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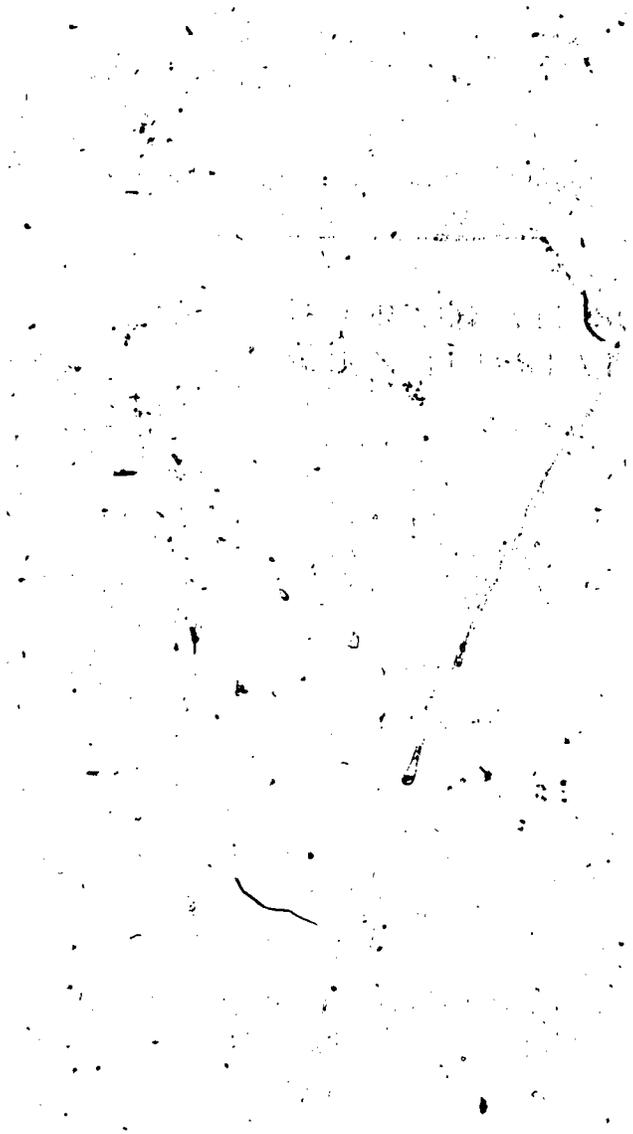
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ABSTRACT

The proceedings of the 12th annual meeting of the Council of Graduate Schools contains reports on new and changing directions in the master's degree by Joe N. Gerber, Thomas C. Rumble, and Donald E. Stokes; the activities of the panel on alternate approaches to graduate education by J. Boyd-Page, Robert F. Kruh, and Benjamin DeMott; financing graduate education by Philip E. Kubzansky, John D. Millett, and Clarence Scheps; women in graduate education by Robert E. Wolverton, Lorene Rogers, Elizabeth Scott, Margaret Rumbarger, and Cyrena Pondrom. Workshops offered include the dean and the law by Raymond P. Mariella, James J. Ritterskamp, Jr., and Donald J. White; new elements in graduate admissions by Stirling L. Huntley, Andrew J. Hein, Thom Rhue, Cliff Sjorgren, and David L. Jacobson; a reexamination of the residency requirement by William J. Burke, Charles A. Leone, Michael J. Brennan, and John P. Noonan; and self-evaluation of graduate programs by John K. Major, Lyle Jones, Sam Webb, and Arthur Veis. (JMF)

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*Proceedings of the Twelfth Annual Meeting.*

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COUNCIL OF GRADUATE SCHOOLS  
IN THE UNITED STATES

CGS

NEW ORLEANS, LOUISIANA  
November 29 - December 1, 1972  
HOTEL MONTELEONE

Edited by John W. Ryan

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**First Plenary Session  
The Master's Degree —  
New or Changing Dimensions?**

Wednesday, November 29, 1972, 2:00 p.m.

Presiding: Jacob E. Cobb, *Indiana State University*  
Joe N. Gerber, *Stephen F. Austin State University*  
Thomas C. Rumble, *Wayne State University*  
Donald E. Stokes, *University of Michigan*

**Introductory Comments**

Jacob E. Cobb

The former president of the Council of Graduate Schools in the United States, Dr. Gustave Arlt, not so many years ago made some rather pungent remarks about the master's degree. One partial sentence of which I want to quote: "The master's degree means so many different things in so many universities and colleges, and there are so many differences among departments within the same university that no one can possibly know the meaning and value of a particular degree."

Now, we did not have this particular quotation in mind when either the topic or the three people who will address this topic were selected, but we did have in mind that virtually every member of CGS is involved in graduate education at the master's degree level.

It is also true that at the present time and apparently in prospect, there is a great deal of activity and some rather considerable soul searching on the part of a good many people with regard to the master's degree -- involving such things, for example, as the interface between master's degree programs and continuing education, financial support for programs and for students, residence requirements, transfer of credits, new credit options, new degrees and new nomenclature, old degrees with new nomenclature, new degrees with old nomenclature, or however many combinations of that there may happen to be.

And as we look at it today, the three gentlemen who will present some ideas represent three different types of schools, all of which, however, do award each year a relatively large number of master's degrees.

One of these institutions is among those which awards the most doctoral degrees and also among those awarding the most master's degrees. Another institution is a very large urban university; and the third institution is one which awards only the master's degree as its graduate degree, but in relatively large numbers.

Now, each one of these gentlemen had exactly the same invitation to speak. So far as I know, they have not collaborated either by mail or in person. I think it will be interesting to see whether or not they talk about the same things. I think it will be interesting to see whether they talk about different things. In either case, I am very sure they are going to talk about significant things. They will make their presentations and then open up the session to you for whatever

comments or questions you may have.

Joe N. Gerber

It is indeed a pleasure to represent the graduate schools among our membership which offer the master's degree as the highest degree. It is essentially that group of institutions often referred to as emerging universities. It is likely that our group of institutions places more emphasis on the master's degree than do those which offer the doctorate because the master's degree is our only and highest graduate degree. Hence, we concentrate all of our effort on it. It is the most prestigious thing we do.

That does not relieve us from having problems. We join all of you in feeling much like the graduate dean who was walking across the campus one day with a monkey on his back - which is not an unusual condition for a graduate dean. He met a colleague who asked where he got it. The monkey replied, "I got him in a raffle." Graduate deans have most always been in this sort of predicament and the number of monkeys appears to be increasing faster than the number of graduate deans.

The master's degree has had a checkered career. The word *master* comes from the Latin word *magister* which means teacher. The first Master of Arts degree was given at the University of Paris in the 12th Century and was a designation to teach in the arts faculty. At that time, if a student was at least 14 years of age and studied two years in the arts, he could become a bachelor or apprentice teacher. After five or six years, he could take an examination and be initiated into the Guild of Masters. The Master of Arts Degree was the highest degree offered by the faculty of arts but such a person could then study toward the doctorate in other faculties such as medicine, law, or theology. The seven years which are involved in the above description came to be a magic number and has ever since been associated with the master's degree. Even in England where those who received the four-year baccalaureate degree and behaved themselves fairly well for at least three years were automatically awarded the master's. This practice came to America with the founding of Harvard College and the Master of Arts came to signify simply that the student was somehow engaged in literary or professional pursuits and that he had paid to the college the proper fees. As a matter of fact, this practice is still current with the M. A. at Oxford and Cambridge. On the Continent, the master's degree fell into almost complete disuse. The University of Michigan is credited with rehabilitating the master's degree. In 1858, the regents of that university resolved that the Master of Arts and the Master of Science be conferred on holders of the bachelor's degree provided they pursued at least two courses each semester for at least one year, that they passed an examination before the faculty in at least three of the studies so attended, and presented a thesis.

The master's degree has changed very little since the beginning of this century. The SREB Research Monograph No. 18 entitled *Reform in Graduate Education* by Lewis B. Mayhew is perhaps the best current work on prospects for reform in graduate education. Mayhew tells about the good look taken at graduate education in the 60's with the decision that only minor reforms were needed. Following that, he reviews the attacks from various sources which have been made and reviews the sources for change. These forces include the size and rapid growth in graduate enrollments, the growing financial crisis in higher

education, the expectations of society, and the mounting evidence that colleges and universities are not really as effective in producing educational change as they claim to be. However, a number of changes in education are becoming apparent.

The main thrust of these remarks is that we have gone through a period of rigid requirements and we are becoming more flexible in many areas of our work. The prospect is for more flexibility. This increasing flexibility shows itself in admissions, extension and residence centers, residence requirements, and related transfer of credits, cooperative programs, new degrees and more elaborate nomenclature, an emphasis on career orientation, and new ways of building programs and qualifying for degrees.

Admissions is becoming more flexible at all levels of our institutions. The open-door policy for undergraduate colleges is becoming recognized. There is less expectation that a student will enter an institution and stay straight through to graduation. There is more staying out and returning over a period of years and much more mobility from institution to institution. The literature reveals a growing inclination of graduate schools to admit a broader range of students. Just as a large number of undergraduate colleges are announcing they will no longer require College Board or ACT test scores, so there is much argument among deans, and more among students, about the usefulness of GRE scores. This organization has a task force at work with the Educational Testing Service Board in an effort to develop more useful and predictive GRE scores. The move toward flexibility in admissions is perhaps more evident when applied to minority groups. There have been appeals from a number of professional organizations encouraging colleges and graduate schools to make possible the entrance of larger numbers of minority students. The job market is forcing a number of students back, with much more urgent pleas to be admitted, into graduate school. It is almost certain that a comparison of the admissions practices of graduate schools today with the practices several years ago would reveal that today's marginal student is more likely to be given a chance.

Extension programs have been with us for a good many years. Typically, these have been programs in which classes are organized in towns and cities away from the campus and an instructor from the campus travels to meet the class. For a number of years, through the 50's and 60's, we were very particular that these courses be labeled on transcripts as extension and the amount of such credit to be counted toward the degree be strictly limited. Now, there is a rapidly growing tendency to establish residence centers. In our area, at least, the residence center is a situation in a place removed from the campus which is approximately equal to that provided on campus. That is, the space is suitable, there are suitable library facilities, and the other conditions are at least roughly equivalent to those provided on campus. In these situations, which we call residence centers but which otherwise operate precisely like extension classes, the students earn residence credit. With the development of a number of these, often on junior college campuses, it becomes possible for a student to complete the requirements for a master's degree by never going to the main campus except perhaps for his comprehensive examinations and his thesis writing and examination. Though there are differences of opinion, it is likely that with proper control these residence centers will provide a real service to many students and will be in demand by the larger centers where there are multiple campuses of junior colleges and a large number of public school teachers. It is another expression of the kinds of flexibility into which we are moving. Many of

us consider them appropriate to our mission and long overdue.

Perhaps, one of the greatest changes we are experiencing is in the relaxation of residence requirements. A study made about a year and a half ago by a subcommittee of the Graduate Council of the University of Alabama and provided to me by Dean Scott along with certain other information, indicates that most of the universities in the Southern Region had for many years limited transfer to six semester hours on a master's degree. We were the only part of the country which had such a strict limitation. As a result of his study and others, many of us have increased the amount of work which may be transferred or taken by extension to be counted toward the master's degree. We thought we were bold at our institution in doubling the limit to twelve semester hours. Now, we find that some institutions have gone to eighteen semester hours and some have erased the residence requirement on a master's degree entirely as a graduate school requirement. In such later cases, each department is normally permitted to establish a residence requirement, if it feels necessary, for purposes of recommending students.

Another indication of changes taking place in residence requirements is to be found in the standards of the accrediting associations. As an example, the Southern Association of Colleges and Schools had a standard until this year which named specific residence requirements for the master's degree and required at least one year of residence for the doctorate. The proposed revision of that standard has been circulated and will almost surely be approved at the annual meeting in December. The revision virtually eliminates residence requirements for the master's degree and does not name a specific amount of residence required for the doctorate, saying only that there shall be some period of residence. It will undoubtedly follow that many institutions will reduce or change the character of the traditional minimum one-year residence for the doctorate. As a matter of fact, from the standpoint of common sense, we can probably all agree that we have been unreasonably restrictive in insisting that the student do the major portion of his work for a degree on our own campus. With the current tendency of students to move about the country and with accreditation and other assurances, it seems reasonable that we can and will accept more of each others work to count toward our degrees.

The development of cooperative programs is another dimension in flexibility. Increasingly, we notice that two or more universities combine efforts to grant master's or doctor's degrees in a combined program. There are the obvious advantages of avoiding duplication, taking advantage of the best capabilities of two or more institutions, and making programs more widely available to students. Usually, there is a formal contractual arrangement between the institutions and the final degree is granted by one or all of them. In a very real sense, this is only another manifestation of the growing tendency to accept a larger amount of transfer credit.

There appear to be coming some movements which may or may not have significant basic effects on the manner in which we count progress toward degrees. It may be that we have become slaves to semester hours, grades, courses, and transcripts. Many of us have felt for a long time that the greatest gain in education will come when someone teaches as a better way. One suggestion which is being made at least loudly throughout the country is in terms of competencies or performances rather than the accumulation of courses and semester hours. This can be stated rather simply but can probably not be done very simply. The concept is that for any degree, in some places including the

doctorate, there is first drawn up a list of competencies or performances or abilities which a student must show he has achieved. Granted that the achievement may be developed through what is ordinarily recognized as standard courses, the earning of a specific grade is not to be so much the point as is evidence of the attainment of certain competencies. That concept is now becoming the basis for teacher certification in Texas, Florida, and a number of other states. There is also an attempt at some institutions to apply the principle to degree structures: in many of these cases, grades are not used except within the institution for such purposes as formula-appropriation requests. Whether or not this particular approach will prove successful is still to be shown. The significant point is that there appear to be some real attempts to substitute something for traditional courses and grades.

Perhaps all of us have noticed a new emphasis on career orientation. More and more of our students and their employers are insisting on programs which prepare them as directly as possible for the career they wish to follow. If you have had an opportunity to interview large numbers of school superintendents, principals, and teachers as I have during the past six weeks in connection with another study, you will be impressed with the degree to which this attitude is prevalent among that group. Superintendents, principals, and teachers seem to agree almost unanimously that colleges and graduate schools could have done and could be doing a better job in preparing them for their work if they would leave out what they call required, irrelevant courses. They appear to want everything included in their programs to be specifically applicable to preparing them for their jobs. They are not at all interested in what we call liberal or general education which is designed to produce an educated person in addition to career preparation. It is likely that much of what we do will become less ivory tower and more directly applicable to everyday work situations.

Our nomenclature, both old and new, has always been badly mixed up and does not appear to get any better. This problem might best be presented in relation to the idea of new degrees and new degree names. One of the best pieces of work in this connection, in my opinion, is the general report prepared for the Carnegie Commission on Higher Education by Stephen H. Spurr entitled *Academic Degree Structures: Innovative Approaches*. He refers to the rather large number of master's degree titles in use. In 1963-64, there were 328 different master's degree titles reported to the U. S. Office of Education. However, they are all of two general natures: liberal arts master's and professional master's. Spurr's plea is that the liberal arts Master be called the Master of Arts and the Master of Science and that master's degrees in professional fields be recognized by such titles as Master of Arts in Library Science or Master of Business Administration. He makes the same plea which is made in the policy statement of the Council of Graduate Schools as approved by the Executive Committee of the Council in 1969. That is, that the number of degree titles be kept to a minimum.

The basic recommendation in both sources is that the Master of Arts and the Master of Science be used for programs which provide an introduction to scholarly activity and often serve as preparation for a career in teaching. They provide a second type of master's degree referred to as professional master's degrees and include the Master of Education, Master of Business Administration, Master of Music, Master of Fine Arts, and the like. To quote the CGS bulletin directly: "The number of different graduate professional degree names should be kept as small as possible. New names should be introduced only when there is a

substantial and often multi-institutional need for such separate identification of a new and major discipline or profession." It appears there is a tendency to increase the number of degree titles at the master's degree level and it is one item of flexibility which it is hoped can be avoided. Also, in connection with nomenclature, we have a whole list of terms which we use freely and appear to understand which have never really been defined at all. The simple concept of semester hours has never been defined except in hours scheduled over a period of time. The amount of progress or learning which takes place in the individual during one semester hour has never been dealt with. The term "teaching load" still needs lots of definition and standardization if we are all to mean the same thing by the same words. Most of us can still not agree on what is a publication.

In our trend toward creating new degrees and new career orientation programs there is the fear that we will make them so discreet and so different that it will be difficult for students to progress far into one of them without being trapped. As Spurr points out, we should keep our degree structures sufficiently flexible to make it possible for students to find a place in the system of higher education appropriate to his current interests and abilities. He should always have the opportunity of moving laterally and consistent with his changes in motivation, abilities, and performances. His eventual preparation should not be unduly restricted by the nature of our structured programs. The system should, in Spurr's words, "provide recurring opportunities so that no one failure should permanently stop the student's progress." In short, the best degree structures will make it possible for continuous choice of career goals and a continuous choice of institutions, programs, and curricula through which these career goals can be pursued. Our programs should not be mutually exclusive nor should we have mutually exclusive classes of institutions and discreet non-overlapping programs within these institutions. Spurr recognizes that this theme is contradictory to much of the American literature on degree structures but he also states, "Where degree structures have been sharply defined, made mutually exclusive, and limited to specific segments of the student population, they have tended to wither on the vine for want of students and reform."

Much has appeared in the literature about the declined status of the master's degree. Certainly it must be true that it has lost in stature in the eyes of scholars. One development which caused the decline was the adoption of the degree by many state certifying agencies for teachers. In many states, it is now necessary to hold the master's degree in order to get the highest level certificate.

Perhaps the greatest blow to the prestige of the master's degree is the practice of doctoral institutions which allow students to enter doctoral programs directly from the bachelor's degree with no requirement that the master's degree be satisfied on the way. It is hoped there is concurrence, again with Spurr, that

"Upon completion of the baccalaureate, therefore, all students should be admitted only as candidates for the master's degree. No student would be admitted at this time directly to the doctoral program. Only by such a change in our present policies can the principle of progressive, non-invidious steps be put into practice. As a result, the master's degree would become a required and necessary stepping stone enroute to the doctorate. The fact that all students would be admitted only as candidates for the master's and must earn this degree means that the master's degree would always mark successful forward progress. It would, therefore, provide an appropriate stopping place for those who choose not to go farther. It is only the fact that many graduate schools admit students fresh out of the baccalaureate into doctoral programs that gives the connotation of consolation prize to the master's degree. We suggest that this

practice must change to make the Master of Arts and Master of Science degrees fully respectable."

Innovation, new approaches, and change in graduate education are apparent all around us. Perhaps the most direct manifestation is the response of the Council of Graduate Schools, in forming the Panel on Alternate Approaches to Graduate Education. This Panel is making a concerted effort to identify and suggest new approaches. What is suggested here is that many changes are already apparent in our requirements. Flexibility in the areas which have been discussed appears to be long overdue. Certainly we have all maintained regulations which, in many instances, are arbitrary and which really had little justification. On the other hand, being flexible does not mean doing away with requirements for high quality work. There would appear to be no problem about admitting a broader range of students provided we require of them full accomplishment which justifies progress toward the degree or eliminate them. Those of you who have tried it find that many who do not fully meet your admission standards really perform quite well though the majority may not. Taking our courses out into the field for extension and residence center work is a fine service to students but again we must require that students measure up.

All of the areas mentioned as relating to a season of increasing flexibility we are experiencing and will almost certainly continue to experience appears, for the most part, to be in the direction of making it possible for more students to get more education under a wider variety of circumstances. There would seem to be little objection to such developments but only if we retain reasonable requirements in standards of performance.

Thomas C. Rumble

The tremendous expansion of graduate education over the past dozen years has led too many graduate educators to concentrate too fully on the highest of our graduate degrees, the doctorate. Except for the attention we have given the master's degree as a convenient indicator of some kind of mid-way point along the route to the academic doctorate, it seems to me we have been all too ready to regard the master's as a professionally oriented and terminal degree; and we have been alacritous, even, in finding the means to spin off our control of, and responsibility for, over half of the master's degrees awarded in our universities each year. It is high time, then, to devote a plenary session of the Council of Graduate Schools' annual meeting to the dimensions of the master's degree and attempt to discover whether there are, indeed, any new or changing attitudes in the wind toward that degree.

I happen to be rather pessimistic at this point about the outlook for any significant academic revitalization of the master's degree; in the controls and responsibilities we have spun off, the disintegration may be far too far advanced to be turned around by such as we -- we who are traditionally long on conscience and short on funds. Further, with the accelerating pressures of advocates for all manner of non-traditional, external graduate programs, I fear things are likely to get worse before they get better; and if we continue to spin off our already diminished spheres of control, many of us may be urging ten years from now, "Why don't we just say we won the master's war and get out?"

Shortly, my near neighbor, Dean Stokes, may well put a happier

construction on all of this; that is one of his many fine facilities, and I am always grateful to him for it. But if the master's degree has come to be a common problem among us, let me explore a couple of the dimensions of that problem and then suggest a couple of very basic and all too unimaginative solutions.

You are probably as well aware as I of the numerical dimensions involved. In 1965-66, our graduate institutions produced nearly 141,000 master's degrees. By 1970-71, that number had grown to over 230,000. And, barring all but the severest of economical setbacks or the most drastic revision of social values, 1975-76 may find us awarding as many as 350,000 master's degrees. Further, in 1965-66, 36 percent of all master's degrees were awarded in the field of education, with as much as another 25 percent in education-related programs. By 1970-71, these percentages had reached 38.5 percent in education and as much as 30 percent in education-related areas. And, while by 1975-76, we may have seen the rate of this percentage growth diminish, we shall probably not see a decline in actual numbers much before 1980, if then.

Now, I am not so much troubled by the inflation of numbers in the statistics I have just cited. Given the concomitant growth of our population, the burgeoning number of master's degrees we award may not be all that far out of line. Along with a lot of other people, I am more troubled by the growing percentages of master's degrees awarded in the various areas of education. If the holders of those degrees are to be absorbed effectively into productive employment, it seems to me their numbers have to be plotted out pretty carefully from five to fifteen years in advance in order to avert the shortages and gluts that have marred our miscalculations over the past twenty years or so.

What troubles me most about this general inflation, however, is what is increasingly perceived to be a corresponding devaluation in quality. You are probably familiar with the two-year study of graduate education completed in April by the Bureau of College Evaluation of the State Education Department in New York, although I am much surprised that that study has not had a wider circulation and more profound impact than seems to be the case so far. In any event, the criticisms of that report are many and severe; and I only hope that graduate educators will not rush to man defense battlements with the rationalization that these criticisms are, after all, the cheap shots of a "bureau" and therefore automatically an instance of the pot calling the kettle black.

To begin with, the study points out that the quality and usefulness of master's degree programs in the state have in no way kept pace with their increasing numbers, and that many of them, especially in public institutions, were from the start ill-conceived, loosely administered, and without much semblance of serving a proven need. Performance standards of both faculty and students, the study contends, vary markedly from one college to another, and many of the programs are in no way distinguishable from undergraduate studies. Students frequently go uncounseled or miscounseled, and many are admitted to master's programs on the basis of exceedingly modest records of achievement. Further, well-integrated master's program curricula are everywhere sacrificed to enable part-time students, especially in teacher education, to obtain the graduate credits necessary for permanent certification. Finally, to quote directly from the study, "it would seem that an attitude of collusive mediocrity has been adopted among students, faculty, and administration at the master's level."

This is the barest summary of a summary, and if you already know the study, I apologize for rehearsing it even this briefly. My point is that I genuinely fear that a similar study in any of our states might easily reach most of the same

conclusions, and that the reforms we are not bringing about from inside our universities may soon begin to be mandated from outside -- with all of the attendant ~~bad~~ publicity of acrimonious charges and countercharges fired back and forth between educators and legislators. Even as things stand, our public image is not so bright that we need this kind of additional grief.

Furthermore, as I have said, our situation could well get worse before it gets better. I do not have to tell you how intense the gathering pressures are to develop so-called "delivery system" packages that will bring education to the consumer rather than vice-versa. How to react to these pressures is going to be a real dilemma for graduate deans. None of us really *wants* the role of the conservative, old-guard protector of education's virtue -- the one who thwarts the progressive designs of imaginative and innovative forward-thinking systems planners, or who denies opportunity to all of those motivated, ambitious, qualified people out there whose location or responsibilities make graduate education impractical through the usual means of campus and classroom. By the same token, most of us cannot with any kind of conscience encourage the hodge-podge smorgasbord curricula that *could* turn out to characterize these open-university, external degree programs: an unsequenced television course here, a correspondence course there; catch-as-catch-can discussion group meetings in the neighborhood junior high school, week-end workshops held in the local Holiday Inn; institutes and conferences whose programs are taped for those who find it inconvenient to attend in person; four hours credit for each so-called "experience," bundle a dozen experiences and, presto, you have a Master's degree in General Studies or some such. I shall leave you to interpret in the light of your experience the extent of my hyperbole here. Whatever it is, if these programs develop with only a grain of this potential, we are in for trouble.

I do not want to damn, out of hand, this emerging trend in non-traditional graduate degree programs. But we had better be aware -- and fearful -- of the pitfalls ~~down~~ that road -- some of which, anyway, are the same ones we have stumbled into getting where we are. Robert Kingston and Stephen Spurr touched on some of these in the opening plenary session of last year's CGS meeting. First, we had better expect that these non-traditional programs cannot be delivered cheaply; and unless they are developed in response to clear and even practical needs, we had better be prepared to be served up another heaping portion of criticism from the public in general and state fiscal officers in particular. Secondly, while we might wish to see these programs packaged up in a "continuing education" box, without benefit of a bright and decorative *degree* ribbon, that will probably prove unrealistic. We are by now a thoroughly degree-oriented society, and that degree diploma symbolizes a goal without which most people will not be motivated, however much they protest their purpose of augmenting skills and knowledge in the abstract. Finally, we had better be prepared that today's extension bachelor, and external master will tomorrow be knocking on our campus master's and doctoral doors. Who is going to tell those people that we did not really mean it, that we just wanted to help them feel "fulfilled," that the campus doctoral entree does not go with the off-campus master's salad bar?

Dr. Kingston observed last year that "advanced education, education beyond the bachelor's degree, clearly . . . is not a bad thing":

- (a) provided that it does not fail to train people for the kind of work that society will call on them to do, (b) provided that it does not train and qualify them for jobs that it cannot offer them, and (c) provided that it does not, by the

scope of its operation, abdicate from its responsibility and fail to maintain those professional standards which it is the task of the professional school, the graduate school, to affirm and maintain.

Few of us could responsibly reject provisions such as those! Ironically, however, Dr. Kingston went on to discuss those provisions in reverse order, because, as he said, "the last one, the matter of standards, is a little delicate, and I would like to be rid of it quickly." Personally, I am firmly convinced that *that*, precisely, may be the root of all of our severest problems. The matter of standards is a little "delicate," and we would like to be rid of it quickly. What is "delicate" about the matter of standards is that there is perceived something essentially *negative* about it. If we persist with it, if we do not get rid of it quickly, then negative turns to *critical*, critical becomes *accusative*, accusative equals *threatening*, and the whole thing ends in *impasse*.

I have talked here about only two dimensions of the master's degree: the present state of programs leading to over half of the master's degrees we award annually, and the potential state of a vast new enterprise in non-traditional, off-campus graduate education. I have tried to illustrate the gathering criticism of the first of these and to indicate that the second, irresponsibly managed, will further endanger the whole species. I also promised a couple of prescriptions—however basic, or even banal.

In the first instance, what we need are some massive transfusions of good old-fashioned academic integrity. I candidly do not know how we manage this, since long ago the graduate dean declared the patient no longer his — declared all education graduate degrees "professional," said he had therefore won the war, and got out. It may now be time for him to get back in, though he had better know the ground he has lost in the years of his default. But it may yet be possible to backtrack the path from impasse to the "matter of standards" and this time around, if all parties will recognize the syndrome that moves from standards to negativism to criticism to accusation to threat, and if the graduate dean can bring himself to understand what is "professional" about these programs, and bring the "Educationist" to understand what is "academic" about them — if all these if's, then maybe this time around the whole thing need not end in impasse, in which case both sides will have won the war, and no one need get out.

In the second instance — in the potential expansion of non-traditional graduate programs — the graduate dean needs only to have learned from the mistakes of his predecessors. He can work cooperatively with the continuing education people, constantly insisting on the application of sound academic standards; or he can abdicate again, leaving them to go it alone and chancing that the whole trend will be irretrievably bungled for his having spun off another area of his responsibility. Here, the prescription seems to call for no more than the intelligent practice of a little preventive medicine.

Obviously, these prescriptions are so easy to state that they must be impossibly difficult to implement. That appears to be an elementary fact of life these days in our business. Nevertheless, the graduate dean who accepts as appropriate and necessary his role as the conscience of the university begins and ends by talking standards, and in between he talks quality, rigor, value, and integrity.

Now, did someone back there take the roll of my workshop students so that they can get their graduate credit?

Donald E. Stokes

My role on this panel is essentially to describe the "dark side of the moon" by examining master's training at an institution where the light falls mainly on doctoral studies. At Michigan, as at a number of universities heavily engaged in doctoral training, there operates a kind of Gresham's Law under which the faculty's interest in its highest degree tends to drive out interest in other degrees. Certainly, our faculty has proved itself capable of treating master's instruction to a benign neglect.

The neglect has in the main been benign. Our graduate departments have been faithful to master's students even if their instruction has not been a principal preoccupation. The faculty has steered a middle course between true success and true disaster at the master's level, as the country judge steered a middle course between justice and injustice. An undoubted virtue of the chill that has settled on the doctoral market is that it will encourage the faculty to re-examine master's training. I will talk for a few minutes about some aspects of our recent experience with the master's degree, dealing fairly concretely with the University of Michigan, the institution which took the first hesitant steps, more than a century ago, to rescue the master's degree from its purely honorific status at Oxford and Cambridge. We have not lost confidence in the degree. I share with our faculty the belief that master's training has an important role to play in our educational program.

The simplest statistics make clear how deeply our university is involved in master's training. We have 21 professional master's programs, 82 master of science programs, and 31 master of arts programs, a total of 134 in all. Master's enrollment reaches seven thousand students in the fall and winter terms, or one-fifth of all students at the university and one-half of those who are enrolled past the baccalaureate level. The annual yield of 3,300 master's degrees represents one-third of all the degrees awarded by the university and far outnumbers the doctoral degrees we grant.

The 30-hour credit minimum has become fairly common in our professional master's degree programs, although the minimum reaches as high as 68 credits in some cases. A minimum of 24 or 36 or 40 is standard in our arts and sciences master's programs, and the typical master's student is enrolled for essentially full-time work. Two-thirds do reach their degrees in a standard period of time, with its length keyed to the number of credits required by a particular program.

Many master's students expect to become doctoral candidates. Probably about 70 percent of our arts and sciences master's students enter with the intention of going beyond the master's degree. About 60 percent of those who complete their master's training would be permitted to proceed with further doctoral work. But the latter group is not entirely included within the former. Master's degree recipients are distributed across the fourfold classification obtained by crossing whether the student wants and is permitted to go beyond the master's as follows. Fifty percent have both the will and the welcome to proceed and therefore do go on. Another 10 percent are welcome to proceed but do not go on, for varied reasons. About 20 percent want to go on but are not permitted to do so. A final 20 percent have neither the will nor the welcome to go on and therefore leave the institution by mutual consent.

Two dominant characteristics of the graduate university help define the problems and opportunities of master's instruction at Michigan. The first is one I

have already mentioned, the faculty's extensive involvement in doctoral training. The second is less obvious but I think has consequences no less profound. This is the presence of a large and highly differentiated program of advanced undergraduate training. These twin characteristics condition much that we must do if we are to mount master's programs that are, on the one hand, intellectually and professionally valid and are, on the other, well integrated into the student's earlier and later education.

Let me say a little more about each characteristic. The benefits that doctoral programs hold out for master's training need scarcely to be mentioned. A graduate faculty that is able to offer strong doctoral programs is capable of offering master's training of high quality in the same fields. Moreover, the presence of doctoral programs offers superior opportunities for integrating master's and doctoral training. Master's students can gain a first-hand experience with doctoral programs that will help them decide whether to go beyond the master's level. And for many who do go on there can be a direct coupling of master's with doctoral study. This will be increasingly important as doctoral programs become more varied. With the differentiation of Ph. D. programs and the appearance of Doctor of Arts and perhaps other doctoral degrees, the student will benefit from being able to choose among varied doctoral programs offered by the institution in which he takes his master's training.

But the liabilities which the presence of doctoral programs can entail for master's training are also real. A faculty preoccupied with doctoral instruction does have a hard time seeing the far side of the moon. This has especially been true during the rapid expansion of doctoral programs. In the years of rapid growth and strong demand for Ph. D.'s, many of our faculty could suppose they were mainly reproducing themselves by training scholars who would go on to careers in university settings like their own. In this frame of mind, the faculty were unlikely to pay much heed to educational issues they would have felt were important even for their doctoral students if they had expected their degree recipients to pursue careers outside departments like the ones in which they had been trained. The weakening of the doctoral market has changed this. Our faculty is now more inclined to weigh the needs of students headed for other careers than teaching and research in graduate universities. As a result, they are more disposed to examining the educational needs of terminal master's students.

If added evidence is wanted of the operation of our special Gresham's law, it is supplied by the difficulty of our graduate departments in telling us where their master's students go. Any department could say, within a few days of being asked, where all of their recent doctoral recipients have gone. Few could give us more than a fragmentary account of where their terminal master's students have gone. This also is a matter in which departments are beginning to change their ways. We are doing what we can to help the departments trace these students and gain further insight into their later careers.

The new interest in master's programs has brought to the fore a number of questions which have gone unexamined for a long while. I will offer as a worthwhile example the status of our residency requirements. In common with a great many graduate schools, we have required that master's students present a minimum number of credit hours earned in courses taken in residence. We are taking a fresh look at the intellectual warrant for this requirement. As we do so, we increasingly realize the need to know more about how master's students learn. What is the reality nowadays of any of the virtues that were traditionally associated with residence: of the right to browse in a graduate library collection?

of contact with major faculty figures? of learning from informal exchanges with student peers? We intend to find out by undertaking some serious research on how students learn at this state of their graduate work.

Deeper insight into the learning process could reshape our residency requirements in two desirable ways. To begin with, it could help us set requirements in terms which go directly to the nature of the experiences we wish our master's-level students to have, rather than in terms of arbitrary numbers of course credits. But it could also help us to see more clearly how we might develop analogs of these experiences for students who wish to take their master's training away from the university campus. I was interested in Dean Gerber's remarks about the residence center, an interesting movement in this direction. We hope, in other words, that arbitrary residence requirements can give way to arrangements which are educationally valid both on campus and off.

Let me now turn to the implications for master's training of the second main characteristic of our university to which I have called attention. The character of advanced undergraduate instruction, of course, owes a great deal to the graduate mission of the university. A distinguished graduate faculty that is also deeply involved in undergraduate instruction naturally tends to carry back into the undergraduate years many of the intellectual categories it uses in its graduate and professional curriculum. It does so in terms of the departmental or disciplinary boundaries of undergraduate majors. But it also does so in terms of particular courses and topics of study. Indeed, to achieve the economies of scale, the faculty will often lecture to undergraduates from the same notes it uses in its graduate seminars.

I will say very little about the vices in this arrangement for many of our undergraduate students, although this is a subject on which I have strong feelings. I want rather to emphasize the potential virtues for undergraduates who expect to continue into graduate training. The faculty's tendency to turn undergraduate majors into pre-graduate training gives students, who have committed themselves to a discipline, the opportunity of integrating undergraduate and graduate study. We are examining the possibility of allowing these students to treat the upperclass undergraduate and master's years as a period of mixed undergraduate and graduate training, one that is shorter and less redundant than the present sum of the two. The time saved by gifted students in this middle stage might, indeed, be utilized later in a postdoctoral phase of training, one that would be far more creative than the marking of time that now characterizes the education of students who cover similar topics in their undergraduate majors and master's programs.

I do not mean to suggest that this pattern is as yet widely followed at our university. We are experimenting with precocious admission to graduate study by a limited number of gifted students whose beginning graduate work could complete their undergraduate majors. For example, selected undergraduates from the departments of economics, political science, and sociology are being permitted to enter a two-year master's program in Public Policy Studies at the end of their junior year, counting the first year of this graduate program as the final year of their baccalaureate studies. We expect a number of graduate departments to consider precocious entry into their master's programs both by their own majors and by students who have majored in their disciplines at other institutions.

We are concerned that precocious entry not be limited to students who remain at the same university. The change of institution between undergraduate

and graduate study is one of the few surviving moments of liberation or reacclimation in American higher education. It would be most unfortunate if early entry into master's training simply cemented graduate students to their undergraduate schools. We have therefore included in our plans the possibility of early entry for students who come to Michigan from other institutions, encouraging our graduate departments to discuss with their colleagues elsewhere the development of integrated programs of undergraduate and graduate study. We hope that this can have the useful byproduct of fostering contact between our faculty and the faculty of other institutions in the state and region.

Master's instruction at Michigan is therefore conditioned by the character of undergraduate education as well as by the presence of a large and remarkably differentiated doctoral program. Our master's training can draw strength from the faculty's involvement both in undergraduate and doctoral education. This involvement allows us to mount programs of master's training that are of high quality and are well integrated into the educational experience of the student both before and after the master's years.

**Second Plenary Session  
Welcoming of New Deans and Reception**

Wednesday, November 29, 1972, 4:15 p.m.

Host: David R. Deener, *Tulane University*  
Remarks: President Herbert E. Longenecker, *Tulane University*

**Introductory Comments**

**David R. Deener**

Let me welcome the new deans on behalf of the Council of Graduate Schools and I would like to introduce our speaker, the President of Tulane University, Dr. Herbert E. Longenecker.

Dr. Longenecker is from Pennsylvania originally. He did his graduate work at the University of Pennsylvania and then moved to an institution a little further west known as the University of Pittsburgh. There, he served as a Dean for at least twice as long as the average life of a dean in the 1960's. He served as Dean of the Graduate School from 1946 to 1955. He then went to the University of Illinois as Vice President, and we have been fortunate enough to have him at Tulane since 1960.

I will not mention all of the organizations to which Dr. Longenecker belongs. Recently, he was elected President of the Association of American Universities. He has received other honors, one of which I cannot refrain from mentioning. He received an honorary doctorate from the University of Miami last spring. In view of some things that occurred on the football field not too long ago, there was some advice that perhaps he would like to return and have it awarded to the referee in that game.

Dr. Longenecker is a chemist by profession and the author of some seventy-eight professional papers and widely known in the national field. He will welcome the new deans to wonderland.

**WELCOME TO WONDERLAND**

**Herbert E. Longenecker**

A year ago, when the Association of American Universities gathered for their accustomed semi-annual meeting, many of us greeted each other for the first time. As Chairman pro tem, owing to a last minute call upon our then president, I found myself referring constantly to a name chart identifying the new or just recently selected chief executive officers of nearly half the group.

Just a month ago, another group of newly appointed presidents joined the fall meeting. The old-timers among us were outnumbered two to one — and when I say "old-timers", I mean those in office before January, 1970, just two

and a half years earlier.

For an organization that, until the 70's, had experienced replacements and additions of not more than one to three per year, the impact of new faces and new thoughts was substantial, to say the least.

Something of this sort has been happening in this organization, I understand. While I do not have accurate figures, it is easily possible that more than one-third of the graduate deans meeting here this week have been in office less than two years.

While there is much to be said for continuity in office for institutional stability, accomplishment of long-range objectives, effectiveness and efficiency, it is also clear that the new presidential appointees bring vitality, experience, dedication, and outlook commensurate with their obligations and are fully capable of meeting and dealing with their challenges. The same can be said, I feel sure, for the new leadership of the graduate schools.

If there are moments of bewilderment for either the new presidents or the deans, let them be consoled that they are shared by the old hands.

How could it be any different in this enchanting wonderland of academe?

We have talked about and certainly experienced great changes in this academic world for decades. But never in my experience have we confronted so much change at such a rapid rate as now seems in prospect.

Not since the last decades of the last century have the pressures been so great. At that time, the ideals of research and scholarship were being grafted onto the classical collegiate institutions of colonial America. Out of the rich experiences and trail-blazing of a few institutions, the modern university emerged with its graduate school and its professional schools at post-baccalaureate levels.

The institutional models that led to the organization of the Association of American Universities became not only increasingly popular but enormously effective at critical times in the nation's history. When the AAU was founded with 14 member universities in 1900, five of the group -- Harvard, Columbia, Hopkins, Chicago, and California -- conferred 55% of all earned doctorates in the United States and the nine other members conferred 35%. Seventy years later, these 14 granted over 25% of all doctorates. It was inevitable that their success would be emulated. The very extensive membership of this group testifies to the importance of the basic educational philosophy of the university model that arose in the 1870-1890 period.

In passing, I should comment at this point on the recognition of need a decade ago for an organization to serve the growing group of graduate deans. It was my good fortune to be able to support vigorously and enthusiastically the efforts of Tulane's dean, Robert Lumiansky, in bringing this organization into being.

But with all this expansion of the modern university concept to six or seven times the number of research-based institutions ever seriously contemplated even two decades ago, we have had an enormous expansion of enrollments, drawing upon a steadily increasing proportion of college age youth (from about 5% at the turn of the century to 50% at present.) While the late nineteenth century university model served the relatively small, and essentially self-selected student body of the early twentieth century, it was clearly incapable of sufficient renovation to meet the variety of interests, capabilities, and expectations of the broader cut into the college-age population of the past few decades. Those who foresaw the problems of endless repeat of the model

and of the lengthened institutional confinement of larger and larger proportions of all the nation's youth were scarcely noticed or heard in the tumultuous push for more of the same during the 50's and 60's. It was a heady expansionist period, tailor-made for a growth-oriented society.

For 100 years, these institutions doubled their enrollments every 12 to 15 years. But like most growths at such rates, this one is tapering off. Indeed, by 1980, the growth will stop completely and there is the distinct possibility that, by 1990, fewer students will be enrolled than in 1980.

This will be the first zero-growth rate in 300 years of higher education in America.

While many, if not most, of us will not be in the saddle to experience the rough and hot ride through the deceleration zone, we can easily appreciate the traumatic problems our successors will have for we have had a few similar situations to deal with for different reasons, largely financial.

Speaking of the financial dilemma for our successors, if not just for ourselves, we can make a few simple calculations. Per student costs have been rising at an annual rate of three percent plus inflation. Without change in this pattern, the nation's outlay for higher education will rise from the present level of \$20 billion per year to \$40 billion in 1980, \$60 billion in 1990, and at least \$100 billion by 2000. Will such sums be available? Or will the resistance already begun grow more intense? (Note: 1929-30 expenditures were 0.6% of GNP; in 1969-70, 2.6% estimate for 1980-90, about 5%.)

A bit closer to our own daily schedules, the issues are no simpler and are ever so numerous. There is not time here to do more than list a few:

- Post-secondary education in place of higher education
- Career education in the dominant role, not preparation for teaching and scholarship
- Public confidence in higher education
- Increased level of antagonisms to scholarship and research
- Emphasis on applicability of research to some perceived need
- Emotional response in place of reasoned enquiry
- Egalitarian pressures based on concepts of equitable access to post-secondary education
- Governance of single institutions and groups of institutions
- Coordination of institutional growth and development
- Increased involvement of local, state, and regional agencies in approval of institutional plans
- Student desires to effect curricular reforms, challenging the validity of liberal arts programs based on established disciplines
- Expectation for increased allocation of faculty time to assigned teaching
- Increased politicalization of the institutions and programs
- Federal Government involvement in nearly every aspect of college

- and university life
- Mounting student debt structure
- Educational productivity and efficiency
- Finance of students and institutions
- Competition for funds
- Possibilities for progress in period of austerity
- Basic versus the peripheral functions
- Representation of the academic institutions in state and national forums
- Possible over-expansion of college and university facilities
- Rapid rise of community colleges
- Shift to public institutions
- Doubts about the quality of education
- Anti-establishment sentiments
- Effect of tax reform measures in philanthropy
- Neglect of adequate opportunities for the poor, for minorities, and for women
- Finance of modernization of facilities
- Institutional accountability and credibility
- Accreditation and evaluation of performance
- Alternative modes of learning
- Potentials of new educational technologies
- Equivocal positions of international education
- Access to current information on higher education
- Standardization of cost calculations
- Shifting pattern of enrollments
- Apparent oversupply of Ph.D.'s in selected fields
- Expectations of minorities, the disadvantaged, and women
- Apolitical stance of the academic community
- Effect of the court decisions in shaping higher education

In these times, and with the prospects now seen for the future, if only dimly, these institutions need the leadership and guidance that have in general characterized the graduate deans. Because of your breadth of interests, your dedication to standards of excellence, and your relationship to faculty

leadership, you can, I believe, play a significant role in helping to develop the understanding of impending adjustments needed throughout higher education. The time for action is short. The future is already pressing hard. It's a great place to be.

Welcome to Wonderland! .

**Third Plenary Session  
Activities of Panel on  
Alternate Approaches to Graduate Education**

Thursday, November 30, 1972, 9:00 a.m.

Presiding: J. Boyd Page, *Chairman*  
Robert F. Kruh, *Kansas State University*  
Benjamin DeMott, *Amherst College*

**Introductory Comments**

J. Boyd Page

It is a pleasure to have the opportunity to bring to the attention of the Council this brief status report on the work of the Panel on Alternate Approaches to Graduate Education. As you know, this is a project jointly sponsored by the Council and by the Graduate Record Examinations Board. The Panel was organized about a year ago. The first full meeting was held in February. Fourteen distinguished and knowledgeable individuals serve on the Panel. The fourteen include two university presidents, a dean of engineering, an administrator of a state university system, a vice-president of a major publishing company, five professors in different disciplines and institutions (some of whom have additional administrative responsibilities), and three graduate deans (of whom one has since defected to an administrative position closely allied with graduate study). I have the honor to serve as chairman. The work of the Panel is supported by highly competent staff members on loan from the Educational Testing Service.

The Panel was formed with some sense of urgency in recognition of the many new and, in some cases, almost radical proposals and pressures to which graduate education is increasingly being subjected. There are potential students who have not found access to traditional graduate education either possible or convenient. Many of these students now seek the opportunity for advanced study. Older students seek the opportunity to improve their competence or to prepare themselves for new fields of activity. Our admission standards and the delivery system may need to be "opened up." The student who cannot adjust to continuous registration as well as the student who will seek to transfer credit for work taken at several institutions all seek accommodation and opportunity to prepare themselves for new forms of service. Differing organizational patterns as well as acceptance of non-academically derived training and experience also have their champions. Of necessity, the Panel has had to explore in depth such basic questions as how is graduate study organized and administered, who does it serve and who does it not serve well, what new demands will be placed upon it by changing social structures and patterns, what modifications may be desirable or feasible, and how can the system continue to operate effectively if new elements are to be introduced in the face of declining levels of support?

As you can see, this is no casual undertaking. The Panel has taken its charge very seriously. The members have placed a high priority on the work of

the Panel even in the face of demanding individual schedules and responsibilities. Three full plenary sessions have been held, the last one at this hotel during the early part of this week. In addition, there have been several task force or subcommittee meetings. The staff has prepared an excellent background paper. Several special position papers, literature reviews, and policy statements have been developed both by individual members and by task forces and committees. The discussions have been lively and intense, even, on occasion, heated. At this point, the dimensions of the problem have been reasonably well delineated. Essential agreement has been reached on several key issues, and the clusters of issues for which recommendations will be made have been agreed upon.

The schedule calls immediately for initiation and organization of the draft of what will ultimately be our final report. Key recommendations will be winnowed out from the large numbers which have been discussed by the Panel or supported by individual members. At our next plenary session to be held in March, we will attempt to come to some closure on what the Panel will wish to say and what positions it will wish to take with regard to the important issues toward which it has been directing its attention.

Part of our purpose in making this presentation is not only to give some indication of what we are about but to solicit suggestions or recommendations from any of you who might wish to make them. We do hope to make our report and recommendations responsive to the many pressures with which you may be confronted. I can assure you that we will welcome your comments either at the end of this presentation or at any time you may wish to make them.

As I hope you will have seen, the work of the Panel is wide-ranging; and it would be impossible to attempt to bring all of the detailed consideration to your attention in this meeting. Instead, two members of the Panel, Dean Kruh, whom you know, and Professor DeMott, professor of English at Amherst, will make brief presentations of phases of the work for which they have been or are responsible. Dean Kruh headed a task force looking at the populations to be served by graduate schools with particular emphasis on those not now being well served, or for whom access seems difficult or blocked. Professor DeMott will join the staff with a responsibility to summarize and prepare the first draft of our report and organize the recommendations which will ensue. At this time, however, he will discuss some of the basic philosophical issues of graduate education growing out of a task force which addressed itself to the very difficult questions of what societal needs does graduate education serve and what should it serve in the still vaguely seen "new society" into which we are now moving. Following these presentations, I will attempt a brief summary and then ask for questions or comments from the floor.

It is now my pleasure to present Dean Kruh.

**Robert F. Kruh**

I would like to make some rather brief remarks, and because of their briefness you will have to forgive me if I omit a number of the qualifications, reservations, and explanations that might accompany them. I am sure you will appreciate the fact that in a group such as is represented by the Panel, a great deal of time must be spent in sharing biases and in refining language so that we can communicate with each other. The same kind of problem exists when one tries to present in rather brief form the current status of, as yet, unconcluded

activities.

One of the first concerns of the Panel, in fact the fundamental concern, is to deal with the educational needs of society, both from the standpoint of the individual and collectively. Our concern stems from the type of social structure in which we live, which is more and more dependent on knowledge and use of the intellect. This dependence has made it possible and necessary for education to be expected as part of each individual's preparation for survival. As a result, collegiate education has become a commonplace, and there is a greater population for whom graduate education is the next logical step. Moreover, because of our increasing dependence upon knowledge, it is clear that we must also meet the need for recurring and continuing education. In addition, we now have to act upon the unmistakable message from students who are insisting on a greater pragmatism in graduate education with fewer seemingly arbitrary requirements.

In the recent past, there has been considerable diversity among graduate schools but that diversity has involved variations on a research theme. Of course, research has been the traditional cornerstone of graduate work. Excellence in research has been the principle pathway to institutional and professional prestige and advancement. Government policies during the 1960's reinforced this pattern to the extent that in many fields students with a variety of interests and objectives outside of research found it difficult to locate programs designed for other than research careers.

There are now many indications that the diversity of programs is now widening as a result of the actions of individual schools which are reassessing the appropriateness of the research model for all comers. In this sense, they are anticipating the Panel and this is good. Although the Panel is very much committed to the cultivation of diversity in meeting the needs of students, it emphatically insists upon carrying forward the strong research and research training capability within our graduate schools. This capability has been marveled at universally and is unequalled by any other nation in the world. The Panel is not talking about changing this, as it must be retained and strengthened. But we are talking about augmenting and supplementing it in order to respond to the broadening needs of students.

Whether our leading graduate schools should take or have the inclination to take new directions is problematical. The Panel believes nevertheless that among the nation's graduate schools, there is the apparatus and talent to serve a variety of aspirations and to demonstrate a willingness to respond in new ways. The fact that we are experiencing financial austerity along with stabilization or even retrenchment in some of our programs will complicate the task. More and more, however, we are realizing that all graduate schools do not have to fit or aspire to the same pattern. The Panel, obviously, is very much concerned with mechanisms of broadening graduate offerings, about which it will be making recommendations.

In considering these mechanisms we are concerned with present students, many of whom are well served, but some not so well. And we also identify a variety of potential students who are deterred by reason of age, intermittency of their study, financing, or perhaps competing responsibilities. Both men and women suffer from such obstacles. There are others that we might identify who, but for appropriate advice or information, might undertake needed graduate study and yet others who await the availability of suitable opportunities.

We have spent some time assessing the difficulties that arise in a society

that places much emphasis on credentials. I mentioned survival previously and not in a frivolous way, because credentials seem to be a rather important instrumentality for survival, perhaps unnecessarily so in our society. So we have to be concerned about credentialism.

Although graduate schools do provide both learning and degrees, the intrinsic value of learning is the justification for having graduate schools while degrees have only a utilitarian value as a first approximation to an individual's achievement. The reasons for learning and the reasons for having a degree are different but overlapping. For many who feel themselves to be prisoners of necessity, the degree involves the equivalent of rites of passage.

Thus, in our approaching age of increasing, if not mass, graduate education, the graduate schools face populations whose motives and needs differ markedly from those of the scholar-to-be or the researcher-to-be. The Panel seems to agree, however, that whatever the kind of experience we provide in an education context -- whether it is traditional or non-traditional, and I use the words loosely -- it should be characterized by sound intellectual quality.

In working out our recommendations for existing institutions, we have dealt with many questions, some of which I will simply enumerate. We are obviously dealing with the problem of admissions, the structure of the learning process, evaluation of achievement outside the academy, the utility and versatility of the master's degree, the plight of the ABD, the expediting of doctoral studies so as to avoid unduly long sacrifice, the problem of continuing education, the intermingling of the academy with many more elements of the outside world, the needs of liberal learners and problem solvers, the perceptions of the constituency who seek the educational outputs of the graduate schools, cooperation and a division of labor among institutions, utilization of alternate approaches, faculty acceptance of new patterns, and the reward and value systems under which institutions operate.

These are some of the things that are under consideration, and much of the final report will be directed toward our present graduate schools. Whether attention will be given to the possibility of establishing new institutions is not yet clear. That may well call for an additional undertaking if indeed it is in order at all.

J. Boyd Page

Bob's presentation may have left you with some questions. Please keep these in mind for later discussion.

As the Panel has directed its attention to fundamental issues, four central issues around which much of the discussion has clustered have emerged. Briefly, these relate to the nature and utility of the traditional residence requirements. Second, the broad meaning of the doctorate degree -- this includes the purposes for which the degree is sought and the elements of certification which go along with the conferring of the degree. Third, the necessity for reconceptualization of subject matter. This has been viewed with increasing urgency, particularly in areas where newly emerging social needs are apparent. Fourth, the faculty reward system, particularly as it may be supportive of or detrimental to attempts at innovation and modification.

Without attempting to elaborate on any of these issues, I would like now to introduce Professor DeMott who may discuss these or any other issue he

considers important.

Benjamin DeMott

Ladies and gentlemen. Obviously, I am the ringer here, the plain ordinary classroom teacher who has had in his lifetime very little in the way of administrative responsibilities; and when I have had them, I have not discharged them particularly well. Therefore, you would be quite justified in assuming that this would not be the five star part of the presentation.

To talk about philosophy and history means presenting yourself with the question, what are the conditions that have to be borne in mind when thinking about alternate approaches to graduate education? What are the goals that have to be kept in the front of the head? What is the general context in which you place issues involving the training of people in graduate schools?

Now some of those conditions Bob has alluded to, and many of them we scarcely need a lecture about from a professor of English or from anyone else. We all know that there has been over the last, let us say, two centuries a long revolution in process for the mass diffusion of intelligence.

Stages in that revolution are fairly well marked for us, from mass literacy and public-supported elementary education to the moment that Bob spoke of before, the moment when society decided it really does believe all people ought to have a shot at close to fourteen years of publicly supported education. It is very hard, I think, sometimes for people to bear in mind that, when you say fourteen years of public education, you are in effect saying more than that people will have two years of college. You are in effect saying that everyone in society will have, everyone in society in some sense "ought" to read Dostoyevski, everyone in society "ought" to have experimented in some way with a reflective introspective vision, everyone in society ought to have an opportunity of knowing something about the laws of nature at what would have been considered not many years ago an advanced level. When we talk now about the cutback of funds and so on, we forget how enormous a commitment is being made to the mass diffusion of intelligence in society. That is one of the prime conditions for anyone thinking about approaches to any kind of education at the moment. In a sense, the revolution that I speak of is a long, long-revolution. It cannot be turned back. It is not going to be turned back because the public commitment to the enlargement of human reflective and speculative powers is absolutely overwhelming and undeviating.

The first condition then, as I say, has been pointed out to us all. The second is that everyone at the moment appears to have vast expectations for trained minds as contributors to the clarification and the solution of public problems.

It is not just a matter of field agricultural stations any longer. The assumption is that in some way the university ought to contribute to the repair of the rents in the social fabric. Most of our people hold that view of us. It would be very difficult to think in terms of the eradication of that expectation. It cannot be eradicated. The commitment, once again in terms of general belief throughout the society, is too wide, too strong, too fully felt. It constitutes another component in thinking about alternate approaches.

A third point, a shade less visible but nevertheless possibly more important than the others is what we take to be an almost universal protest throughout the

society, not just on the part of the young -- an almost universal protest against what one might call the culture of slots. The culture that, in one way or another, as we all know, precedes us and can predict on the basis of where we are born, or where we were educated, what the level of income of our parents was, can predict with some safety where we will be living some twenty years from now, where we will take our vacations, where we will buy our clothes, what kinds of entertainment we will choose, what sort of books we will have, whether our children will or will not get to the university, and whether those children will or will not have children who get to the university, and so on.

The culture of slots, as I say, is felt to be depriving human beings of opportunities for self-creation, self-development, self-actualization, to use that familiar term, which they are entitled to -- opportunities for development and growth that are personal and that involve the choice of a track made by the single human being in light of his feelings, as those feelings develop in the course of a lifetime.

This protest that I speak of seems to us to have immense implications for graduate study. It involves first of all an awareness of all people who enter graduate study at this moment, that they do not or may not wish to accept the pattern of occupational structure that still exists in the society and that exists equally potently, I believe, in the university itself. There is a desire here for a kind of flexibility, a desire for a kind of movement in life to a personal variousness, toward a multiplicity of self, that the university and graduate school are at the moment not adequately conversant with and not adequately responsive to.

Now that means, so far as we can make out, that the university and the graduate school need ultimately to find ways of easing the shapes, forms, functions and definitions which originated in an age in which fixed slots, fixed occupational categories, fixed modes of life, and fixed sequences of experience prevailed. Universities and graduate schools need to find a way, as I say, by which they can adapt themselves to a whole new set of aspirations and a whole new set of desires which exist among the general population. We seem to perceive the university and the graduate school as having a form and a function that belongs to a quite different historical moment, a moment that was production oriented, that was consuming oriented, that was dominated by a fairly simple work ethic, that in some way matched up with understandings about occupational category. That form and function belonged to a moment in which social islands and enclaves, as well as occupational categories, had more inevitability and more apparent validity than they now have.

The problem of adapting, of linking up through alternate approaches one kind of institution to another kind of age is extremely difficult for the reasons that I think Bob and Boyd indicated, reasons which do not need extensive amplification. It is absolutely clear that out of the graduate school, as a social form and as a cultural form, civilization got, what remains to this moment, the best way of preserving the value of controlled, disciplined, delayed gratification and long-term intellectual labor. It is among the best social inventions that we have, the best cultural invention that we have for diffusing that value, and if that value grows in society, we all know that it will lead to the improvement of not just the human being and the mind, but of human beings in their wholeness. But even as we say that the university and graduate school as presently constituted are the places within the society wherein that value receives its toughness, its strength, its permanence, even as we say that the value must be preserved, we

have simultaneously to say that we do want to foster the long revolution – the long revolution which turns out to be the revolution on behalf of full human development for everyone and is a full attempt on the part of each human creature ultimately to discover what he can do in a disciplined, intellectual setting.

Now I am perfectly aware that to move from talk of acts of individual self-creation and the difference between the way the act of self-creation is conceived now and the way it was conceived in 1880, is to move toward “blue sky”. People who may tomorrow afternoon be arguing with the department chairman about the budget line find such talk abstract. Yet, it does seem to us that before we can confront in any sensible way the issues that Boyd just mentioned, we have to come to some understanding among ourselves about where we thought the society was going and how the graduate school and long-term disciplined intellectual labor fitted into that vision of where we are headed. We have, in some sense, arrived at a notion of where we are going and where we think the culture is going.

We think it is going toward a society in which the recycling of human beings at various stages in their lifetime would be perfectly feasible. We think that where we are going is toward a culture that will permit departures and entries from occupations, even at very high, technically advanced levels of performance. We see, in short, a kind of movement, a kind of mobility, social, occupational, and ultimately psychological and cultural – unlike anything that the past has known. We are absolutely convinced that the graduate school, with the help of some alternate approaches or different models and patterns of study than those which presently exist, can function as it should – can carry the revolution forward and ultimately make it pay off for all of us.

J. Boyd Page

Dean Kruh and Professor DeMott have described some of the concerns of the Panel as it has continued its discussions and some of the philosophical bases which have emerged. The discussions have been wide-ranging indeed, covering the whole field of graduate education – what it now is, what it might be, and what it should be. We are now at the point in the life of the Panel when decisions must be made regarding recommendations for action which the Panel will make as a part of its final report. The Panel will not attempt to describe what any graduate school should do, but we will attempt to provide an analysis and a rationale which we hope will be useful to institutions as they make their own choices in light of the changing environment in which graduate work is conducted. We do feel that there are significant new elements in society and that students will be approaching graduate education with new sets of values and with different goals than we have become accustomed to and around which we have built our collective enterprise. We will be urging each graduate school to “re-think” its own goals, its capabilities, and how it can best serve the students who will come to it and the society which helps support it.

It is too early to list specific recommendations. They have not yet been fully sorted out nor has full agreement been reached on any of the specific recommendations now under consideration. A few basic principles have already been tacitly if not formally adopted as fundamental. Let me mention just a few of these, but it should be made clear that these are listed randomly without any

suggestion implied as to relative importance. First, advanced study and research are essential components of our educational system; and it is in society's best interest that our established system of graduate education be kept viable and strong. Second, advanced degrees are sought for a variety of reasons. This has, of course, always been so; but the number and variety of reasons will clearly increase. We must understand what is sought and why it is sought if we are to plan well, and we must be prepared to meet new goals and objectives. We must also recognize that all graduate study need not be oriented toward achievement of a degree. Third, admission to established graduate schools must be made more available to qualified students for whom access may have been difficult if not impossible in the past. At the same time, however, it must be kept in mind that graduate education cannot be mass education nor should it attempt to be. It is not likely that our intellectual, physical, and fiscal resources will permit dramatic increases in graduate enrollments in the few years just ahead. Fourth, available evidence does not support the often made assumption that non-residential study at the graduate level can be conducted at markedly reduced costs with minimal demands on faculty time. Fifth, graduate education, even with the adoption of new techniques and procedures, will remain expensive -- innovation costs, development and adoption of new technology costs, and the costs cannot be borne by student fees alone. Sixth, most, if not all, of the innovative procedures or programs which are worthy of serious consideration can be incorporated into the structure of established schools without undue strain if resources will permit. This is not to say that all graduate schools should embark on new enterprises. When, however, an institution decides to accept for itself a role in response to a newly emerged social need and when adequate resources can be made available, exciting and responsive programs can be established with quality still the hallmark and without doing violence to sound academic principles.

The recommendations which are being developed can be classified under two main goals. First increasing flexibility -- these will, of course, have an orientation which is primarily internally directed and the second will be directed toward extending the outreach of the graduate school. These, of course, will have external orientation. Under the first grouping, there is a category of recognition of non-traditional qualifications. These relate to acceptance of life and work experience as a teaching/learning resource, introduction of flexibility and accepting appropriate credit transfers, establishing mechanisms to evaluate work obtained outside of the academic environment, and strengthening ties between graduate schools and university extension. Another category will relate to the faculty reward system so that faculty members engaged in new forms of education or in newly established interdisciplinary combinations may be rewarded. Another category relates to new technologies and teaching methods, and still another calls for a re-evaluation of the validity of our traditional residence requirements for the differing forms or specific disciplines in graduate education.

Under the second broad category which involves external orientation, cooperative arrangements with other institutions and industry will be considered, definition and establishment of appropriate external internship components, acceptance of non-academic experts on the faculty, non-degree programs to update professionals, and outreach through educational technology will all likely receive attention.

As indicated at the outset, our combined purpose in presenting this

material to the Council has been to give you some indication of what the Panel is concerned with as well as a brief progress report. Our schedule calls for a full meeting probably in March with such other meetings as may be necessary to follow, but with the ultimate objective of completion of the central work of the Panel in the early autumn of 1973 with issuance of the final report and recommendations to follow shortly thereafter. We hope to be able to have available and possibly to discuss the final report at the annual meeting next December.

We have purposely been brief in our presentation because our other purpose was to seek comments, criticisms, and suggestions, or to hear expressions of concern from the members of the Council. We now invite your comments and suggestions. We recognize that with a group of this size it may be difficult to cover many points with which you may be concerned. We, therefore, invite your comments or suggestions by mail or in person. This is, in fact, the ideal time for input from the graduate community which we now solicit.

## Fourth Plenary Session Who Should Pay for Graduate Education?

Thursday, November 30, 1972, 10:30 a.m.

Presiding: Philip E. Kubzansky, *Boston University*  
John D. Millett, *Academy for Educational Development*  
Clarence Scheps, *Tulane University*

### Introductory Comments

Philip E. Kubzansky

This session is devoted to a question which is increasingly relevant following upon our discussion of a few moments ago, who should pay the costs for graduate education?

The question is relatively simple to ask even if not so simple to answer. In our discussions about alternate approaches to graduate education, one of the motives which propels that question to its urgency is the issue of the costs of graduate education and how those costs are to be borne. All of us in graduate education today are aware of the relative withdrawal of federal support for our enterprise and the pressure and competition for resources to do our jobs. Consequently, the apportionment of the costs has a force and an urgency of great moment.

We are very fortunate in having as our principal speaker this morning one of the men in this country who is among the most knowledgeable about these issues, Dr. John Millett. Dr. Millett was a member of the graduate faculty at Columbia University for a number of years. He served from 1953 to 1964 as the President of Miami University in Ohio and followed that as Chancellor of the Ohio Board of Regents, which is responsible for coordinating the programs of higher education in the State of Ohio. At the present time, he is Vice President of the Management Division of the Academy for Educational Development.

John D. Millett

At first glance, it seems relatively easy to answer the question: who should pay for graduate education? Certainly, there should be little reason to provide any different answer for graduate education from that for undergraduate education. If it is appropriate, as so many persons in our society profess, that the costs of undergraduate education should be shared by both student and society, then surely it is equally appropriate that the costs of graduate education should be shared by student and society.

Indeed, it can be argued that a social investment in graduate education is even more important than a social investment in a general baccalaureate program in the arts and sciences, teacher education, and business administration. A good many persons in higher education institutions may disagree with this

proposition. I cannot imagine that there would be many, however, who would want to dispute my basic proposition, that a social investment in graduate education is socially justifiable; even more, I believe, such investment is socially essential.

At the outset, it is necessary to designate a specific definition of graduate education. One possible way of defining graduate education is to make the field coterminous with all post-baccalaureate education. Just as most of us in higher education are now supposed to adjust to the new label of post-secondary education, we might also try to adjust to the designation "post-baccalaureate" education. I would prefer, however, to suggest a somewhat more restrictive definition.

I think we may properly divide post-baccalaureate education into two parts: graduate professional education and graduate education. *Graduate professional education* is that post-baccalaureate education which builds upon a liberal arts base and which undertakes to achieve specialized professional objectives only at the post-baccalaureate level. The primary fields of study for such graduate professional education are law, medicine, dentistry, theology, veterinary medicine, and optometry. Although, in these last two mentioned fields, graduate professional education is not always strictly post-baccalaureate, the trend appears to be in that direction.

*Graduate education*, in contrast with graduate professional education, also seeks professional objectives, to be sure, but tends to build upon the base of an undergraduate specialization. The usual degrees of this graduate education are the Master of Arts, the Master of Science, the Doctor of Philosophy, and specialized designations. Graduate education in the arts and sciences and in such specialized fields as teacher education, business administration, agriculture, engineering, and nursing tends to continue an undergraduate concentration toward a more advanced level of knowledge and skilled performance.

Assuredly, there are universities with schools of business, schools of management, schools of social work, schools of library science, and schools of journalism which build upon a liberal arts base and which might well be classified as graduate professional schools. In addition, there are universities and scholars who would define graduate education exclusively as post-baccalaureate education in the arts and sciences.

In fact, we might further define post-baccalaureate education through three components: graduate professional education, advanced professional education, and graduate education in the arts and sciences. I hold no strong conviction about any particular definition. I insist only that we have an obligation to define our terms. And this discussion includes education at the master's and the doctor's degree levels, in both the arts and sciences, and in advanced professional fields within my definition of graduate education. With due recognition of the diversity which characterizes higher educational institutions in the United States, I believe I am utilizing a definition of graduate education which will accord with the practice of a majority of the universities belonging to the Council of Graduate Schools.

To return to my primary concern in this paper, who should pay for graduate education, let me underline the two basic issues involved. One is the cost of graduate education. The other is the distribution of this cost between student and society. I want to emphasize that we cannot separate the question of the distribution of cost from the issue of the cost itself, for two very important reasons. In a discussion of the distribution of the cost of graduate

education between student and society, both parties to that distribution would want to know what the costs are. And, if universities expect student and society in some kind of juxtaposition to meet the costs of graduate education, we must be prepared to defend those costs. Higher education can no longer exist in this country merely upon a professional assurance by scholars and administrators that we know what we are doing. We shall have to demonstrate that knowledge and justify our expenditures.

At this point, it may be unnecessary to discuss the subject of the costs of graduate education in any detail. In this connection, I think we are fortunate to have available the cost-benefit data prepared by Powel and Lamson and published this past March by the Council of Graduate Schools. I think we are equally fortunate to have the commentary on this research prepared by Deans McCarthy and Deener and published at the same time.

I am aware of some of the travail which accompanied this study. There are, of course, many complications in any effort to establish instructional costs. I wish to emphasize an important consideration. Institutions of higher education cannot expect increased funding and at the same time declare that it is not desirable or feasible to determine the costs of instruction. Underlining this statement is a brief provision of the Education Amendments of 1972, which became law when approved by the President on June 23. The new federal law adds to Title XII of the Higher Education Act of 1965 the following new section of law:

Section 1206. The Commissioner may require as a condition of eligibility of any institution of higher education

- (1) for institutional aid, at the earliest practical date, or
- (2) for student aid, after June 30, 1973, that such institution supply such cost-of-education data as may be in the possession of such institution.

I would assume that the Commissioner of Education will have to enforce this condition of eligibility or face considerable criticism in the Congress; it also seems likely that in order to obtain institutional aid and student aid funds, colleges and universities must have some well considered, meaningful data about their instructional costs.

There should be nothing startling about the cost data for master's degree programs or for doctoral degree programs reported by Powel and Lamson. The ranges of expenditure data for programs in similar fields are certainly to be expected, and the variations in the medians among various fields of study is a familiar situation. There are some aspects of cost data, however, which I want briefly to mention.

It is not enough to determine direct instructional costs. It is equally necessary to allocate a proportion of the overhead or indirect costs to the direct ones. There are various ways to make such allocations; the important consideration is that these overhead costs must be included as a part of total instructional expenditures.

Cost data require a unit of output. There is no satisfactory unit, I am convinced, except student credit hours of instruction. These student credit hours are then easily converted to a full-time equivalent student instructed on either an academic year basis or a year-round basis. The academic year seems to be the proper basis for cost data. For budget data, to be sure, year-round count of full-time equivalent students provided instructional service is needed. In this

connection, we need to make certain that our curriculum offerings include appropriate course credit units for preparation of a master's essay and for the research essential to a doctoral dissertation.

A major complication in determining the costs of graduate instruction is the allocation of faculty time between undergraduate and graduate instruction. Apart from the appointment of faculty members who devote their energies exclusively to graduate teaching, there are two familiar means of achieving this allocation. One is a faculty service report in which the faculty member is asked to state the proportion of his work week devoted to undergraduate and to graduate instruction. The other method is to use a weighting scheme, presumably based upon some sampling of faculty reporting data. I have known such weighting to assign a unit of one to lower division student credit hours, two to upper division credit hours, and three to graduate instruction. This kind of weighting seems to be generally reasonable, provided there is some kind of empirical data base for it.

Another kind of cost problem is that of deciding how to recognize differentiations within graduate education. In their commentary, McCarthy and Deener identify three different levels of graduate instruction: the master's degree level, the candidate or specialist level, and the doctoral degree level. I should like to report my own conclusions on this subject.

As Chancellor of the Ohio Board of Regents for eight years, I directed a very carefully constructed resources analysis procedure based upon a uniform management information system which provided us with the input data for our computerized calculations. In turn, each year, I carried on some vigorous discussions with the graduate deans of eleven public universities about the meaningful interpretation of these data.

The graduate deans and I eventually agreed that in analyzing the costs of graduate instruction, it was satisfactory to recognize two levels rather than three. We also agreed that these two levels should not be labelled master's degree instruction and doctoral degree instruction. We decided to label them graduate instruction and doctoral instruction. We came to this conclusion because some departments offering a doctoral degree program encouraged very few, if any, of their students to take a master's degree, and because graduate students usually enroll in a wide variety of courses with a mixture of candidates for the master's degree and the doctoral degree. Indeed, we had to acknowledge the fact that most departments do not plan their general graduate course offerings in terms of a master's or a doctoral candidate; they plan course offerings in terms of specialized subjects or particular parts of a discipline or professional field.

Furthermore, we recognized that a graduate student generally enrolls in graduate courses up to a total of 90 quarter credit hours. We then counted an additional 90 quarter credit hours for the doctoral degree, involving 45 credit hours of individualized or small-group instruction and 45 credit hours of research instruction. I believe these decisions were reasonable as general guidelines in curriculum construction and in expenditure analysis.

It is commonly held that costs of graduate instruction vary with the quality of such instruction. Personally, I do not put much credence in efforts to measure or rank graduate programs in various fields by various universities. What these efforts accomplish, primarily, is to rank the prestige of particular faculty members at particular points in time, and these judgments about prestige may not correlate with quality. It is still possible for some graduate lights to be hidden or concealed by some institutional baskets.

I am impressed by the differentiation in graduate education objectives put forth in the McCarthy and Deener commentary on graduate costs. They propose that a distinction be made between the research-oriented and the practice-oriented graduate programs. I think this concept is useful; it applies both to graduate education in advanced professional study and to graduate education in the arts and sciences. When graduate education in the arts and sciences encompasses undergraduate teaching, it is a practice-oriented approach. I would hope that more of our planning and of our expenditure analysis might make use of this distinction.

Upon the basis of a great deal of experience, observation, and study, I am convinced that the basic reason for the differences in costs of graduate instruction are related to differences in the cost of the faculty input. I believe this difference is not so much the consequence of varying levels of faculty compensation, although this is surely a factor, as it is the consequence of varying levels of faculty workload. The kinds of workload standards carried by faculty members make a great deal of difference in the costs.

I recently had occasion to examine the faculty staffing pattern of a major private research university. The faculty members were generally expected to teach six credit hours of formalized instruction per semester. Most of these faculty members taught graduate courses; a great portion of undergraduate instruction was assigned to teaching assistants. Personally, I believe faculty workload expressed in terms of student credit hours is more indicative of actual faculty productivity than is workload expressed in terms of course credit hours. But however stated, workload or productivity has a great deal to do with the costs of instruction.

During my tenure as Chancellor for the Ohio Board of Regents, all of us concerned with public higher education carefully considered the size of faculty workloads we could reasonably ask the Governor and the General Assembly to finance. We fixed these workloads in terms of student credit hours, and the standards varied for general studies, technical education, baccalaureate general programs, baccalaureate professional programs, graduate programs, doctoral degree programs, and medical programs. For example, at the graduate level, we insisted that there be one full-time equivalent faculty position for each 150 student credit hours of output. This is the equivalent of 17 students enrolled per class in three classes for three credit hours each. At the doctoral degree level, we said that there should be one full-time equivalent faculty position for each 120 student credit hours. This was the equivalent of 14 students enrolled per class in three courses of three credit hours each.

The doctoral degree faculty workload was exactly one third of the workload fixed for student instruction in general studies, and one half the workload for student instruction in baccalaureate general programs. Our argument to the Governor and the General Assembly was that faculty members engaged in graduate and doctoral instruction were also expected to engage to a reasonable extent in research or public service related to their field of instruction. The argument was acceptable to the extent that in Ohio we avoided any legislative mandate on the subject of faculty workload. The General Assembly was content simply to endorse the standards of the Board of Regents.

Incidentally, faculty workload standards presuppose minimum enrollment in graduate instruction. In the absence of such enrollment, costs become excessive or must be absorbed as adjuncts of the cost of other instructional programs. Both practices have been used.

Many probably consider these faculty workloads to be unduly demanding. Workloads, however, are related to costs, and costs depend upon available income; that is, upon who is willing to pay how much for graduate instruction. Faculty workload, like faculty salaries, must be fixed in the context of acceptable costs and acceptable pricing, whether or not that pricing is for students or for society.

There is one aspect of university expenditure which I insist is *not* a cost of graduate instruction, the expenditure for graduate fellowships and for teaching assistantships. I am well aware that most instructional departments consider the availability of graduate fellowships and teaching assistantships to be an essential means for recruiting the desired quality and number of graduate students. Yet, fellowships must properly be regarded as a form of student financial aid, and teaching assistantships must properly be regarded as instructional compensation in the program where the position is assigned. Neither fellowships, nor assistantships should be assigned automatically as a cost of graduate education to be recovered from graduate student tuitions and from social subsidies of graduate instruction.

At this point, it is important to make still another distinction, a distinction between graduate education and graduate instruction. Graduate education, indeed, higher education in general, embraces three somewhat different kinds of activities, which we customarily label instruction, research, and public service. These three kinds of activities have been designated the "primary programs" in the program classification structure of the National Center for Higher Education Management Systems. Graduate education involves graduate instruction but encompasses research and public service as well.

I think this distinction is important both in the analysis of the costs of graduate education and in the determination of the financing arrangements. But before I further pursue this distinction, let me point out that considerations about the financing of higher education cannot be separated from issues about those who benefit from higher education.

The available literature as well as the uncertainties about this whole matter of benefits are reviewed in the monograph by Powel and Lamson and in the commentary by McCarthy and Deener. Moreover, in the near future there will be a report from the Carnegie Commission on Higher Education on the subject of who benefits from and who should pay for higher education. All of us will eagerly await this important document.

In general, it is evident that the benefits of higher education accrue to both students and society. Also, there is a consensus about the identification of these benefits. The disagreements begin when we are asked to express these benefits in terms of dollars. And disagreement quickly becomes conflict when we attempt to base decisions about financing upon our judgments about the relative magnitude of these benefits.

For the individual student, the benefits of graduate instruction are the personal satisfaction of formal education carried to its highest potential development and the opportunity thus afforded to the graduate to earn more income in our economy based upon the use of this educated talent. In this latter connection, there are two factors to recognize. A study on the rate of return to individuals of their investment in higher education shows that this rate has in the past been lower for recipients of the doctorate than it was for recipients of the baccalaureate. Income in the labor market is related to the supply and the demand for educated talent. If we want to see rate of return on graduate

instruction enhanced, we would do well to limit the supply of such talent well below its demand. That would certainly be the correct economic behavior, provided graduate education is motivated or influenced by economic considerations.

For society, graduate education provides benefits of various kinds: the preservation and transmission of the intellectual heritage of our culture, the advancement of knowledge, and the utilization of knowledge applied to promote the well-being and the general welfare of all citizens in our society. We have come to see that graduate education is essential to the operation of higher education itself, to our national security, to our health, to our economic development, to our ecological survival, to our social cohesion, and to our cultural enrichment.

In deciding who shall pay for the benefits of this graduate education, we might begin by examining the costs of sponsored research and public services performed by institutions of higher education.

Undoubtedly, the presence of sponsored research on a university campus has today created the research university. I would go a step farther and declare that sponsored research makes possible the research-oriented program in graduate education. The definition of a research university propounded by the Carnegie Commission on Higher Education is based upon the dual standard of number of Ph.D. degrees awarded and dollar volume of federal government research grants and contracts. I am disposed to believe that today a research-oriented program of graduate instruction, at least in the physical and biological sciences and in engineering, can only be provided in the university where sponsored research exists on a sizable scale.

It is evident that research to advance knowledge and the encouragement of creative talent are costs of graduate education to be financed by society. Notice that I say costs of graduate education. The benefits of research and of creative talent are primarily social benefits in my judgment. Therefore, these costs should be paid by society.

Sponsored research today in universities is being financed up to 75 or 80 percent by federal government agencies. Not all of this sponsored research is basic research; some of it is purchase of applied and developmental research from universities for direct use by government agencies, in programs such as space exploration or the development of atomic energy. Clearly, the future volume of research in our universities, together with the advancement of knowledge and the flowering of creative talent, will depend upon the volume of federal government financing. We can expect that much achievement in science, the humanities, and the creative arts which we in society are prepared to underwrite.

But social support of research and of creative talent is not dependent solely upon federal government financing. There are other available forms of social support: endowment and gift income earmarked for this purpose. Moreover, such general income from endowment and gifts and such appropriation support from state governments as is provided for graduate instruction may also support research and creative talent.

When a university fixes a limited or reduced workload for its faculty, it is supporting research and creative talent. I see no objection to this practice. I do suggest that a university would do well periodically to assess the output it is realizing from these general arrangements for the support of research and of creative talent. I suggest also that a university would do well periodically to ask

itself whether or not the cost of its support for research and creative talent is outstripping its income from society for this support. And, I do suggest that a university would do well periodically to ask itself whether or not a more particularized approach to the support of research and creative talent would be more appropriate to the actual volume of output in these fields and more equitable to those who pay for graduate instruction.

Similar considerations apply to the financing of public service. Various public and various enterprises in our society look to colleges and universities to perform various public services. Many individual faculty members may be called upon by outside groups such as voluntary associations, business enterprises, and governmental agencies to assist them in providing advice about how to perform certain tasks or about how to solve certain problems. The response of the individual faculty member to such requests for consulting assistance will depend upon his or her interests and other commitments, including the commitment to the college or university of which he or she is a part. Other public services may be performed through agencies or mechanisms of the college or university, such as public broadcasting, the operation of a museum, the exhibition or performance of special talent, the treatment of patients, the enrollment of persons in seminars or short courses of continuing professional education, the dissemination of advice about specified problems.

Again, I must express my own strongly held position that a college or university ought to undertake formalized endeavors to render public service only to the extent that these services are financed by consumer charges or by social contributions. Public service is an integral part of higher education. It is especially useful and apt to be particularly sought in connection with graduate instruction. But public service, like all other activities of higher education, has to be paid for, and the volume of such activity needs to be carefully related to the financing available for this activity. I do suggest that a university would do well periodically to assess the outputs it is achieving from its general support of public service. I suggest also that a university would do well periodically to ask itself whether or not its support of public service activities is outstripping its resources for financing such public service. And I do suggest that a university would do well periodically to ask itself whether or not a more particularized approach to the support of public service would be more appropriate to the actual volume of output in this field of endeavor and more equitable to those who pay for graduate instruction.

At this point, then, we must find some kind of answer to the question of who should pay for graduate instruction. Let me say at once that if the principle of social funding of research and of creative endeavor within a university were accepted and practiced, and if the principle of restricting public service commitments to public service income within a university were accepted and practiced, then I think the cost of graduate instruction, including university overhead, could be brought within reasonable bounds. Certainly, all of us in higher education operation must become cost conscious in regard to graduate instruction.

Assuming we know the cost of graduate instruction at two or three levels of endeavor, and assuming we have clarified the research-orientation or the practice-orientation of our instructional programs, then we have to decide as a matter of policy and of practical need how we shall divide this cost between the student and society. The polar positions on this issue are simple to state. On the one hand, we may say that all the benefits of graduate instruction accrue to the

individual student and that, accordingly, the student should pay the entire cost of graduate instruction. On the other hand, we may say that all the benefits of graduate instruction accrue to society and that, accordingly, society should pay the entire cost. Since most of us agree that the benefits of graduate instruction accrue to both the graduate student and society, we conclude both should pay the cost.

I must pause here to insert another important qualification in the consideration of the costs and the financing of graduate instruction. I have mentioned earlier the finding in the graduate cost study of the Council of Graduate Schools and of the National Association of College and University Business Officers that expenditures vary by discipline. It is not feasible, however, to enter into differential pricing of graduate instruction upon the basis of the particular program or discipline offered. For pricing purposes and even for state government appropriation purposes, we need to determine average costs and average charges. The distribution of average income among particular programs then becomes the task of budget management within a particular university.

In Ohio, during the current biennium ending June 30, 1973, the average expenditure per full-time graduate student for graduate study including university overhead was fixed at \$3,300, and the average expenditure per full-time graduate student at the doctoral level including university overhead was fixed at \$5,400. At the level of graduate study, the student was expected to pay \$1,200 of this expenditure and the State of Ohio, \$2,100. At the level of doctoral study, the student was expected to pay \$1,200 and the State of Ohio, \$4,200. In the first instance, the student paid 36 percent of the cost and the state government 64 percent. For doctoral study, the student paid 22 percent of the cost and the state government paid 78 percent.

I believe that the distribution of payments between student and society in our state universities will undergo considerable change over the next several years. Increasingly, we shall have differential pricing to students at the lower division level; the upper division level, and at the graduate level. Furthermore, I think we shall move toward the point where the distribution of costs between student and society at the level of graduate study will be approximately 50 percent to 50 percent, while the distribution at the level of doctoral study will be approximately 40-60.

Insofar as privately sponsored universities are concerned, I shall cite the current experience of another private research university whose expenditures I have had an opportunity to examine. At the level of graduate instruction, the expenditure per student averaged around \$4,000 in the arts and sciences, and at the level of doctoral instruction, the expenditure per student averaged around \$7,000. The graduate student paid 60 percent of the cost at the graduate instruction level; society, through endowment and gift income, paid the remaining 40 percent. At the level of doctoral instruction, the graduate student paid 35 percent of the cost and society paid 65 percent.

Apart from their efforts to reduce the costs of graduate instruction, I believe the private research university must increase the proportion of its costs paid by the graduate student. The alternative is to find increased social support for graduate instruction.

A third private research university carefully examined its cost and income situation and decided that it must have increased social support. It determined to embark immediately upon a very substantial capital gifts campaign in order to raise its endowment by almost 100 percent. The preliminary planning for this

campaign suggests that this particular university has a good chance of realizing its goal. Here is one way in which the social contribution to the costs of graduate instruction can be increased:

There is another choice. As the problems of cost and income have increased for graduate instruction, I have come to believe that graduate instruction ought to be financed on a national basis. I am well aware of the dangers involved in this procedure. As a former state government higher education planner, I am not overly enthusiastic about having a federal government planner for graduate instruction. The preferable arrangement would be for the federal government, through revenue sharing or through grants-in-aid, to provide state governments with funds to support graduate instruction in both publicly sponsored and privately sponsored universities.

I, for one, would like to see the time when privately sponsored universities have the option of obtaining the same social support for graduate instruction from all available sources as is provided the publicly sponsored university. If we do not arrange some such mechanism, then there are only two choices available to the privately sponsored university in financing graduate instruction. One choice is to increase social support through philanthropy. The other choice is to continue differential pricing to graduate students in terms of the pricing policies of publicly sponsored universities. In the long run, this particular kind of price competition between privately sponsored and publicly sponsored universities will surely be harmful to the survival of graduate instruction by the private university.

To be sure, as governmental financing of a part of the costs of graduate instruction increases, governmental planning and coordination of graduate instruction must inevitably follow. And after governmental planning and coordination will come governmental accountability. No one should have any illusions on this score. Governments which pay for graduate instruction will also direct and supervise graduate instruction.

How we shall finance the graduate student is a separate problem beyond the scope of this paper. It is not reasonable to expect the parents of the graduate student to finance graduate education, although in practice this does occur and will continue to occur. And some outstanding graduate programs would continue to have graduate students if the universities involved did not find means to provide support to half, three-quarters, and even 90 percent of their graduate students. These universities have a particularly difficult problem when they must find the resources to finance graduate instruction and graduate students. In long-run terms, I see three primary methods for financing the graduate student. These are part-time employment -- including part-time instructional and research duties in the university where the graduate student is enrolled -- family support, including the earnings of a spouse, and loans.

#### SUMMARY

Graduate education, including graduate instruction, research, and public service, is a major set of activities for American universities. These activities are performed by our major research universities, by our other doctoral-granting universities, and by our comprehensive universities. These universities may be privately or publicly sponsored.

A pattern of financing for these activities has clearly emerged today which suggests that sponsored research activities and sponsored creative activity will be supported by social contribution primarily from the federal government. Additional financing may be obtained from private philanthropy and from state

government appropriations. The support of graduate instruction will be shared by the graduate student and by society.

This sharing of the cost of graduate instruction varies among the state universities and the private universities. The trend in this decade will be for the graduate student share of the costs of graduate instruction in the public university to increase. Hopefully, a trend will also develop for the share of the costs of graduate instruction paid by the graduate student at the private university to decline somewhat. In this way, we shall continue to have a pluralism of graduate instructional programs with their varying emphasis upon research and practice. I hope it is not too optimistic to expect this kind of future for such essential endeavors as graduate instruction, research and creative activity, and public service.

Clarence Scheps

My assignment this morning is to comment briefly on John Millett's incisive and informative paper. I have been asked to limit my remarks to five minutes to give you more time to participate in the discussion period and to ask questions.

Although the subject of his paper was "Who Should Pay for Graduate Education?" he emphasizes, I think very wisely, several related areas, especially the importance of calculating the costs of graduate education and the absolute essentiality of using such data in the decision-making process.

The principal conclusions he reaches, briefly summarized, are as follows: First, if adequate social funding of graduate instruction were an accomplished fact, which it is not, and if public services commitment were limited to the income resulting from that service, which it is not, then the cost of graduate instruction could be brought within reasonable bound. Second, since the benefits of graduate instruction accrue both to student and to society, the cost should be shared partly by the student and partly through social funding -- that is, funds from governmental sources, endowments, and gifts. Third, the distribution of payments between student and society will be somewhere in the realm of 50/50 or perhaps 40/60. Fourth, looking to the future, Dr. Millett expects that in the state universities the student's share of the cost of graduate instruction will increase while he expresses the hope that in the private institutions the share the student would have to pay would decrease.

I can find no serious disagreement with Dr. Millett's conclusions. Nor am I capable really of enlarging upon them. I would, however, like to take just a minute to relate this discussion of the costs of graduate instruction to the larger problem confronting graduate education and, for that matter, all of higher education at this time. Of course, I am talking about the undisputed fact that higher education, as I see it, is in deep financial trouble. Although the degree and the extent of this trouble varies among institutions, as far as I am concerned there is very little to make us optimistic about the immediate future. By the immediate future, I mean, let's say, four years. Parenthetically, I should point out that my own pessimism may very well be influenced by the fact that my own institution has been operating on a deficit basis for the past sixteen consecutive years and the end is not yet in sight. Part of the financial difficulty in higher education, there can be no doubt, has been the rapid growth in graduate and professional education, which, admittedly, is by far the most expensive kind of education.

At the same time, there can be no doubt, that progress, expansion, and enrichment in higher education for the past two decades has been something short of miraculous. It has been great, but at the same time our individual institutions as well as our systems of higher education, and there are many of them, were expanded with little thought of the cost of such expansion or the possibility of a future day of reckoning.

For a long time, I was among those who contended and advocated that the only way the financial ills of higher education could be cured was to find ever-increasing revenues. I no longer believe this. I am now convinced that funds from all sources, public and private, cannot be generated rapidly enough to meet all our needs in the years immediately ahead.

Of course, we must continue to pursue vigorous additional sources of revenue. Simultaneously, we must strive to make our systems of higher education and our individual institutions more efficient. In my judgment, we urgently need improved planning mechanisms in terms of our individual institutions, in terms of statewide and regional coordination, and in terms of federal policy.

Relating this financial dilemma of higher education to our topic at hand, it seems evident to me that society's share of the cost of graduate education, at least in the immediate future, not only will not increase but probably will decrease or diminish. This means that the student will have to pay an increasing share of the cost of his education and that includes graduate education.

Frankly, I am unable to determine what proportion overall ought to exist between the respective shares to be paid by the student on the one hand and by societal sources on the other. I would rather suggest that to the extent an individual student is able to bear the cost through sources suggested by Dr. Millett—that is, employment, family support, and loans, then the student must be expected to pay for some or all of the cost of his education. I realize this is not a popular position to take, especially in a group like this. But realistically, I can see no other course of action at this time.

While we must continue, as energetically as we know how, to seek additional social funding for the graduate structure, we must expect, I am afraid, for awhile at least that the student may have to bear an ever-increasing part of this burden.

## Luncheon

Thursday, November 30, 1972, 12:30 p.m.

Chairman: David R. Deener; *Tulane University*  
Presentation of Gustave O. Arlt Award in the Humanities  
Guest Speaker: David Henry, *Chairman, National Board on  
Graduate Education*

## LUNCHEON

David R. Deener

Members of the Council and guests, I would like to begin the activities today by making some introductions at the table. In keeping with the trends of the times, at least the immediate times, I will commence on my left and move to my right.

I will introduce each person and at the end I would ask you to join with me in recognizing the work they have done on behalf of the Council during the past year. They are all members of the Executive Committee.

At my extreme left is Dean Jacob Cobb of Indiana State University who will be your new Chairman. Next is Phil Kubzansky, Boston University; Ray Mariella, Loyola; and Dr. Boyd Page, President. The next person is Elizabeth Foster, Bryn Mawr; and the next wearing the latest in formal academic attire is Phil Rice, South Florida; and Bob Wolverton, President of the College of Mount St. Joseph on-the-Ohio. Also with us today are three former chairmen of the Council - Herb Rhodes, Arizona; Al Proctor, Kansas State College (Pittsburg); and Joe McCarthy, University of Washington. Would you three rise for a moment and let people see what former chairmen look like.

A fourth past chairman is with us - Bryce Crawford from Minnesota; but he has returned to faculty status and is said to have left because of pressing classroom duties.

And now for a moment which all of us in graduate education have looked forward to, the presentation of the first Gustave O. Arlt Award. I would first like to describe the award and then introduce to you the recipient and say a word or two about the accomplishments of this award.

The Council of Graduate Schools in the United States, holding its twelfth annual meeting in New Orleans, has inaugurated an award to honor its first President, Dr. Gustave O. Arlt. The award for Dr. Arlt, and funded from contributions of individuals and organizations, is to be given to a young scholar-teacher in the humanities. An Advisory Committee, in accordance with Dr. Arlt's wishes, selected the field of English and American Literature to be the first honored.

It further stipulated that the recipient must be teaching in an American university, have earned his doctorate within the past six years and have written a

book of scholarly importance. Subsequent awards in other humanistic fields will be made each year, with a committee of scholars in each field serving as a selection committee.

Members of the selection committee for the first award were Professors George Hendrick, University of Illinois; Robert Kinsman, UCLA; Edward Lueders, University of Utah; Robert Lunzansky, University of Pennsylvania; and George Harper of Florida State University who served as Chairman. Serving as the Advisory Committee for the award are Reverend Robert Henle, President of Georgetown University; Professor Richard Predmore, Duke University; and Dr. Robert Wolverton, President of the College of Mount St. Joseph on-the-Ohio. All members of the Advisory Committee are former graduate deans.

And now, I would like to introduce to you Professor George Paul Landow. Professor Landow received his BA degree at Princeton University in 1961, a master's from Brandeis in 1962, and received his doctorate from Princeton in 1966. He has taught at Columbia University, Cornell University, the University of Chicago, and presently is Associate Professor of English at Brown University.

He has won a number of special honors. He was a Woodrow Wilson Fellow at Brown. He held a Chamberlain Fellowship from Columbia, and is a Fellow for the Society of Humanities.

Beginning in 1966 with the publication of an article on *Tristram Shandy and the Comedy of Context*, some 28 pieces of research and publication have been published by Professor Landow. The book for which he is being honored is the *Aesthetic and Critical Theories of John Ruskin*, published by Princeton University Press in 1971. I will read a review to give you the flavor. This review appeared in the *Modern Language Quarterly* in June, 1971.

"George Landow's *Aesthetic and Critical Theories of John Ruskin*, a logical successor to Henry Ladd's perceptive and in some degree pioneering *Victorian Morality of Art*, is unique in its admirable aspiration to place Ruskin as a mighty landmark in the progress of aestheticism. But Landow's book has many other merits, not the least of which is its author's intellectual humility, perhaps the rarest of all attributes among younger academics today. Furthermore, the refreshing sanity of the book, the courageous approach to a most daunting intellectual quality, as well as a sheer enthusiasm written across each page, comes singularly to the fore as the reader progresses from one chapter to the next. After all too long a time, studies of Ruskin, and one might say the enduring Ruskin, will doubtless take a different turn for Landow suggests, to his deeper perspective, new and first avenues to an author whose writing from his time and our own have too long remained neglected."

Professor Landow, it is really a great pleasure on my part to be able to present to you a tangible token for the first Gustave Arlt Award. Now, I wonder if you would help me prevail upon Gus Arlt to come up and add his personal congratulations to Professor Landow.

Gustave O. Arlt

I want to thank Dave for generously permitting me to say a few words on this, to me, a very happy occasion; and I want to thank all of you for your expression of enthusiasm that brought me up here on the platform.

Professor Landow, I wish to say a few words to you first of all, and then to my colleagues and friends in the Council of Graduate Schools. If you will permit me a paraphrase of an English poet who does not fall within your particular purview, "You have drunk deep of a pyrene spring." Your publications and your recent work on which the review was just read clearly

indicates that your erudition and your scholarship is without question.

I am, therefore, particularly happy that the selection committee has chosen so worthy a recipient for the first award. Other awards will be made in the coming years, I hope. But you have one particular distinction, Professor Landow, which no one can ever take away from you. Many people have made solo flights across the Atlantic, but there is only one Charles Lindburgh. Many people will receive this award in the course of the years, but you are the first and you can always make a list. For that I am happy, and for that I congratulate you.

I congratulate even more sincerely the members of the Executive Committee and the members of the Council of Graduate Schools for having established this particular award and I do not think anybody will take it amiss if I say that I appreciate especially the cooperation of my colleagues in the fields of chemistry, physics, and engineering who take no objection to an award in the humanities, a field which I think certainly deserves the recognition which the Council is now giving it.

An award of this sort is not a mark of honor for the person for whom it is named. It becomes a mark of honor through the people who receive the award. In the corridors of the Cosmos Club in Washington, there are two long rows of photographs. On one side of the corridor are all the Cosmos Club members who have won the Pulitzer Prize. On the other side are the Cosmos Club members who are Nobel laureates. Those are two great names, Pulitzer and Nobel. They are great through the persons who have received the award over the years; and if this award is to continue, it, too, has the opportunity of becoming a great award through the work and achievements of the people who will be honored by it.

**George Paul Landow**

If I may politely disagree with Dr. Arlt by saying that I am honored by having my name associated with his, and I also want to say that I am very proud, not because this is an award of my peers showing some confidence in me, but because it stands for something that I believe in. Graduate education, as I am always telling my graduate students, is something which is meant to show you that things which are right at hand and seem so familiar, can be very strange and wonderful. All those exotic strange foreign things have something familiar in them if you only know where to look. In other words, as we always tell freshmen, even more than beauty, relevance is something in the mind of the beholder and education, particularly graduate education, is very much a habit, a practice, an indoctrination almost, if you want to find what is relevant to oneself.

When I started to work on Ruskin, my advisor had to go to the graduate committee and really beg them to allow me to take Ruskin as a special author rather than Milton or someone else, and his argument was that in Victorian literature, we do not really know who the major authors are.

That can be taken as a rather two-edged comment. I would choose to take it as a comment meaning that everything is wildly exciting. It allows our investigations. It allows us to tie everything from pop culture to our understanding of Judeo-Christian traditions. That is something which I try to do in the book, and whatever success I have had in doing it, I certainly hope that my success, which you recognized, will in some way be thanks to Dr. Arlt for all

the work he has done for graduate education.

David R. Deener

Now, let me say a few words about our speaker, Dr. David Henry. He really needs very little introduction, as we all know; but I might remind you that he has had a distinguished career as a university president, first at Wayne State and then sixteen years at the University of Illinois. He has been President of the Land Grant Association. He has been very active in the American Council of Education and has been one of the spokesmen for graduate education and higher education in Washington. He has also been President of the Association of American Universities and at the current time is serving as Chairman of the National Board on Graduate Education.

David Henry

Mr. Chairman, Ladies and Gentlemen. A trip to New Orleans, even though I could not come early to your meeting or stay late, is worthwhile for me, just for the opportunity to see so many of you whom I do not have a chance to see in these days of professorial duties!

My talk today is in the nature of a report, submitted at the request of your president, made nearly a year ago. When he asked me to come to your meeting of last spring, I said that I did not have enough to say to justify your program time. I believe that the intervening year has been productive, but you will have to decide whether this progress report merits your attention.

There has been a great deal of curiosity about the National Board on Graduate Education, and I welcome the opportunity to be in your company to give you this report, because there is no other group in the country whose primary interest is so clearly related to the work of the Board. It is true that the Board is an autonomous agency, speaking or seeking to speak, about graduate education, not for it - a very important distinction. It is a Board without constituencies. Yet, the very existence of the Board reflects the deep concern of the members for the welfare of graduate education. Otherwise, the twenty-six busy and distinguished people who make up the Board would not give of their time and effort if they did not have that basic feeling about the importance of graduate education. Hence, they want to relate their work to yours, to keep in touch with you at the organizational level, and to have the advice and counsel of your members.

A word about the origin of the Board may be in order. Some three years ago, with the assistance of the Carnegie Corporation, a conference on pre-doctoral education was held at Woods Hole, Massachusetts. The people who inspired that meeting had a feeling that graduate education was being, on the national level particularly, overlooked in the studies and discussions about higher education and that it was time that a systematic, analytical look at graduate education be taken, with a view to bringing its purposes, objectives and problems into public visibility. Out of that conference came a recommendation that a Board be established for the purpose that I have just described.

It is interesting to me, as a newcomer into the organization, to recall conditions in 1969 and to note how remarkable it was that the recommendations of the founding group preceded the financial "crunch" which

has come with such harsh pressure. The idea for the Board's mission was really born before the budget necessities were what they are today, reflecting a sincere desire to look at the future of graduate education in terms of the demands of the times, not merely in budget considerations.

The Woods Hole Conference resolution was accepted by the Conference Board of Associated Research Councils. The four Councils cover all of the fields and disciplines of graduate study. Some two years elapsed in the organization task, part of the time spent in gathering information about prospective board members, and part in consulting about the general desirability of the Board's creation.

The first meeting of the Board was held in August 1971, a kind of exploratory meeting, which by common report did not take any significant action, except to underscore the need to proceed. Additional Board members were appointed, the Chairman was selected in January of 1972, the Staff Director, Dr. David Breneman, was recruited, and the office in Washington was established in June. Hence, six months of the year was spent on organization tasks. An important activity in that period was the publication of a bibliography on graduate education for the years 1950-1971. Copies of that publication have been sent to all of you and many others and the response has clearly indicated its value. Here we have in one place, for the first time, some measure of the interest in graduate education as reflected in publications on problems and issues.

In 1972, the bibliography was updated, again under the supervision of Dr. Wayne Hall, and published in the fall. These publications have proved to be of great value, to scholars, to graduate students, to administrators, and to all others who are interested in the state of graduate education.

Beyond gathering information as a basis for Board recommendations, another charge was to provide an unbiased, thorough analysis of graduate education today and its relation to American society in the future. The means are to be studies, consultations, conferences, and research activity as might be commissioned. Further, the Board is expected to move its recommendations into the arena of public and professional discussion so that action outcomes may be encouraged.

The Board is financed by gifts, from a number of sources, some from government and some from foundations. Although the organization is under the aegis of the Conference Board, it exists as an autonomous agency. In its business affairs, it is represented by the National Academy of Sciences, one of the members of the Conference Board.

The Board has twenty-six members. The staff is small and will remain small. In its presumed short life, some three years according to plan, the Board can be more productive by calling upon others to be of assistance and commissioning special work to be done, rather than employing a larger staff.

Some negative questions were raised at the very beginning of the Board's organization. One critic said that efforts on behalf of higher education are too fractionated and too diffuse now, and another well-meaning group may make things even more diffuse and fractionated. In response, one can only say that there is apparently a need for a group with credibility that does not represent graduate education, but is qualified to speak about it. The National Board may indeed turn out to be ineffectual. It must not claim too much importance, but whatever it does will fill a gap in present understanding.

Some who are skeptical, not only of the Board's usefulness, but of the

value of the kind of effort to be put forth in studying problems, do not appear to understand that there are things that we do not know about graduate education. Universities are vulnerable to criticism in many ways and the causes for these criticisms must be removed or they must be answered where not valid. Changing times need changing responses as well as conservation of that which requires renewed emphasis.

It is reinforcing to note that at the time that the Board was organized the Carnegie Commission on Higher Education, in its report on *Reform*, gave several pages to the need for reassessment of graduate education. One of its recommendations was an endorsement of the mission of the National Board.

Another negative reaction to the Board's creation is the apprehension that the Board will make recommendations that may have critical overtones and that, therefore, will make the task of getting increased support more difficult. I suppose such a possibility exists, but certainly to follow the approach that we ought not to criticize in order to keep things looking better than they are is not a sound long-term stance. If we follow that way, the skeptics, the uninformed, and the antagonistic will have their own way. Those who feel that a cover-up is the way to do business would have a good learning experience if they appeared before a committee of the state legislature or of the Congress or even of a foundation and try to respond to the criticisms that are current these days.

Another comment has been directed to the composition of the Board, as unrepresentative of various groups. The Conference Board selected people, not constituencies. The people come to the Board with varied backgrounds and many backgrounds are reflected in the totality of their experience. However, they will be supplemented by advisory groups, consultants from all areas of expertise, and spokesmen from any other identifiable interest group.

These are the main negative comments that have come to our attention. I shall now stress the positive aspects of the Board's planning.

Recently, the first position paper of the Board was published. It is titled, *Graduate Education: Purposes, Problems and Potential*. Here, the Board attempts to chart its course.

The first point that comes through very clearly, is the stress upon the need for a long-range view of the national need for graduate education. The National Board believes that the numerous decentralized decisions currently being made to reduce support of graduate education may have the unintended effect of severely damaging the nation's capacity to provide the quality and diversity of graduate education that we believe to be a continuing national need.

While agreeing with the necessity for some limitation and selective retrenchment, the Board is concerned by the absence of thoughtful planning about and development of long-range policies, policies designed to insure continuing strength as the graduate schools adjust to the new fiscal environment. You know of the moratoriums, the cutbacks, the budget squeeze, and all the kinds of financial decisions that are being made out of current necessity; but they are made without the guidance of long-range policies, or even long-range considerations.

For example, one of the possible threats to the national welfare is in the present tendency to align doctoral production with market demand. Here, we would turn off the machinery and diminish our capability; then, when that market demand alters, as it inevitably will, we will find that the machine won't work. A central question is what will be the demands for specialists in the economy and society of the 1980's? Will we have the capacity to deal with

them? These are haunting questions. There is not much evidence that anybody is really concerned about national policy on that subject, a subject beyond the capability of a single institution to deal with.

A second main point of the Report has to do with the belief that the fundamental purposes of graduate education have become obscure, and there is need for their restatement and broad understanding as they relate to the current social and educational scene. The basic purposes of graduate education as perceived by the members of the National Board are set forth. The list is not comprehensive, but the highlights are there. What the Board has to say about the education and development of skilled individuals, the production of knowledge, research and the availability of expertise flowing from research, the preservation and transmission of knowledge and the effect of graduates on the quality of life will not be new to you, but it will make clear our common ground.

Another major segment of the Report identifies the priority concerns of the National Board, as presently defined. Obviously, there are many more topics that could be considered than time to deal with them will allow. The Board spent many hours trying to arrive at a judgment of what should have priority.

First place is given to the supply and demand question as related to doctoral programs. We recognize that a tremendous amount of work has been done on this subject and more is underway. The National Board does not expect to enter the research activity, in a basic sense. However, it recognizes that the public ought to be aware of the confusion surrounding the debate on this question. The Report states three cautionary notes for decision-makers as they modify graduate programs in response to market issues.

First, it is acknowledged that manpower projections can contribute significantly to the formulation of wise public policy, provided the policy-makers are aware of the limitations that surround the various projection techniques. However, the Board believes that some policy decisions are currently being made without an awareness of these limitations.

The science of forecasting manpower requirements is still in a primitive stage of development. An examination of the history of past forecasts indicates that unforeseen changes in the economic and social environment have rapidly rendered most forecasts obsolete. The economist Mark Blaug supports this point, observing that present forecasts of manpower requirements cannot be made with any reliability beyond periods of three to four years, and even three-year forecasts are frequently proved inaccurate. And yet the time perspective of almost all manpower forecasts is as long as ten to fifteen years.

Second, several factors point to the danger of possible over-reaction in the currently depressed market. The Board is concerned that some policy-makers of the federal and state levels are ignoring or are unaware of the important distinction between manpower projection and predictions. As Allan Carter has written, one should draw a careful distinction between these two. The former may illustrate the consequences of current trends and thus serve to alter the course of events. There is considerable evidence that students in graduate institutions are reacting to the recent projections, comments to the contrary notwithstanding, suggesting that the future supplies of Ph.D.'s will be considerably less than projected. We must guard against the pendulum swinging too far in certain fields.

Another factor that may contribute to possible over-reaction is the fact that Ph.D. production is a multiple year process. The effects of current policies will not be totally clear for several years.

A third cautionary note: Although most of the aggregate productions for Ph.D.'s agree that the labor market forecast is not now favorable, this tells us very little about field by field supply and demand for doctorates. Thus, current policies may lead to future shortages in certain fields accompanied by excesses in others.

Given these cautionary comments on the general limitations of manpower forecasting, the Board does believe that the forecasts, as regards a diminishing future academic demand, estimated largely on demographic considerations, are broadly accurate. This suggests that an increasing percentage of new Ph.D.'s will be employed in the nonacademic sectors of the economy. For this reason, expansion of traditional doctoral programs oriented toward the academic market does not seem warranted at this time and on this the Board agrees with the Carnegie Commission and others who have made the same point. However, as of the present, no one has looked very deeply into the question of the nonacademic market and the possible change in the nonacademic market in the years immediately ahead, let alone the decade ahead. This area must have increased attention before we can come to any final manpower policy as a boundary for graduate education.

Another very important related point is the question of social need versus market demand. Here again, we have had very little basic research and very little understanding of what should prevail in the determination of manpower policy. Market demand in a setting of very broad understanding of what are the social needs may be controlling in the years to come. Thus far, that subject is waiting for some firm research. To ignore it, of course, is to run the risk of undersupply which could be a damaging result for our country at a time of very great national need.

Obviously, the manpower questions are large and complex. In the time it has, the National Board cannot contribute much to definitive research. But it hopes to issue a report that will clarify the issues, define the limitations of present knowledge and discourage arbitrary and uninformed decisions.

The second subject that comes forward in the list of priorities is graduate costs. Here we have a perennial topic. However, because of current budget constraints, and the current depression in higher education generally, the demand for more coherent analysis of graduate costs is certainly an area of major concern. These are of two kinds, of course. One is the cost of the graduate student to the institution; the other is the need for and costs of underwriting student assistance.

A basic confusion in the finance area is "Who should pay?"—society or the individual? If both, in what proportions? These are basically philosophical questions and their answers will produce political responses. Until the policy question is decided, solutions will be pragmatic compromises. If we are going to have the student pay the whole bill, we shall have to have one set of policies. If we are going to continue tax support and gift support, we shall have another.

Another major topic, the "pros and cons" of the geographic dispersion of graduate education. Not too long ago, we seemed to be committed to building what was called "centers of excellence" in the country, reasonably distributed, geographically, but not dispersed in an indiscriminate way. The "centers of excellence" approach came under heavy political attack some ten years ago and federal government policies were established for dispersion. Now at a time of retrenchment and regression, what should our policy be? What is the capacity of the present system? What should it be, and what should be the distribution of

quality graduate education?

The questions for study and report mentioned today are broad ones, and largely external to the institution. There are many internal issues; some are on your program today. Among them, of great interest, is the search for alternative models in graduate education.

For example, we find little evidence that the rather extensive new data now available in the area of student attitudes are being used in any systematic way as a basis for change in graduate education. I call to your attention the tables in the Carnegie Commission Report issued in June of this year under the title of *Reform of Higher Education*, the section having to do with the attitudes of graduate students. In that particular survey, some 30,000 graduate students were included, 70,000 undergraduates, and 60,000 faculty members. As far as I know, this is the most comprehensive sampling of student opinion that has ever been conducted. Up to the present time, scholars have not fully digested its significance.

A very satisfying result of the survey was the fact that 77% of the graduate students were generally satisfied with their education. This response was quite contrary to what critics of the system were trying to tell us five years ago.

Nevertheless, it is somewhat disturbing that 23% in varying degrees, were not satisfied as these tables point out. More interesting and more to the point is that within the total number, while 77% were basically satisfied, when it came to specific issues on curriculum, on faculty environment on the campus, problems and issues of this kind, the students were much more critical than they were of the total education in general. It seems to most of us that these reactions are important as we attempt to respond to consumers of our service, so to speak; at least, we should consider them to see to what extent they are valid, and how much they should affect the so-called "reform" in graduate education. The whole question of student attitudes is certainly one of the subjects which will have the Board's attention.

Among other subjects that fall in line behind those that I have enumerated are graduate programs in black institutions, graduate education in relation to the two-year colleges, the role of the research institute, trends in post-doctoral education, the future of the master's degree, access and recruitment for minority members and women, the federal interest in graduate education, and state support for graduate education.

Some of these are old issues, but they are alive and unsettled, often unclassified. Obviously, we must find some answers that are not now apparent.

Now, turning to the activity program, the Board plans to have a series of expository reports on high priority subjects. Early ones will be on the manpower question and on financial aid to graduate students. We hope to undertake a study on quality in graduate education and one on the adjustments of institutions to the current depression.

On other subjects, we hope to sponsor exploratory conferences and consultations that may be helpful to the Board in formulating recommendations.

In all of our efforts, we look forward to collaboration and cooperation with others that are undertaking similar efforts; for example, the Panel on Alternative Models, the Board of Human Resources, ETS, CGS, AAU, government departments, especially HEW and Labor, and the Federal Interagency Committee on Education.

In conclusion, let me say simply that as a premise we believe that the system of graduate education is a vital national asset and that simple statement is

not properly assessed in our country today.

As efforts are made to improve graduate education and relate it to present needs, decision-makers should recognize the fragile nature of the system and avoid the type of hasty and perhaps irreversible decisions that may unnecessarily foreclose valuable options.

Some things, and here I am speaking for myself, have to be taken on faith in the search for improvement. We do have to make some value judgments, particularly in areas where we do not have research foundations and where research methods elude us. I refer to productivity, to the measurement of quality, and to the value of the research experience. What part of advanced education is preparation for employment and what is for personal growth? What is the continuing role of specialists as we search for inter-disciplinarians? What is the critical mass of research activity required to produce the great discovery? How large a research program does one have to have before the idea that merits a Nobel prize finally emerges? On such questions, we do not have answers entirely satisfactory to all. We can try to build a consensus among us in order to renew the confidence of the American people in advanced education.

In conclusion, I cite for you several sentences from a Carnegie Commission Report that epitomize my concern with the subjects of the day.

"The period just ahead may be and certainly can be one of the most experimental, innovative and progressive periods in the history of American higher education. To make it such, we need to identify the basic problems as clearly as we can, to specify the constraints that limit the range of solutions as wisely as we are able and to determine the better avenues of approach to new policies as effectively as possible."

To that end your National Board on Graduate Education is dedicated. I hope that we can help in arriving at that goal.

**Fifth Plenary Session  
Women in Graduate Education**

Thursday, November 30, 1972, 3:00 p.m.

Presiding: Robert E. Wolverton, *College of Mount St. Joseph*  
Moderator: Lorene Rogers, *University of Texas*  
Elizabeth Scott, *University of California, Berkeley*  
Margaret Bunbarger, *American Association of University Professors*  
Cyrena Pondrom, *University of Wisconsin*

**Introductory Comments**

**Robert E. Wolverton**

Perhaps I am quite out of order, but I hope you will forgive the intrusion of a personal comment, since I simply feel that I would be remiss if I did not take this opportunity to say a couple of "thank you's." This is, as I said, my swansong -- or the other metaphor, the lame duck -- as a graduate dean since on August 1, I became the President of the College of Mount St. Joseph on-the-Ohio. But before I depart from active involvement in graduate education, I simply wish to thank all of you with whom I have worked these past five years. I am convinced more than ever that the I.Q., in this case, the integrity quotient, of graduate deans is the highest in the academic world; that has meant that I have known and worked with people of the highest quality and for that I am most thankful.

I have been privileged to serve at state, regional, and national levels of graduate education and at all levels I have met only great people of the highest integrity. So, I would simply say to all you new deans that you are now among some of the finest people in the academic world. I want you to appreciate it. I want you to keep working because, as you know, there is a lot to do.

Finally, I would say that I am thankful that most of you, I think, would agree with me that even a classicist can be relevant as a graduate dean, despite some of the comments of this morning!

Now we turn to the afternoon session, which is concerned with the subject of women in graduate education. It is perhaps appropriate that I was asked to serve as presider since my new school is one of the few remaining women's colleges, which means among other things, that I do not really have the problem of affirmative action--perhaps the reverse.

With regard to this particular program, I will say that I have some good news and some more good news. First, despite the obvious temptation, I will not tell any jokes about Texas. The other good news is that I am going intentionally to let the women have the last word. My task is only to introduce Dr. Lorene Rogers, and she will carry on from here. Now introducing a friend like Lorene is a real pleasure: if there is anyone of whom it can be said "The eyes of Texas are

upon you" it could be said of her for she is a most distinguished scholar, teacher, administrator, and human being. Let me just buttress that by a few facts. Her degrees: B.A. degree in English from North Texas State University; her Master of Arts in organic chemistry and her Ph.D. in biochemistry both from the University of Texas.

Her professional experience reads like a distinguished person's should, and I will not go through it all; but professional honors have come her way, including an honorary degree. She has been, among other things I notice, a predoctoral fellow, a postdoctoral fellow, and a fellow in the American Institute of Chemists. I do not know how she has lived so long with all these fellows, but she has adjusted.

In other professional activities, she has served as a visiting scientist, a lecturer and a consultant for the National Science Foundation. In our professional organization of CGS, she has served on the African Graduate Fellowship Program, the International Education Committee, and has been a member of the GRE Board from 1970 to the present. She holds membership in Phi Kappa Phi, Sigma Xi, American Society of Human Genetics, American Institute of Nutrition, American Institute of Chemists, and (get this) American Men of Science - which has been changed, I understand. I will not credit that to her, but it could have well happened that way.

One of the nice things that one of our fearless leaders of the past did when he became President of Texas (of course I am speaking of Steve Spurr) was to select Lorene as vice-president. He knew that she was a great teacher because she had received, on that campus, the award for excellence in teaching. He knew, too, that she was well versed in graduate education, that she wore many hats, and that she was always very capable; so, for those reasons he appointed her simply vice-president, not vice-president *for* anything or *of* anything, simply vice-president. Now, that is the sort of title that all of us should be blessed with!

So, Lorene, the eyes of Texas are upon you but only with great pride for being such an affirmative-actioned person.

Lorene Rogers

Thank you Bob. One might think that everything that could be said about women in higher education or graduate education has already been said in many such programs as this, in the last year or two; but many of you are still involved, or at least your institutions are still involved, in trying to improve the status of women, writing affirmative action programs and so there is still interest in this topic and questions to be answered.

We are very fortunate today to have three women on this panel. We had a fourth one who is unable to be here, but we have three women who are experts in their areas, who have a great deal of knowledge and new things to say and who will be able to answer the questions that you have, I think.

The other evening I was looking through one of those great educational journals, *The New Yorker*, and came across a quotation by Judge Learned Hand. I cannot quote it exactly, but the substance of it was that liberty can never be brought about by laws and regulations; liberty is only in the hearts and minds of individuals. I think we might paraphrase that to say that as far as the elimination of discrimination is concerned, it will never be done by laws and regulations; it will only come about in the hearts and minds of people. But the laws and

regulations do help. I think all of us of the female sex recognize that a great many changes for the better have been made in the past year or two, and these have been brought about by legal regulations and by pressure from organized womens' groups. Sometimes we do not approve of their methods, but we have to give them credit for having improved the situation for all of us.

We still have a long way to go. I think if you look at the program for this meeting you will recognize that there is a great deal of segregation involved here. We find women talking only about women in higher education. Now surely in this great group, there are some women who are concerned with the master's degree and some of the other things that have been talked about here. I do not want to be too critical because I know this program was put together under some unfortunate and difficult circumstances, but I hope this is the last year that we will have all of the women over in one group talking about women and then all of the other problems of graduate education being discussed by the men in the group.

I would like to introduce these fine panel members. The first one is Dr. Elizabeth L. Scott. She is professor and Chairman of the Department of Statistics at the University of California at Berkeley. She succeeded in her profession long before there was a womens' movement. She is an astronomer, mathematician, and a statistician, and has worked in research in teaching. Recently, she has been involved in a study on her campus concerning the present status of women, so she is going to talk to us today on "The Facts of the Matter".

### Women in Higher Education — The Facts of The Matter

Elizabeth L. Scott

Some of you may have heard of the obstacles and indignities to women in higher education of 100 or even 50 years ago, women whose achievements in research are of first rank, perhaps ahead of those of outstanding men with whom they were associated. Sonya Kovalevsky, the brilliant Russian mathematician (1850-1891), obtained her higher education in Germany under several famous mathematicians including Karl Weierstrass with whom she read privately from 1871-74, as public lectures were not then open to women. On the basis of three remarkable dissertations, the University of Gottingen granted her a degree *in absentia*. At age 34, she became a professor at the University of Stockholm. Her research was recognized as remarkable; her solution to the problem set for the Prix Bordin by Paris Academy in 1888 was so outstanding that the value of the prize was doubled. Yet, talented as she was, since she was a woman she could not attend classes in Berlin.

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Women scholars have had (and still have) their salaries withheld or been denied employment because of nepotism rules. Thirty years ago, when the Nobel prize winner Maria Goeppert Mayer was offered a position at Chicago at double her Columbia salary, she replied that this was not much of an increase since Columbia paid her nothing, only her husband was paid.

Even famous Marie Curie-Skłodowska was denied admission to the "Retreat for Scholars" in her native Poland because she was a woman. This was in spite of the fact that she was already a winner of two Nobel prizes and was bringing to the radioactivity laboratory (which she had helped to establish in Warsaw) a gram of radium presented to her by the President of the United States in recognition of her service to science.

We want to emphasize that these are not just horror stories from the past. The same or similar problems persist today. In the recent past and currently, women have been forbidden to apply for a postdoctoral fellowship advertised in *Nature*, have been denied access to the big Mt. Wilson and Palomar telescopes (no woman has yet used the 200" in her own name), have been forcibly evicted from the dining rooms of the faculty club of the University of California or required to use a side door at Michigan simply because they were women. The habits of discrimination have so permeated the universities and research institutions that one wonders whether women will ever have the chance to be effective in academic life or is the struggle hopeless? Certainly, some profound changes are needed in the attitudes of both men and women. We can no longer regard as a calamity an increase in the number of women applying for admission to graduate studies. The academic status of women in relation to men must be raised to equality. Not only must the opposition of reactionary men be overcome, but a change in the thinking of the society at large must be brought about and this means a change in the thinking of women as well as men. Several years ago, a department chairman told a woman student that she had been selected by unanimous vote of the faculty to receive the departmental citation. She was informed that there would be a ceremony and her name would be placed on the plaque in the front office. She was all smiles for a few minutes but then became pensive and alarmed. The chairman asked, "What is the matter?" and she answered, "I cannot do that. You see, my husband is a good student but he may not get the citation in his department!" Several weeks later she rushed up to the chairman in great excitement, "Can I still get the citation? My husband got one too!" Many changes and much understanding will be needed for a long time to bring about equal opportunities for women to be scholars in our universities.

The Facts with the Faculty. Women make up about one-fifth of the teaching faculty of United States institutions of higher learning but their representation is much less in the more elitist (and better paying) universities: the percentage of women faculty in the leading research universities is only 11%, it is 13% in the other research universities, increasing to 20% in those universities awarding only five to ten doctorates annually. In the four-year colleges, the percentage is around 24% except in the nonselective liberal arts colleges where it is 32%. The percentage of women faculty is near zero in engineering and other specialized institutions, and about 26% in two-year colleges. These estimates are obtained from the large-scale national survey of college and university teaching faculty, made in the spring of 1969 by the Carnegie Commission on Higher Education in cooperation with the Office of Research of the American Council on Education. A comprehensive questionnaire was returned by 60,028 faculty

drawn from 78 universities, 168 four-year colleges and 57 two-year colleges. The data were weighted to compensate for sampling and non-response biases.

The data from this survey extends (see Bayer<sup>3</sup>) what was known from earlier, small surveys: women tend to be at lower ranks (24% of the men but only 9% of the women faculty are full professors, 25% of the men are outside of any level of professor, while 46% of the women are beyond the pale). The discrepancies are more striking in the research universities: there are few women in the physical sciences, engineering, and business-departments that tend to be better paid. With some concentration in humanities and education, women tend to receive lower salaries by a striking amount. Other strong differences include: women tend to be older, are more likely to be unmarried; have fewer children, are more likely to do undergraduate teaching and are less likely to hold the doctorate.

Presumably, these and other sex differentials are interrelated. Part of the lower salary women tend to receive may be due to lack of the doctorate, part may be due to the field of employment, or to some of the many other determinants of academic reward, such as the number of papers published. The most extensive study of sex discrimination in academe is due to Astin and Bayer<sup>4</sup>, using the same CCHE-ACE survey. By means of a linear regression equation with 32 predictor variables, they estimate that to reward women with the same salary as men with the same rank, background, and achievements would require a compensatory *salary increase* for women averaging \$1,040. This does not include discrimination in rank which they estimate to be one-fifth of a step. As Astin and Bayer point out, we are neglecting the discrimination in the 32 predictor variables. Insofar as women are discriminated against in the types of institution that employ them, in the fields they can enter, in the opportunities to do research or administration, and so forth -- all affecting the estimated salary -- the actual amount of the resultant discrimination in salary and in rank will exceed the figures above. Thus, the figures \$1,040 and one-fifth of a step are only a rough lower bound of the average effect of the discrimination attributed to sex.

We decided to go farther in the study of the CCHE-ACE survey to investigate whether the differential salary effects due to sex would be greater in some types of institutions (for example, in leading research universities) or in certain fields (such as physical sciences), whether better estimators and more insight could be obtained with higher order interaction-predictors, and whether there was bias due to the previous elimination of all faculty teaching less than 9 hours (which meant eliminating 51% of the men and 35% of the women sampled) because the survey neglected to inquire whether employment was full time. Our study is not completed yet but the results already confirm and extend the conclusions of Astin and Bayer. Our study is based on the replies of all the women plus a 25% random sample of the men in the survey. The studies were done separately by type of institution and field except when subsamples became too small -- then neighboring samples were combined.

Table I shows the coefficients of the predictor variables in the multilinear regression equation for predicting faculty salaries in the fields of biological and physical sciences (combined) in leading research universities. The first column gives the coefficients when the entire 1,183 men and 312 women are considered together. Note that the coefficient for "sex" is -0.83, meaning that all other predictors being fixed, women will be paid about 0.83 times \$3,000 which is about \$2,500 less than men. The second and third columns give the coefficients

separately for men and for women. Some of the coefficients are very similar while others are quite different. In the first place, the constant term, the intercept, is lower for women than for men by one-third of a salary interval, that is, by \$1,000. Both sexes tend to earn more if there are children but the coefficient is twice as large for women, although there is an interaction term crossing the number of children with date of birth and favoring slightly older people with no children. It is very important for women to have a graduate degree from a prestigious school but of no importance for men. The salary increases with the number of years in academe but does so twice as fast for men as for women. The number of articles published is important for both, equally so, but the number of books published gives twice the increase to women as it does to men. The effect of paid consulting is more remunerative for women than for men but outside professional practice is more harmful to women than men (perhaps the result of part-time faculty still in the sample). Other possible predictor variables available in the CCH-ACE survey were omitted from the regression equation because they would not appreciably improve the precision of the estimated salary.

Table 1  
 COEFFICIENTS OF THE MULTILINEAR REGRESSION EQUATIONS  
 FOR PREDICTING FACULTY SALARIES

Leading Research Universities - Biological and Physical Sciences, 1158 Men, 312 Women

Salary Range: 1 = below \$7,000 to 9 = \$30,000 and over; one interval is \$3,000 for \$2,000 or \$5,000

Men and Women	Men	Women	Variable
.69	1.52	.48	Constant
.84	.08	.05	Sex, 1=male, 2=female
.04	.05	.05	Date of Birth, 1=1905 or Before, 2=1944 or Later
.42	.20	.44	No. of Children, 1=none to 3, three or more
.61	.67	.69	Highest Degree, 0=BA or less, 1=MA, 2=doctorate
.13	.12	.06	BA from a Prestigious School, 0=no, 1=yes
.08	.02	.33	Graduate Degree from a Prestigious School, 0=no, 1=yes
.30	.35	.18	Years Employed in Academe, 1=one year or less to 8
.09	.11	.05	Years Employed in Present Institution, 1=0 years to 10 or more
.06	.10	.04	Quality of Present Institution, 1=high to 5=low
.48	.17	.45	No. of Articles, 1=none to 6, more than 20
.14	.10	.22	No. of Books, 1=none to 4, 5 or more
.27	.25	.39	No. of Sources of Paid Consulting, 1=0 to 6
.21	.21	.12	Administrative Activity, 1=none to 3, 81 to 100 percent
.03	.03	.01	Consulting, 1=none to 3, 81 to 100 percent
.13	.12	.33	Outside Professional Practice, 1=none to 3, 81 to 100 percent
.06	.10	.05	Hours Taught per Week, 1=none to 2, 21 or more
.73	.75	.76	Salary Base, 1=9-10 months, 2=11-12 months
.04	.04	.05	Date of Birth * No. of Articles
.05	.07	.08	Sex * No. of Children
.08	.20	.09	Date of Birth * No. of Children
			Sex * Single * Young, 1=male, never married; under 30
			2=female, married or formerly married, 30 or over

As was done by Astin and Bayer, we can use these regression equations to compare the predicted and actual salaries. Since the estimating equations are not perfect, some men will earn more than their equation predicts and some will earn less but the average residual will be zero. This situation is similar for women when compared to their own equation. The interesting comparison, from the point of view of discrimination, is the residual between the actual salary received and the prediction from the equation of the opposite sex. Does a man earn more than what we would predict from the equation that estimates women's salaries? Does a woman tend to earn less than what would be predicted if she were a man? Yes, as shown in Figure 4, discrepancies of \$3,000 or of \$6,000 or even \$10,000 are common, especially in the more elitist institutions and in the fields where women are scarce.

In the biological and physical sciences departments of leading research universities, more than 85% of the women are underpaid, more than half by at least \$5,000, some 22% of them by at least \$7,500 annually as judged by what they would be paid if they were men possessing the same characteristics of training, background and performance. At the opposite extreme, 84% of the men are overpaid compared with what they would receive if they were women. More than half are overpaid by at least \$5,000, and 21% by at least \$7,500.

The distribution of residual salaries for men compared to that for women is again much higher when we consider the humanities in leading research universities. However, the discrepancies are smaller than was the case in biological and physical sciences. The subsample contains 520 women and 712 men. For a comparison, we show the distributions in a case where the proportion of women faculty is larger than usual in the nonselective liberal arts colleges, again in the humanities. Now, one-third of the men are underpaid, as against two-thirds of the women. The overwhelming evidence is statistical. It is possible that a close examination of the file of each of these women would reveal some justification for underpayment but the probability that there are indeed so many unusual cases is very small. It appears that women's salaries should be increased, and markedly increased, to bring them to the level of what a man of the same capability would receive.

There are now many studies on the status of academic women at particular colleges and universities. Several of these have traced the status of women back fifty or more years. In every study, the conclusions show that the status of women has been declining on almost every measure: salary relative to men, rate of promotion relative to men, proportion of women on faculty, proportion of women full professors, and proportion of women faculty relative to women awarded Ph.D.'s (see 5, 6, 7). National figures confirm the conclusions of diminishing status derived from individual institutions.

The Facts on Graduate Women. The number of women obtaining degrees has been increasing rapidly at every level. However, the number of men has been also increasing rapidly so that the ratio of degrees awarded to women has not changed as much. Figure 2 shows the number of degrees awarded in the United States on a logarithmic scale. For higher degrees, the line for females is much lower than that for males and the distance between the lines in a pair is rather constant indicating that the ratio does not change much.

Figure 3 shows the percentage of advanced degrees earned by women from 1900 to 1970. The percentage of master's awarded to women has now increased to 39.8%, about what it was in the 30's. The percentage of doctorates is up to 13%, almost back to its values in the 20's and 30's.

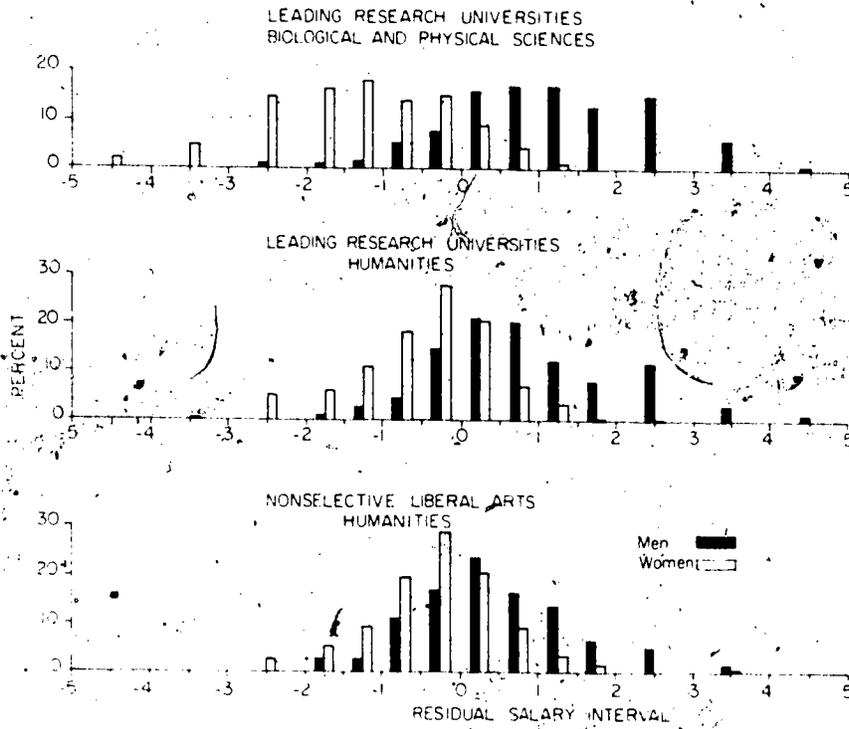


Figure 1

RESIDUAL SALARY INTERVAL DUE TO SEX DISCRIMINATION  
 Difference between actual salary and predicted salary estimated  
 from equation of opposite sex. One salary interval is \$3000.

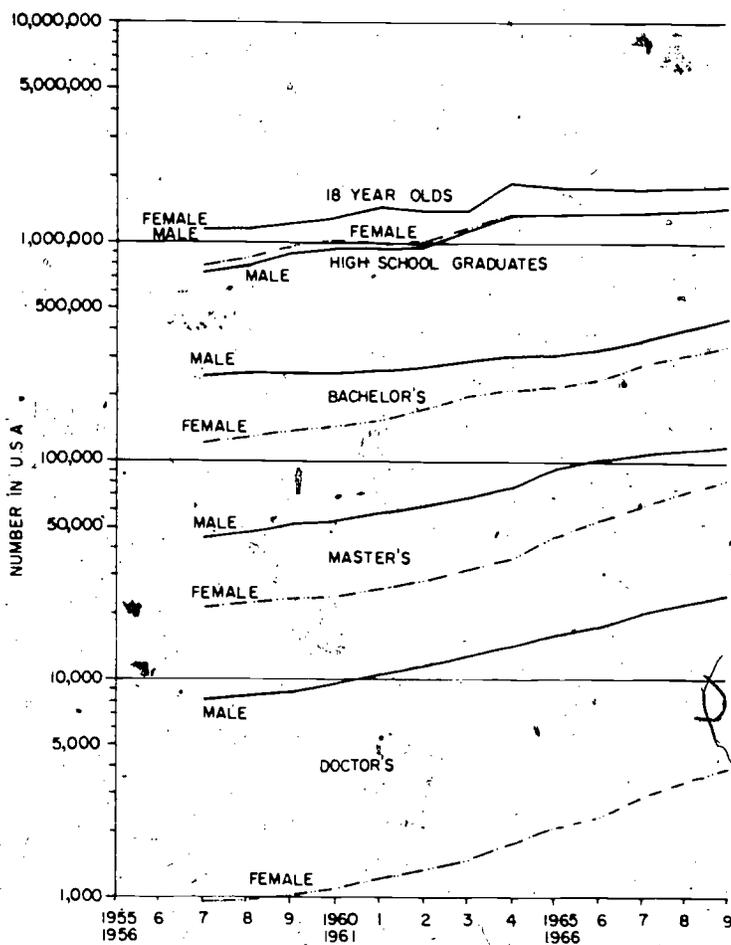


Figure 2

NUMBER OF DEGREES AWARDED IN UNITED STATES

Increase in number of degrees awarded during the last 12 years, at each level, with fewer degrees awarded to women.

Note: Number of degrees on log scale.

Source: Office of Education, Earned Degrees Conferred

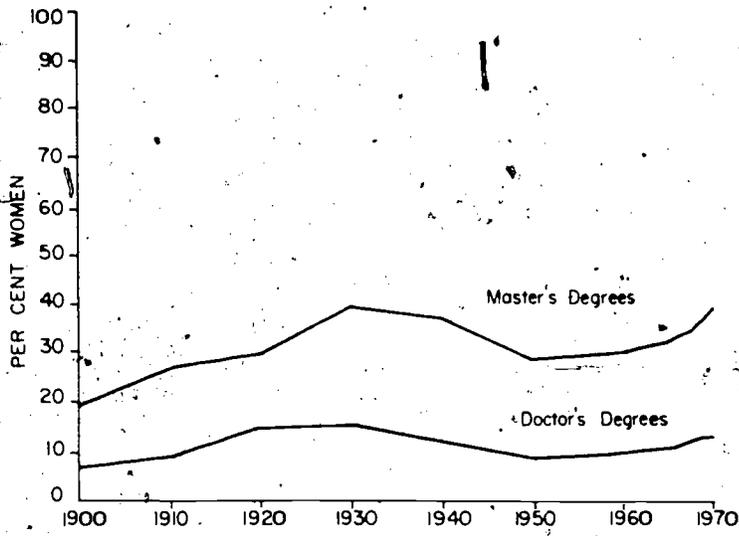


Figure 3  
 PERCENTAGE OF ADVANCED DEGREES EARNED  
 BY WOMEN IN ALL UNITED STATES

Source: Bureau of Census and Office of Education  
Trends in Educational Attainment of Women,  
 Women's Bureau, Department of Labor

66<sup>62</sup>

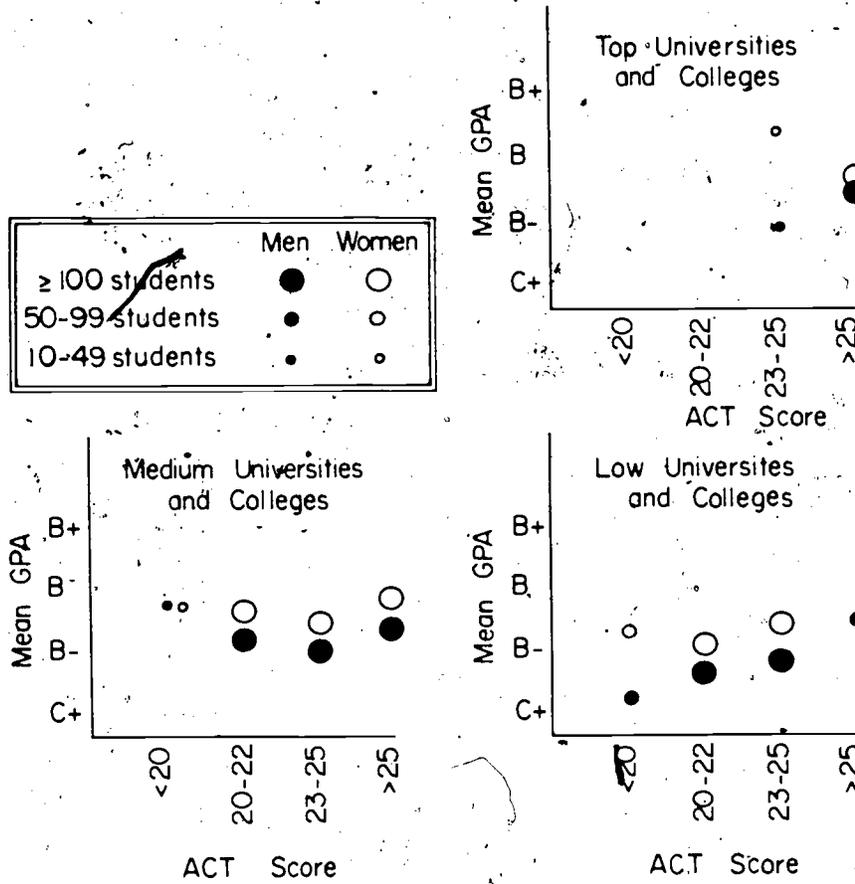
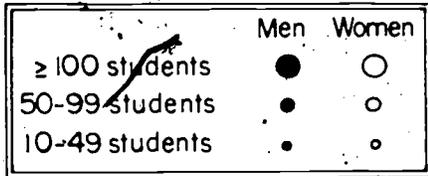


Figure 4

WOMEN DO BETTER IN COLLEGE THAN MEN EVEN WHEN SORTED BY ACT SCORE

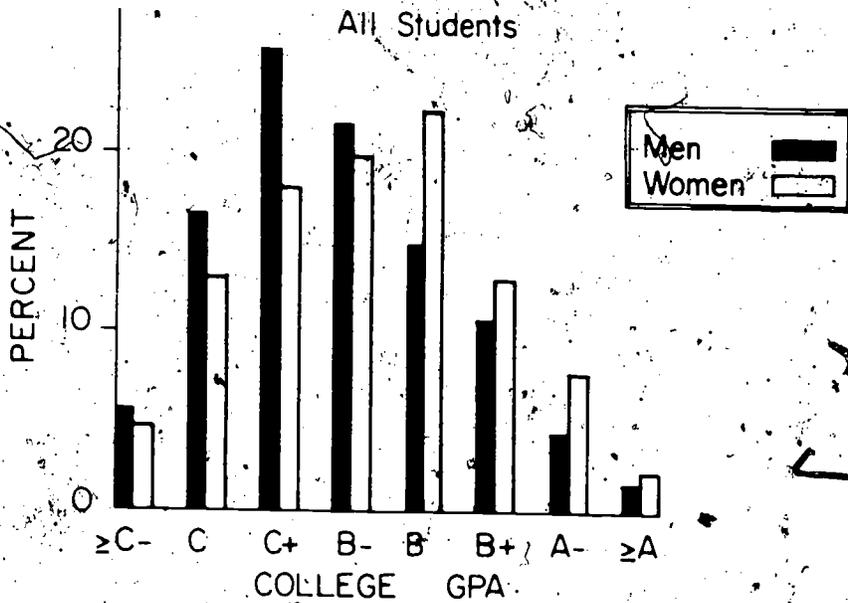


Figure 5  
GRADE POINT AVERAGE FOR MEN AND WOMEN

In the high prestige universities, the percentage of women faculty in any department tends to be much smaller (often zero) than the percentage of graduate students who are women. Similarly the percentage of women graduate students is itself smaller than the percentage of women undergraduate students. There is a dropping off at each step. The decrease applies also to undergraduate students who have an "A" undergraduate grade point average: for men, 39% went to high quality universities and only 1% to low quality colleges to do their graduate work. For women with an "A" undergraduate GPA, 30% went to high quality universities and 8% to low quality. The explanation does not seem to be financial need or socioeconomic status, according to the survey of graduate students also made by the Carnegie Commission on Higher Education and the American Council on Education.

As is well known, men and women tend to choose different fields of study. It happens that the fields selected by women (languages and education account for 51%, humanities next) award a low percentage of their students doctorates and they require many years to earn the degree. The fields most favored by men (engineering 14%, physical sciences 11% and business 12%) have a higher probability of awarding the doctorate (especially the physical sciences) and do it much faster. But the total number of women in these three fields is but 5% of graduate women. When this differential selection is taken into account, that is, the comparisons are made between men and women for each field separately, we find that women tend to be *more* likely to attain the degree, women finish *faster* on the average, women are *less* likely to receive financial aid, and those women who do obtain the doctorate are *as* likely to be employed and to publish papers and are *more* able than the corresponding men (see Harmon 8-9). The facts on women graduate students belie many of the myths.

The Facts on Undergraduate Women. The number of undergraduate women is increasing however, the ratio of women to men is remaining constant. The percentage of women getting the Bachelor's degree out of those enrolled is the same as for men in almost every field. However, women do better in college (as they did in high school) in terms of grade point average, or class standing. Figure 4 shows the distribution of grade point for men (black rectangles) and for women (white rectangles): there are more women among the A and B grades, fewer among the C grades, using now the CCHE-ACE survey of undergraduate students. It was presumed that this was because colleges were more selective of women, that is, they discriminated against women academically. However, even when this is taken into account, at least partially, by sorting students by ACT score, the evidence is that women do better on the average than men of the same ACT score in all three quality levels of universities and colleges. These results are shown in Figure 5. The plots indicate that the admission criteria for men and women should be different with women having a more relaxed criteria rather than a stiffer cutoff as is now often the case. We have partial information kindly supplied by Education Testing Service confirming these indications.

Selection in the field of study and guidance in the selection of women students, as well as career choice counseling, are areas that need drastic change. As now taught in universities, and as now practiced, they strongly discriminate against women academically and economically.

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Margaret Rumbarger

When she invited me to participate on this panel, Dr. Rogers suggested that the logic of my experience as a consultant for the Office for Civil Rights would dictate a discussion of the laws against sex discrimination and their applicability to institutions of higher education. The Executive Order 11246, which prohibits sex discrimination amongst other things, in employment and other more recently passed laws against discrimination, is surely a subject of some rather intense interest in the study of many colleges and universities at the moment. But as I thought about it, it seemed to me that in simply explaining the context of the law, I might be bringing coals to Newcastle or in any event belaboring what to most of you now must be obvious and perhaps even painfully so.

Until some months ago, there was only one law which prohibited discrimination on the basis of sex in institutions of higher education - Executive Order 11246. Now, there are many including Title VII of the Civil Rights Act of 1964 which is enforced by the Equal Opportunity Commission, the Equal Pay Act of 1963 (which was amended in June of this year to cover professional, executive, and administrative employees and which required equal pay be given to men and women doing substantially equal work in the same establishment), and Title IV of the Education Amendments of 1972 which forbids sex discrimination in admissions to graduate schools and admissions to public undergraduate schools, among other things.

All of these laws, if and when enforced, will have wide-reaching implications not only for the situation of women in the academic profession and in educational institutions but also for the very structure of our educational system and decision-making within it. Despite the passage of the newer laws, for a number of reasons the controversies generated by the enforcement of the Executive Order and its requirement of affirmative action remain at the core of the consternation within the academic world. Not the least reason for this is the fact that the Executive Order is backed by the only meaningful enforcement program presently in operation. I am not prepared to speculate at this point on what is going to happen to that enforcement program now that there is a new head of the Department of Health, Education, and Welfare; but, at any rate, the enforcement program for the Executive Order has been, up until now perhaps, most distressing to administrators and faculty members alike.

These days no one can seriously quarrel, at least in public, with the principle of equal pay for equal work, with programs aimed at enhancing opportunities for disadvantaged persons, or even with equal opportunity for women in admission to graduate programs (although there are some who continue, to the tune of growing social reprobation, to belabor the old saw "they will just get married and waste everything we have put into them"). Of course, when it comes to putting our purported convictions into institutional practice and accounting for our accomplishments to agencies of the Federal government, most university administrators and faculty have resisted with a ferocity that can only be marveled at. The situation becomes even more distressing, both from a philosophical and from a practical standpoint, when a university is asked to take "affirmative action" to increase the opportunities for minorities and women. The phrase has taken on a life of its own and has called forth as varied and emotion-packed a response as "busing."

It has been argued, for example, that enforcement of the law against discrimination, in colleges and universities, will somehow compromise what has

been described as egalitarian principles of professional and scholarly excellence upon which our universities were founded and have grown. It has been argued that the traditional prerogatives of departments and faculties will be compromised by the imposition of affirmative action requirements in the hiring and promotion of faculty. And while it has not always been administrators who have argued most strenuously for what would be in effect a "hands off" approach by the government in this area, neither have they seemed inclined to take the lead in ending discriminatory practices or correcting conditions of inequity. I have even suspected that some high-level administrators have cultivated this overreaction to create a divisive atmosphere and hence, impotence among their faculties, while at the same time using their faculties' so-called intransigence to excuse their own failures to the government and to the groups they continue to exclude.

The twin spectres of debased standards and lost institutional autonomy are raised, again and again, in the course of the debate over the Executive Order and affirmative action, but no one has yet proposed a positive alternative in the presence of law enforcement officers on campus. As Martha Peterson, President of Barnard College, noted in her keynote address to the annual meeting of the American Council on Education in October, 1972:

"through intransigence, inperceptiveness or preoccupation with other issues, the higher education community seemed unable to recognize and to take action in correcting injustices until forced to do so by HEW -- a dismal example of lack of internal leadership."

In some quarters, response to the demands of affirmative action among faculty has been curiously contradictory: on one hand, the sudden reassertion of standards of excellence which had been under attack only a few years before from within the academy itself; and on the other, hasty and ill-conceived efforts to appoint women and minority group persons at any price, accompanied by a conviction that they would probably otherwise have been considered. Still worse, affirmative action obligations have increasingly been used as an excuse to refuse admission or appointment to a white male. On some campuses, the ingenuity with which a few departments are devising schemes to avoid appointing women or minorities, while at the same time appearing to take positive measures to attract their candidacy, is awesome to behold. If only the same ingenuity could be put to work for a better purpose.

I do not believe, at this stage of the game, that it is either useful or necessary to march out statistics on the number of women who complete their graduate training and find no room at the academic inn -- or room only at the bottom of the ladder, in ranks that show no promise of promotion or tenure or professional rewards. Nor is it necessary to point out that in countless institutions, it is still considered acceptable and even justifiable to pay women less than men who do the same work, to promote them more slowly, to discourage their scholarly development, and to exclude them from inner circles of academic decision-making.

One of the problems is the prevailing attitude which considers it socially acceptable to discriminate against women. People are uneasy or even a bit frightened when it comes to discriminating against Blacks; but with women it is, as John Kenneth Galbraith has noted, a rather "good humoured thing" that no one really worries about. You can discriminate against women with a sense of security. One of the largest and most frustrating obstacles which women, in and

out of academe, must contend with is the wry humor and ridicule which accompany every effort to assert a claim to a professional identity and status which, had they been men, would long ago been recognized and rewarded.

If most of us are agreed that at least lip-service must be paid to the goal of achieving equality of opportunity, if only to keep the "Feds off our back," then do we go about rectifying a situation which has been in some degree continued and sanctioned by a tradition and now by academic economics, than simply complying with the law, how do we go about utilizing the vast resources which are represented by women with advanced training in countless professional fields, who are unable to find positions in universities and have turned instead, if they still have enough energy, to business, research, or even in the case of one Ph.D. wife of a Yale faculty member, to secretarial work in the university? What alternatives will our society offer to women upon whom it has lavished years of preparation for professional life, now that the demands upon them, in connection with the home and child, have been and are simultaneously lessened by technology and an increasingly androgynous life style among many of younger married couples, as well as a tendency to have many fewer or even no children at all?

I want to suggest several specific courses of action, most, but not all of which are now mandated by law, with special emphasis on traditional personnel policies among the faculties. The first course may seem the simplest but in reality causes the very difficult problems for administrators and for faculties alike; that is, to examine the situation of those women who are presently on the faculty, to be absolutely sure they are paid commensurate with their skills and training and their contribution to the institution, to be absolutely sure that they are given fair consideration for promotion and tenure, to be certain they are given a fair opportunity to serve on decision-making bodies, to compete for grants, and to be certain there are efficient channels through which complaints of discrimination can be promptly and equitably heard. This entails not only an analysis of individual cases but also the procedures which govern faculty members from initial appointment to retirement. This may involve challenging the judgment of peers whether departmental or college-wide; however, in this area the responsibility of administrators is an important one.

The second step is to bring more women onto the faculty and particularly into administrative positions. In many ways, I think this is the most important short-run aspect of an institution's affirmative action commitment, and has broad implications for professional development of women students. There are few academicians these days who would publicly admit that recruiting methods in academia are anything but irrational and frustrating to perspective employer and employee alike. The assumption that the most qualified individual will always rise to the top like cream and be skimmed off by the vigilant department chairman is simply a myth. Any business or industry, much less a major league football team, would gaze in disbelief at the recruiting methods, which up until very recently, have been the stock-in-trade of the academic world and which are defended as having produced the very best faculties imaginable.

I am not suggesting that we should initiate a draft choice system where the department or institutions scoring lowest on the Roose-Anderson report one year will get the cream of Harvard post- does the next. What I am suggesting is that the telephone and word-of-mouth approach simply does not suffice any longer, not because these methods tend systematically to exclude qualified persons from an opportunity to compete on an equal basis but also because they

are not reliable. Perhaps those administrators who are reluctant to provide even minimal standards of due process for non-tenured faculty would be more flexible if they had some confidence that the procedures used in recruiting new faculty had even a 50/50 chance of turning out the very best person available.

And now we have affirmative action, where departments are asked to make special efforts to correct underutilization of their faculties. Do we find in most cases a sincere and systematic effort to widen the recruitment net, to seek out sources of talent which have in the past been unexplored, to advertise vacancies widely to attract the candidacy of all kinds of people? Unfortunately not! In too many cases, in order to avoid instituting what might be expensive and time-consuming recruiting procedures, a department will simply decide to impose its own kind of quota system and belabor the old techniques in order to come up with a woman or a Black who can satisfy the need.

To return to my football team analogy, I might note that college athletic departments spend an enormous proportion of their budgets to recruit the finest high school athletes and coaches for their teams, flying around the country to scout the best prospects. Perhaps a lesson and some money could be drawn from this sort of program.

Hasty and ill-conceived efforts to hire women at any price seem to be predicated on the assumption that women could not possibly compete on equal terms with men. The spectre of compensatory hiring encouraged, not long ago, in the construction industry by these very same academics, now causes them to recoil in horror as it now appears in their own back yards and is raised in hushed and not-so-hushed tones in faculty meetings. The arguments both pro and con, assume that women candidates will have to be judged by lower standards or they simply would not be able to make the grade. Quotas are something that women should be as anxious to discourage as Sidney Hook, since they only tend to reinforce the old stereotypes.

The third area where change is necessary and offers a great potential for experimentation and may have the greatest impact in the long run for the academic community and on the notion of professionalism in our society, involves a recognition of the disadvantage that professional women have been placed, in having to perform in a series of non-professional roles while at the same time conforming to the conditions and patterns of employment which are convenient to men and have been established by them. Women are expected to conform with men not only in academic preparation but also in age, rate of progression, and quantity of output at given stages of their progression. If, in addition, a woman chooses to have children, she is expected to assume responsibility for raising them and keeping a home where children and husband can find nurture and comfort and at the same time do in all her male colleagues in the classroom, library, and laboratory.

One solution to this dilemma which might have been characterized as a radical one a few years ago, but which is increasingly becoming a characteristic in academic life, is to opt for a more androgynous life style in which both father and mother share the responsibilities of home and family. At one midwestern college, for example, an academic husband and wife share an appointment, with the husband teaching the fall semester and the wife teaching the spring semester or both teaching part-time during the same semester. But recognizing that for many couples this solution is at present unrealistic, and that even if a couple successfully divides family responsibilities, there will still be times at which neither can devote full attention to professional responsibilities as well, then

some additional response seems called for.

If we are not to insist that the academic woman remain childless, or that a woman carry a load so heavy that only the most extraordinary can survive, much less succeed, we must recognize that equality calls for institutional as well as personal approaches. Institutions must, as a minimum, devise and implement sound and equitable policies on child-bearing and child-rearing leaves for students as well as for faculty. They should consider the wisdom of introducing an increased flexibility into those critical years when students are completing their graduate training and then as young professionals, are being judged for tenure, years which just happen to coincide in most cases with a woman's child-bearing years. This may include the implementation of policies such as those presently in effect at Columbia University which permit probationary faculty members with young children to assume a reduced load for several years during the probationary period and extend accordingly the probationary time up to ten years before a tenure decision is made. Note that I did not say a woman probationary faculty member. The Columbia policy is not intended to be so exclusive.

We must consider the whole manner of regular part-time studies and faculty appointments which carry with them, in the case of students, equal opportunities to compete for fellowships and, in the case of faculty, some degree of security, decent pay, promotion through the ranks, and even tenure. We must consider also the problem of late arrival in the academic marketplace, as women are increasingly returning to study after their children are in school. The women who are present, are probably well aware of the problems and biases which await the older woman when she seeks to enter graduate school or later when she looks for her first job with a new doctorate in hand. There are also problems to be solved in the transfer of study credits, including graduate study credits, from institution to institution and in reconsidering anti-incest rules which preclude an individual's being considered for appointment by an institution which has granted his or her degree. Parenthetically, I might note that I was astonished last winter to find that 42 percent of the tenured faculty at Columbia University hold their terminal degrees from Columbia University; although less than 2 percent of the tenured faculty at Columbia are women, Columbia's doctoral recipients over the past ten years have been almost 30 percent women. The lesson, I suppose, is that even where there is no squeamishness over hiring one's own graduates, the desire to hire males is overwhelming.

Above all, we must search out new talent in the most responsible way. It is not simply a matter of providing jobs for persons who have in the past been excluded from an opportunity to compete for them. It is also a matter of reorganizing the academic institution to fulfill its basic commitment to those who are seriously concerned with maintaining the university as a vital part of our society so that it may discover, preserve, and transmit knowledge not selectively for one group, but for all people. We should not talk of diluting standards, but rather look forward to the transfusion which these persons can give to our intellectual life. If what we are interested in is strengthening the college community in all of its aspects, we cannot tolerate a continued neglect of these valuable resources.

In the past two decades, perhaps no sector has been more vocal in its advocacy of equity in educational opportunity, employment, housing, and health care than the academic. When this issue of equity comes close to home, our response should be no less imaginative and intelligent than it has been in

dealing with academic problems. We must also eliminate our feeling that discrimination is a word that only applies when dealing with racial minorities, that the exploitation and "put-downs" which women have suffered are somehow to have been expected, given woman's naturally weak nature and her unhappy tendency to stray from hearth and home.

We must seize the opportunity to translate advocacy into results, to persuade slow learners that much can be won by expanding one's horizons, and that much can be lost by a refusal to make way for those who are demanding entrance to the academy and to the profession as a need that confers a right.

Cyrena N. Pender

I think I can assume, at least on the basis of the two talks that we have already heard, if not indeed on the basis of the experience that you have had over the past two or three years, that almost everyone of you is prepared to say that you believe in equity, you believe in equal pay for equal work, and you believe in the proper use of human resources. And I suspect that those of you who, despite this commitment, still feel that the guidelines prohibiting discrimination on the basis of sex or race jeopardize your institution, do so because you fear for university quality or for the health and strength of faculty governance and peer judgment.

In response to these fears, I would concur with Ms. Rumberger on one point and differ on another. As she has said, there is no question that what we call you to is *quality*. We call you back to those standards that you have been enunciating for decades and even centuries in American higher education. What we ask is not preferential treatment, but that you do, indeed, apply those standards of selection on the basis of quality that you have espoused for so many years.

I want to differ with Margy on one point, however: I do not think it necessary for us to turn American higher education on its head in order to achieve this. I do not see us casting out faculty governance, the procedures of peer judgment, and the relationship between faculty and administration, which has prevailed through generations in many of our universities, in order to achieve the equity in which almost all of us believe. Rather, I think our own experience at Wisconsin and in several other major institutions in the country convinces us that it is possible to make the system work -- work to achieve equity and to achieve that quality in which we as women faculty also believe. Recently, I would like to take you very briefly over what I think are the first steps in instituting a program to make the system work for equity. I will develop in substantially greater detail the first two aspects of such a program.

First of all, in order to make the system work, I think there is no alternative to your appointing a staff member, a woman staff member, who has responsibility for developing programs in this area. She must be a person who is capable of effecting change. She must also be a person who is as determined to advance the important academic goals of your institution as she is to achieve the goal of equity. She must be able to address these academic goals while she is addressing the principle issues which women at your institution identify as problems.

The second thing, then, which I think you must do, having identified a staff member with responsibility for affirmative action, is to establish a

comprehensive program for salary review and for review of graduate stipends. Very simply, the budget is almost the sole tool of control in higher education. Until you put your hand in your pocket, no one is going to believe you mean business about equity or anything else. That virtually dictates that the starting point for developing an equal opportunity program at your institution must involve the establishment of budget and review procedures which will lead you to remove salary inequities and insure the equity of graduate stipends.

Third, and one may hope in conjunction with these first two items, using the number and percentage of women recently receiving the doctorate in major graduate institutions, you should identify the available pool of qualified women in each discipline and assist your departments in establishing hiring goals for women in each discipline that reflect the availability of women receiving the terminal degree from those institutions. You must, of course, establish at the same time a monitoring system which will guarantee that you can give assistance to departments selecting goals reluctantly or to departments where procedures for effecting them fall short of imaginative, effective, and realistic efforts.

Fourthly and again these are procedures which you will develop in part at the same time that you begin the primary procedures you must turn to the development of subsidiary policies and programs which will assist you in fully achieving the goals of salary review and affirmative hiring and which will extend your equity programs to larger groups of people. Let me just summarize the concerns which should be considered here. The allocation of research money to faculty members should receive examination, as should the question of recruitment of graduate students (Are women as actively encouraged as men?). Your nepotism policy or the lack of it should be examined, and you should also consider:

1. The development of a policy that permits a proportionately extended probationary period and the award of tenure for part-time staff members;
2. Procedures for reviewing off-track faculty positions to insure that women have not been left in those positions when their qualifications merit an appointment to the senior faculty;
3. Child care facilities;
4. Counseling for women students with career interruptions who seek to return to school, particularly to graduate school (for we have found that the normal career interruption comes between the B.A. and graduate study);
5. Effective recruitment of women students to fields that are not stereotypically female;
6. Proper career advising for women students currently in school;
7. The establishment of descriptions of your procedures for promotion and descriptions of your criteria for appointment to initial and subsequent positions. (Surprisingly enough, very few of us actually have such descriptions, although it seems to be something we might well have turned to very much earlier under the impetus of the AAUP or some other similar organization.) and;
8. Course generation to guarantee that any absence of scholarly treatment of the role or subject of women is remedied in the various, appropriate disciplines. (Topics might include the history of the development of civil liberties for women, a study as fascinating as

that of the civil liberties for any other group; or the function of women in the economic life in developed or under-developed nations; or the differences in stress, motivation, and social conditioning experienced by females as compared to males.)

All of these are, of course, smaller in scope than the first three items which we identified and many of them must be developed as correlatives to them in order to enable you to achieve fully your goals in the first three steps.

The fifth thing - one which I think is the major element in the success of your program for affirmative action, is the matter of the attitude which all of you adopt for the whole procedure. Again a commitment is required, a commitment to open the competition equally to all qualified individuals. It involves your recognizing that your choice of a woman faculty member is the selection of an equal, and your decision to treat her as such. And this question of attitudes returns us to the question of the selection of an individual to take responsibility for this area of program development and review.

I want to spend several minutes discussing the process of making this appointment and the attitudes which need to accompany it. This decision and your subsequent handling of this staff member may very well be crucial to the success of your program. Yet, it is at this point, where those institutions whose programs are floundering first started to go astray. If you deliberately select an individual whose performance will guarantee failure - either under pressure or out of cynicism - the trouble which you subsequently will reap will go far beyond, I suspect, any temporary respite you may derive from the stalling which such a decision might make possible. In addition, the failure to integrate that appointee into your staff can make even an excellent choice for the position, ineffective. (Parenthetically, as we discuss this, it should be evident that such a position may be attached to the President's or Chancellor's Office, but it also may be necessary to have such an appointment in the Office of the Dean of Graduate Studies or of Letters and Science; the procedures and considerations which apply are equally important in either case.)

The attitude behind your decision will significantly shape your attitude toward the entire program. Is this woman in or out? Do you mean it or do you not mean it? Are you tolerating her for the period of time which you suffer government attention, or do you intend to select a colleague who can pull her weight in the responsibilities assigned to her? The administrative official who makes the selection is choosing a member of his personal staff and most of the same criteria apply as when a graduate dean selects an assistant dean or when a chancellor or president selects a member of his staff. It must, obviously be someone to whom you want to delegate responsibility and with whom you wish to work. It must be someone with whom you believe you *can* work. Now it also must be someone who can get the real job done - not just make the public presentation but do the real job. That means it must be someone who knows, or can learn about significant issues in academic affairs; who knows, or can learn, about procedures and methods of budget planning; who is able to handle delicate issues of personnel matters, including some of those most strident and most painful issues of failure to appoint or promote. It must be someone who knows or can learn about faculty politics.

Remember that this individual, whether she is on the dean's staff or the chancellor's staff, has to deal with the institution's most influential people. She must deal with them, for they are the people who are going to effect change in your institution; and consequently she must be able to talk their language. She

must also, however, be committed to the resolution of the issues and realistically appreciative of the nature of the problems so that she can talk the language of women on campus and can sense their feelings about this problem.

She is not, however, primarily appointed to placate radical pressures. If you select an inappropriate person forced on you by such a group your problem is apt to be exacerbated, for the simple reason that when she is unable to solve the real problems, her leadership will lend strength and credibility to justified as well as unjustified charges which may emerge from a radical fringe.

Now, how do you deal with this new staff member? (For if we look around the room among the graduate deans, I think, we must recognize that the staffs of most graduate deans seem to be all male. Thus, there will be something new in your shop when you have a woman in one of the dean's positions.) The answer seems painfully obvious, but I have had information about institution after institution in which the answer has not been perceived. It means that you select a woman whom you *can* respect, and you then respect her judgment and delegate responsibility to her. It means also, by the very nature of the position, that you are willing to tolerate dissent from her. But she cannot merit this delegation of responsibility and this respect, unless she has the information to form reasoned and wise judgments. If she does not have access to the budget, if she cannot see the personnel records, how on earth do you expect that woman to function capably as an administrative official? She can no more do so than you could yourself, if you were compelled to make up the budget for your college or school, without reference to any previous budget or budgetary information.

This means, then, that as with any other new administrative staff member whose services you need and who you wish to see succeed, you are going to have to give her a cram course in university administration so that she knows what laws and regulations, procedures, budget negotiations or personnel practices she has to take into account. In addition, this means simply that you take her into your confidence so that she shares in the problems. You give her the same kind of treatment as you would give a new associate vice president or assistant vice chancellor or dean or associate dean; you include her in staff meetings or campus councils; you put her on the clip sheet list; you do the hundred small things which indicate you intend to have this colleague function effectively. Now, this seems so obvious that perhaps to those of you who have not watched institutions go stumbling down the road of excluding, isolating and sometimes publicly denouncing the person who they put in this position, it may seem surprising to mention it at all.

You need, of course, to give the person the rank to do the job, but more importantly you need to give her the *backing* to do the job which means that you let her know what kinds of policies you can support and where you feel that institutional goals are in conflict with her proposals. Then, if she runs into trouble in carrying out policies which she has had an opportunity to understand that you can support, you give her enough support to win the battle. If she has the chance to win a few key battles early in her tenure, you will have less need to come to her direct assistance. It would be quite useful if, in addition, this woman has membership in campus women's groups, and associations to rely upon among campus women, and it would also be helpful if she is a member of the faculty - even more helpful if she is tenured, because she is going to be under pressure. If she has scholarly credentials and has experience on the campus so that part of that cram course can be shortened because of her perception, it

will also help. Finally, and a point that is sometimes overlooked, it is important, I think, that the woman whom you select not currently be in need of redress of grievance, for it must not seem that she has a personal vengeance in seeking equity on the campus. You may as well also warn her that she is going to have to work all the time.

Now, having selected this person and determined in advance that you are going to require - not merely permit, but require - that she begin with work on the budget, what is the next step? In discussing this second step, I will very briefly summarize considerations which are important in the budgetary review of faculty salaries.

I think there are several strategic decisions which have to be made at the outset. First, you must obtain sufficient data to persuade the skeptical, who will be legion about you, that there is a genuine problem and there is inequity in the establishment of faculty salaries for women. The most useful thing for this purpose, in my judgment, is a salary-average print out which you can get the computer to produce. This shows average salaries separately by sex for each rank of each department. (If some salaries are for 9 months and others for 12 the averages must be shown converted to both time periods.) We found in Wisconsin that circling the below-average salaries in red had a spectacular attention-getting effect; if copies of those print outs are placed in the hands of the dean, department chairman and budget committee across the campus who customarily make salary decisions, they will have an opportunity to reflect upon any inequities which may exist in below average salaries before your affirmative action officer points them out.

Now, secondly, you should decide to initiate the review internally as a matter of administrative procedure. As frequently as possible, you want to avoid face-to-face confrontation between aggrieved individuals and the legal staff of your university, or the dean, department chairman, or other administrative officials. If you initiate the review internally individuals do not have to file grievances. The university can identify problems first and can take credit for swift and forthright action to establish equity. Pressure groups will not have forced your hand; there will be no gun at your head and you can reflect carefully upon the best way, without being forced, to implement your commitment to equity. So do it first!

The next strategic decision is to use across-the-board instructions for all officials who act on budgetary matters and issue these instructions as part of annual budget procedures. In other words, you should so construct your review of faculty salaries that it is impossible to return a departmental budget request without having performed the review. Salary committees, chairmen and/or deans should certify on the budget forms that the salary and status of every woman academic employee has been reviewed for equity. On one form, all the names of those proposed for an equity increase should be listed, together with the old and new salaries, and on a second form, the names and salaries of all those not proposed for a salary increase should be listed. Whenever a below-average salary is recommended for a woman, the department or budget committee should be asked to provide a written justification for the recommendation. That justification could be very simple: if she has been at the institution for only one year and all of the colleagues with which she is compared have been there four, that fact need only be noted. However, if the justification is that the woman does not publish as much as her male colleagues, vitas both for her and for all of her male colleagues at that rank should accompany the statement.

Administrative officials reviewing the equity recommendations can look at the vita and rapidly tell whether or not she has published as much and as prestigiously as her colleagues. If she has published as much or more, the reviewing official then must seek to determine whether or not she has published as well as her colleagues. Requiring this kind of documentation reduces the possibility that a salary recommendation will be made without thoughtful consideration of the actual record, and reduces the number of times your affirmative action officer must ask for reconsideration of the recommendation.

The next thing you should do in salary review is to open some fund source which will permit equity needs to be met without eliminating merit increases. The fastest way to generate, of course, a backlash from which relationships between the sexes in the professional world will hardly recover, is to deny all the men merit increases in order to advance the needs of equity for women. You can provide an "additional" fund source by permitting use of position funds or by skimming a percentage of the merit budget, withholding it, and making it available upon request to those individuals who present a case for an equity correction for women staff in their departments.

Finally, as you plan the salary review you need to place the affirmative action officer in the budget review process at the campus level, so that the budgets which come forward from the departments to the deans, to the vice chancellor and chancellor pass through the hands of the affirmative action officer. Before the budget is finally accepted, there must be an opportunity for that individual to review at a campus-wide level the justifications and requests which pertain to achieving equity for women.

That is a "cook's tour," I think, of faculty salary budget review procedures. I hope by now it is obvious that these procedures do not turn the university on its head at all - but rather places responsibility for establishing salaries and review of these decisions at the same levels that they have always been placed.

In reviewing for equity in the award of graduate stipends, I believe we come to a problem which is vastly more complicated, rather than less complicated, than establishing equity in salaries for staff members. There are almost no comparable careers in graduate study and few departments have single and uniform sources of student support. There may be very similar careers once you get into full-time service on the faculty, but there is almost no comparable uniformity of expectations for a beginning graduate student. Moreover, there are rarely established procedures for administrative review of graduate support levels, whereas review of faculty salary decisions is well-established. Nonetheless, here briefly are some of the things which you must take into consideration as you initiate such a review.

First of all, the review rarely concerns maintaining separate stipend levels for men and women; that is far too simple, and virtually none of us fall into that error. Rather, the questions are, do male and female graduate students of similar qualifications and performance receive similar cumulative support over the years of their graduate careers? Secondly, are the kinds and pattern of that support similar in being able to produce the scholarly achievement and professional attitudes on which prestigious appointments rest?

Now, how do you answer these questions? You must turn first to some rough guides in order to identify inequities, and these, I believe, are what they are. (If you will flag selected departments for careful consideration by using the following comparisons, you will reduce to some extent the total workload

involved.) For each year, compare the number and percentage of male and female applicants, then the number and percentage of males and females admitted -- the percentage of males admitted in relation to total applicants and the percentage of females admitted in relation to total applicants. If you are like us, you will find that there is not a significant discrepancy at that level. (I hope that you find that the total percentage of women admitted of all female applicants, and the total percentage of men admitted of all male applicants is similar.)

Then look at the number and percentage of males and females at the master's level, department by department, and at the Ph.D. level, department by department. If our pattern is one which you discover as well, you will find that there is a precipitous drop in the number of women between the MA and Ph.D. years, and you may well ask yourself whether or not the level of graduate support has something to do with the demise of a large percentage of female graduate students. Then, within each department, compare the number and percentage of women supported (pre- and post master's level) with the same information for men and compare the average support level for women with the average support level for men. One of the things that you might find is that when five women and five men are supported, the five women each have \$500 scholarships and the five men each have \$1200 scholarships.

There is additional information you need once you have flagged departments for further examination on the basis of these initial numerical inquiries. Taking the entering GPA, the school of origin, and graduate grades into consideration, ask if for each year of graduate study, men and women of comparable qualifications receive the same scholarship support. Look at the total for each person: it does not help to keep a woman in school and give her \$700 if she has to have \$1200 to survive (especially if the men get the larger sum.) The total level of support is as important as the mere existence of some support.

At this point you probably must conduct the inquiry department-by-department on an interview basis, using either a team of deans from the graduate school or a blue-ribbon faculty committee. The next question you must address yourself to is: do men and women receive the same balance between teaching appointments and scholarships? Teaching, after all, slows down the rate of progress one can achieve below that of someone who is receiving full scholarship support.

Next question: do men and women have the same probability of receiving research assistantships? A research assistant works closely with a senior faculty member. He or she may spend virtually the entire time in work on research which may be subsequently publishable or serve as a dissertation. An "RA" gets a heavy dose of socializing in professional attitudes. It is very important to discover, as we have, that women usually have a harder time receiving appointments as research assistants. In that connection, we may note that the award of a research assistantship is often in the complete control of an individual staff member -- it is not easily subject to graduate school review or to departmental screening. In departments where all graduates admitted must receive support, the decision on the part of ten principal investigators to extend research assistantships only to men (even though they may not express that choice as a policy) will substantially reduce the chances of women applicants for admission to that program.

All of these things point, I think, to the complexity of the review of

graduate stipends. They point also to the questions of correct assessment and reward of quality which are involved in genuinely achieving equal opportunity for women students, as well as women staff. It is not simply a question of equity, though that question is significant enough, but again a question of our upholding in practice, the development of human resources, and the standards of quality we have so long espoused. In graduate training we are perhaps, above all else, concerned with establishing the environment that will make possible the achievement of the highest standards of human excellence and with discovering and training those with the greatest ability to demonstrate that achievement. None of us can turn away from the challenge of enabling women to enter the ranks of those who can set new marks for this kind of scholarly achievement.

## Concurrent Workshops

Friday, December 1, 1972, 9:00 a.m.

### THE DEAN AND THE LAW

Moderator: Raymond P. Mariella, *Loyola University*

Panelist: James J. Ritterskamp, *Vassar College*

Recorder: Donald J. White, *Boston College*

Raymond P. Mariella

Hi. I am Ray Mariella of Loyola University of Chicago. The topic for discussion, "The Dean and the Law," may sound a bit unusual and certainly, five or ten years ago, this topic would have been out of place in a meeting of graduate deans.

However, I have been amazed at the number of legal actions, current and active, against universities and the number of litigations threatened or being settled out of court. I never dreamed that administrators would be involved in this type of thing. Perhaps, I have not recovered from the first time when I had to deal with a student's lawyer concerning a dissertation.

To my surprise, I find that I am not unique and my university is not unique. I find that many universities are in the same category. It is a new situation when you deal with students and faculty, today. You have to weigh every word you use and every letter you write, more so than you ever had to do in the past. Many deans are learning with difficulty about these things.

I am most pleased that Dr. James Ritterskamp could interrupt his busy schedule to be with us today. He is exceptionally well-qualified to speak on our topic. Vice-President Ritterskamp is a native of Missouri. He received his undergraduate education at Washington University in St. Louis and his law degree from the same institution. He has been in administrative capacities at Washington University at St. Louis, Illinois Institute of Technology, the University of Chicago, and is currently Vice President for Administration at Vassar College.

It is particularly fitting to hear from Dr. Ritterskamp concerning the Dean and the Law, since he has achieved a fine reputation by speaking on this topic to many audiences. Most notable have been his presentations on the subject given as a short course for college administrators at the University of Nebraska at Omaha. He has a distinguished record as an administrator, a lawyer and a speaker.

— Dr. James Ritterskamp.

James J. Rifferskamp

Let us begin with a few caveats.

We are assembled here in New Orleans, Louisiana, which means I am 1400 miles from my present home in New York, and 700 miles from the State of Missouri, the state in which I am registered as a member of the bar. Each of you is connected with an educational institution that may or may not be located in one of these states. The chances are that if each of us recorded the state where our institution is located, we would have a good selection of the 50 states of our Union. And this means there is a fair probability that something approaching 51 jurisdictions of legal systems could be involved in this room. Our home state, and the Federal Government, have a legislature or Congress pouring out the laws, and a court system applying and interpreting those laws. There is a good reason to believe that the law and the interpretation thereof may not be uniform in each and every application.

I may report a general rule of law, but does your jurisdiction follow the general rule of law? I may tell you of conflicting decisions that have been made leaving us with a prevailing view and a minority view. Which one does your state follow? Even the Federal District Courts have occasionally come up with different decisions in what might be generally regarded as the same legal problem. So diversity in law — as in education — is possible and probable, and that is the first piece of legal advice that I give you today.

And now for the punch line of my remarks. Listening to me talk of areas of legal involvement is not going to do you much good unless it leads you to the legal counsel representing your institution. This is the individual you must get to know and have him get to know you and the manner in which you conduct your work. Tell him what a Dean's office is all about. Give him the opportunity to tell you what is the prevailing law in your state, and what are the legal involvements you are concerned with in dealing with your faculty, your students, your alumni and your public. If I can accomplish an introduction to your legal counsel and help form a close working relationship between the two of you, my time in coming to this city will not have been misspent.

And now, let's get down to cases, if you will pardon the expression. I should begin my topic with a blessing learned long ago:

Dear Lord, today make my words sweet and tender  
For tomorrow, I may have to eat them!

And that is precisely what I may have to do, for the law as it pertains to colleges and universities is changing day to day, and what is said today may be reversed or altered tomorrow. In addition, the application of the law to the campus is being expanded on a continuing basis and what claims the courts refused jurisdiction in prior years, may be heard today. Students have gone to Court. Parents have gone to Court. Faculty have gone to Court. Tradesmen have gone to Court. Alumni have gone to Court. Employees have gone to Court. And whom do they take with them when they do go to Court — you guessed it, the College. An Associate Justice of the Washington State Supreme Court terms it: "the invasion, as it were, of your campus by the Courts."<sup>1</sup>

<sup>1</sup> Justice Marshall A. Neill, *The College Counsel*, Vol V, No. 1, page 1.

A recent case in point shows the extent such invasion may take:

Immediate curriculum enlargement is to be undertaken at Mobile State, including acquisition of a computer needed to develop computer science and data processing programs, teacher aide and library programs, and associate degree programs in nursing, medical technology, and other health related areas.

Effective immediately, the officials responsible for the recruiting of students at each of the junior colleges and trade schools will make special efforts to recruit students who are of the race different from that of the students whom the institution was originally designed to serve. Any recruiting team which visits high schools to discuss its institution will be composed of members of both races. All promotional literature and catalogs sent to high schools and to prospective students will state clearly that students are accepted without regard to race or color.

Quoting from the decision of the case without the prior legal history before you is unfair, but this is a sample of directions given a campus by a Court. It sounds like a report of the Faculty Planning Committee insofar as curriculum direction is concerned. And the makeup of the recruiting teams, and the advertising and catalog texts should be coming straight from the administration. But no, this is from a court and a Federal District Court at that. This gives you some idea of how far we have allowed our campus operation to run afoul of the law and some idea of how far the Court is willing to go if we do not comply. It is an explosive situation.

James A. Perkins, when he was President of Cornell University, said in 1967:

But we do view with some alarm the specter . . . taking the form of a rash of court decisions challenging decisions in areas that were once considered the educational world's peculiar province. The filing of these cases seems to suggest that judicial processes can be substituted for academic processes.

Qualitative decisions are the essence of academic life. To replace this kind of decision either with civil laws that must not distinguish between the plumber and the philosopher or with the kind of wrangling over technicalities to which court action can so easily degenerate, would do permanent damage not only to the sensitive academic processes for judging quality, but indeed to quality itself.

This is today's picture too, insofar as the College and the Court are concerned but it was not always thus. Not too long ago, the courts maintained a hands-off attitude concerning campus administration. They were unwilling to do more than pass on legal issues, and were most reluctant to substitute their judgment for that of the appropriate college official.

This attitude was based upon three major concepts which had much following in the law:

1. The doctrine of *in loco parentis*
2. Higher education is a privilege, not a right.
3. A university is composed of a community of scholars who are self-governing because only the scholars themselves have the expertise to evaluate it and the people involved in it.

Let us spend a few moments discussing these concepts and learn what has or is happening to them. It will help us to understand the direction the law is taking, and the direction we must take if we are to remain "mistress of our house" as President Alan Simpson so succinctly stated when we at Vassar decided not to move to New Haven and Yale University.

*In loco parentis*, in place of the parent, is an old hand-me-down from the common law of England and Blackstone. In essence, it meant the schoolmaster stands in the same position with respect to his students as that of a parent, and

he can therefore direct and control their conduct to the same extent a parent can. As early as 1866 the courts of Illinois embraced this concept in a Wheaton College case involving a prohibition against joining a fraternity. The court stated "so long as the rules violate neither divine nor human law, we have no more authority to interfere than we have to control the domestic discipline of a father in his family."<sup>2</sup> Perhaps the leading case on this doctrine is a 1913 case involving a Berea College edict against students entering certain public eating houses, where again the court repeated the *in loco parentis* statement.<sup>3</sup>

But *in loco parentis* has died, to all extent and purposes. First of all, you and I know that control of the domestic discipline of a father in his family has degenerated. Too many parents today expect us, the modern schoolmasters, to administer a caning to their offspring. So where is our example to apply *in loco parentis*? And with 18 year olds having the right to vote, probably 90% of our audience have become emancipated for all intents and purposes, except perhaps for financial support purposes. So where is an example for the courts to apply?

The second concept was that a higher education was a privilege offered and not a right to be expected. A student was informed that it was a privilege for her or him to attend a college, and in return for receiving that privilege, he or she waived any rights that might accrue from being an individual in our society. In the event the student protested over the loss of certain personal privileges, he was informed by the court that whatever his rights might be as an individual, he waived them in return for the privilege of obtaining an education. A 1915 case, *Waugh v Board of Trustees of the University of Mississippi*, found the U.S. Supreme Court stating:

It is very trite to say that the right to pursue happiness and exercise rights and liberty are subject in some degree to the limitations of the law, and the condition upon which the State of Mississippi offers the complainant free instruction in its University, that while a student there he renounce affiliation with a society which the state considers inimical to discipline, finds no prohibition in the 14th Amendment.<sup>4</sup>

This decision applied to a public institution; the courts were even more pronounced in their application of the privilege doctrine to private institutions.

In *Anthony v Syracuse University*, a Federal court was called upon to decide whether a Syracuse coed could be dismissed because they did not regard her as a "typical Syracuse girl." The university, in defense of its action, pointed to a registration card that in effect stated attendance was a privilege and not a right and that in order to safeguard scholarship and a moral atmosphere, it reserved the right to require withdrawal of any student at any time for any reason. The court said *inter alia*:

A student is not required to enter the university, and may, in fact, after entry, withdraw without reason at any time. The university need not accept as a student one desiring to become such. It may, therefore, limit the effect of such acceptance by express agreement. . . . When dismissing a student, no reason for dismissal need be given. The university must, however, have a reason. . . . Of course, the university authorities have wide discretion in determining what situation does and what does not fall within the classes mentioned, and the courts would be slow indeed in disturbing any decision of the university authorities in this respect. . . .<sup>5</sup>

<sup>2</sup>*People v Wheaton College*, 40 Ill. 186 (1866).

<sup>3</sup>*Gott v Berea College*, 156 Ky. 376, 161 S.W. 204 (1913).

<sup>4</sup>116 Miss. 623, So. 827

<sup>5</sup>231 N.Y.S. 435 (1928)

Ladies and gentlemen, this is "how it was in the good old days."

In 1954 came *Brown v Board of Education of Topeka*, and its four favorite companion cases that presumably ended segregation on the books of law. In *Brown*, the Supreme Court of the United States wrote:

Today, education is perhaps the most important function of state and local governments . . . Such an opportunity, where the state has undertaken to provide it, is a right which must be made available to all on equal terms.<sup>6</sup>

Suddenly, education became a right and was no longer a privilege. Suddenly, education was faced with an out-dated concept of privilege and was dealing with a group of students who had a right to an education. True, this decision did not address itself to a college education, but then came the leading case of *Dixon v Alabama State Board of Education* in 1961 and colleges were involved. *Dixon* dealt with a group of students who were arrested for refusing to leave a public eating place where they had demanded service but were refused. They were summarily expelled under a college rule that permitted such action without reason other than the scholarship or moral atmosphere approach which was used for so many years under the privilege concept. The Federal Court said:

We do not read this provision to clearly indicate an intent on the part of the student to waive notice and a hearing before expulsion . . . the state cannot condition the granting of even a privilege upon the renunciation of the constitutional right to procedural due process.

We are confident that precedent as well as a most fundamental constitutional principle support our holding that due process requires notice and hearing before a student at a tax-supported college is expelled for misconduct.<sup>7</sup>

What has *Dixon* done to us? Well, there is neither time nor room available on this platform to give a constitutional history, but let me recite a portion of one section of the XIVth amendment:

No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

*Dixon* has made the 14th amendment, particularly its due process and equal protection clauses, applicable to public colleges, and by doing so, has wiped out the privilege concept that had such good results in keeping the courts off the college campus. In addition, the Fourteenth amendment by its reference to privileges or immunities of citizens of the United States, and through its due process clause, has made applicable to states and state agencies the First amendment dealing with freedom of religion, freedom of speech and press and the right for people to peaceably assemble, the Fourth amendment dealing with freedom from unreasonable searches and seizures, and the Fifth amendment dealing with double jeopardy and due process of law. Although the First, Fourth, and Fifth amendments were part of the Bill of Rights and constituted a restriction on Congress and the Federal Government, via the advent of the Fourteenth they have become rights and privileges of citizens of the United States, against which restrictive state action is prohibited.

From this, you may ascertain readily that there is a wide range of topics opened for litigative minded students and faculty to bring charges against the public institution. And lest those of you who are involved with private institutions become too complacent and believe this applies only to public institutions, let me take a moment to relate a discipline case tried in Nassau

<sup>6</sup>347 U.S. 483, 74 Sup. Ct. 686

<sup>7</sup>294 F. 2d 150

County New York in 1971 that involved an expelled student and Hofstra College. The Court stated:

The responsiveness of private universities to constitutional inhibition is a lively current topic. Because of the essential need for academic freedom, a justly careful watch must be kept on outside interference in educational institutions. Yet, the principle of personal right is also an essential need of democratic society.

We cannot agree that right of academic freedom requires the total preclusion of personal rights, whether they be of faculty, students, or affected members of the public.

The federal provisions expressly require that the offending action be state action. The law is plain that while state action is the subject of equal protection and due process constitutional limitations, the state itself need not be the direct moving force. The offending action may be taken by a "private" organization, and need not be taken by the state directly or by its elected or appointed officials.

Society's administration has become so complex that private organizations are in a position of performing governmental functions and in the discharge of such function may be subject to the constitutional requirements of using fair and equal procedures.

The Court then went on to point out Hofstra had constructed facilities under the New York State Dormitory and that over \$31,500,000 of its \$61,000,000 book value assets is supplied by the State Dormitory Authority. In addition, over \$1,000,000 of the Hofstra \$25,000,000 operating budget comes from governmental grants; over the past 5 years, it received over \$3,000,000 in direct federal construction grants; it received a federal donation of a 25-acre parcel of land; it pays no real estate taxes on its education-use properties; and that \$3,500,000 of its assets had come from private gifts, which were "largely facilitated by income tax deductions." Other quotes from the court's decision include:

The State participation at Hofstra must be a State presence when considering due process and equal protection for nonacademic disciplining of students. Plainly, Hofstra exists as largely a governmental manifestation.

Given State action, Hofstra students must receive equal protection of the laws... Attendance at a tax-supported university is a right subject to constitutional protection and not an unprotected privilege.<sup>8</sup>

Now this case was decided in a state court. It is not the Federal Courts speaking, but at least in New York, privilege as a concept for private institutions may be on its way to a sad demise.

With *in loco parentis* and the privilege concept departing from our minds, we are left with the third concept of a community of scholars that are self-governing because of their expertise. And this will continue to be a deterrent to unfettered invasion of the campus by the courts, if we will and are able to provide reasonable constitutional guarantees of the individuals' rights. This means that in dealing with faculty and students we will be required to be careful in our contractual arrangements, afford everyone equal treatment, and provide for due process of law when firing, suspending or expelling someone.

It is interesting to note in the cases where the courts decide someone has not been afforded due process and the court takes the time to explain the essentials of due process, they do not demand the formal courtroom type of due process. It would appear that the following essentials of due process are sufficient when applying sanctions to an offending party in a campus trial.

<sup>8</sup>Ryan v Hofstra Univ., 324 N.Y.S. 2d 964

1. Reasonable publication of rules.
2. Avoidance of vagueness of rules and harsh punishment for violators.
3. Trial procedures:
  - a. Accused may be represented by counsel of his choice.
  - b. Adequate summation of testimony of witnesses.
  - c. Permit accused to testify.
  - d. Permit accused to present his witnesses.
  - e. If witness against the accused testifies, the right to cross-examine should be given.
  - f. Accused have the opportunity to present final statement of his defense.
  - g. In all such trials, there is no need to testify under oath, and no need to apply technical rules of evidence.
4. The committee hearing the charge should give careful attention to the evidence, and make a fair finding.
5. A right to appeal to a higher source (probably the President - should be provided.

Following these suggestions will not solve all of our legal problems but will go a long way in convincing the courts that we can and do provide due process.

Another vexing problem that has reached the courts in a number of cases is the student's right to credits and degrees. And here, it must be admitted, the courts continue, almost unanimously, in recognizing the expertise of the community of scholars and are not prone to order a degree granted or a student's grade changed. If we continue to be circumspect in our academic reviews, it appears we are reasonably safe from invasion on this front.

I do wish there was more time to present other interesting facets of the law as it applies to colleges and to deans. Particularly important at the present time, is the right to charge out-of-state residents more than the state resident's fee. It involves equal protection of the law, and poses some interesting problems. If an out-of-state resident moves to your state, so the argument goes, and if he is entitled to have his garbage collected by the city-operated collection service, and if he is entitled to welfare from his new state, why is he not also entitled to partake of the fruits of a free college education? If these arguments persist and obtain, we are all in for some extremely difficult sessions with the appropriations committees of our legislatures.

In conclusion, let me suggest to you several texts that might be of assistance in understanding some of the college involvements with the law. I can suggest *College Law* by T. E. Blackwell, *The Colleges and the Courts* by M. M. Chambers (he has written several other excellent books on the same subject), *The Courts and Higher Education* by John S. Brubacher, and *College and University Law* by Alexander and Solomon. And lastly, let me suggest you see to it that your legal counsel becomes a member of the National Association of College and University Attorneys. Its meetings and its publications are professional in character and worthy of support, as are those of other disciplines with which you might be more familiar.

### Summary

Donald J. White

Vassar's Vice President James Ritterskamp deftly fielded a rich variety of

questions, but with the general caveat that "you really must get to know your university legal counsel" for best results. In the *due process area*, he indicated it would be unwise to eliminate from an existing college code the right not to testify on grounds of possible self-incrimination, because such a move might invite the courts to take jurisdiction on due process grounds: "double jeopardy" from two jurisdictions is not a worry for private institutions but is for public ones; a private institution may probably be within its rights in eliminating a provision entitling an accused to have a lawyer represent the accused at hearings, but such elimination might be unwise because it might damage the credibility of the campus disciplinary system. In the *academic decisions area*, Dr. Ritterskamp noted that in the few cases where the courts had forced the awarding of a degree, "The institutions asked for it!" He stressed keeping the academic and disciplinary sanctions absolutely separate and emphasized reserving in the college catalog the college's right to make decisions involving judgment and expertise; he agreed that increased liberality out of a desire to be fair to the student is a problem, and suggested careful avoidance of "leading on" that might create the feeling of a right in turn subject to a due process claim; he indicated that a student who refuses to be part of research in his major, involving human subjects, does not place himself in jeopardy. In the *residence non-residence area*, he pointed out that the matter of differentiated state policy on admissions had not yet been litigated; higher non-resident tuition faces testing where the right to vote is granted. On *liability*, he recommended that institutions purchase liability insurance in a policy covering both the administrators and the institution.

## NEW ELEMENTS IN GRADUATE ADMISSIONS

Moderator: Stirling L. Huntley, *California Institute of Technology*  
Panelists: Andrew J. Hein, *University of Minnesota*  
Thom Rhue, *Stanford University*  
Cliff Sjogren, *University of Michigan*  
Recorder: David L. Jacobson, *University of California, Davis*

Stirling L. Huntley

Welcome to the workshop session on New Elements in Graduate Admissions. Perhaps the program should be entitled New Aspects of Old Elements in Graduate Admissions, since we will be dealing with problems in graduate admissions which have been with us for some time. As each year passes, hopefully, we gain some new insight into how we may best meet the challenges and opportunities presented to us as individuals responsible for recruitment and admission of new graduate students. It is in this spirit that we have organized this workshop which we hope you will find both interesting and worthwhile.

We have chosen three areas of continuing concern to those in graduate admissions recognizing that each of the three could well be the subject by itself of a two day conference. It is hoped that our discussion this morning, however, will lead to questions from the floor and to further informal discussion as the annual meeting continues. The three speakers will deal with the problems respectively of graduate admissions office organization, recruitment and admission of minority applicants and women, and current problems of foreign student admission.

The panel represents a considerable degree of expertise in the areas with which we are concerned. Mr. Hein is an experienced admissions officer who has worked closely with ETS in studies of admissions office organization both large and small. Mr. Rhue has been involved in his own research in the sociology of education but is at the same time a working admissions man with day to day responsibilities in the area of minority recruitment. Mr. Sjogren is one of the acknowledged national leaders in foreign student admissions and comes to New Orleans on a stopover between visits to British Honduras and to the Dominican Republic. It is a pleasure to work with such a distinguished panel and I believe that we should start the presentations without further introduction.

Andrew J. Hein

In time of financial crisis in education in general, and graduate education in particular, decisions about the admissions function, which has a strong relationship to quality graduate education, take on a new dimension of importance. Now more than ever, we cannot afford to make mistakes!

The validity and reliability of the traditional admissions criteria (on which there seems to be some general agreement) need serious examination (or reexamination) as the tendency for differentiated grading grows more unpopular in a context long characterized by inflated grading, even when a full range of possible grades has been available for use. The quality control factor in admissions also bears consideration as placement competition grows more intense (whether we have an oversupply may be questionable, but potential students may respond as if it is a fact) and as social values change and an advanced degree no longer carries the prestige it once did. If we want to grow or hold enrollment steady, the tendency to admit less qualified applicants, than in the past, will be a real temptation. Think, for just a minute, about what this means in conjunction with inflated grading, greater reliance on *credits* (course work) in advanced degree programs, particularly at the master's degree level! If peer teaching is real and valid, we do play an important role in this matter of *quality education* about which we have heard so much.

I do not propose to describe models for admissions organizations, but rather to identify functions which I consider critical in the area of graduate admissions. This approach is not intended as a dodge but rather as a recognition of the diversity of organizational schemes into which the admissions function must fit. Nor do I mean only the organizational scheme of a graduate school or a graduate division but instead the place that this unit occupies within the overall institutional organization (*Graduate Admissions and Fellowship Selection Policies and Procedures, 1971*). Despite the organizational diversity, we all engage in admitting and, hence, the functional view seems most appropriate.

What follows are my ideas of important facets of the graduate admissions process that must be handled somewhere and, lest I seem to gloss over it in the presentation, there is an underlying assumption of faculty involvement in the decision-making process.

Heading my list is the need for an admissions policy with a clear statement of criteria to be employed in decision-making. The responsibility here rests with the graduate dean. The criteria should be relevant and, insofar as our present state of knowledge permits, they should be valid and reliable (more on this later in the description of another function I have identified).

The second facet might most appropriately be called a corollary of the first namely, a policy statement articulating the safeguards to be employed to insure that the selection criteria identified are applied equitably.

Resources must be available for the review of foreign applications and the peculiar problems which they pose with respect to degree equivalence; unusual grading systems, quality of institution, etc.

From receipt of initial inquiry to the reporting of the final decision, a well-planned and efficient system of notification is ethically demanded. For planning purposes, applicants need to know what is happening or why something is not happening, or when they can expect it to happen.

The last area I would like to identify is one whose importance has mushroomed in the last 24 months. It was important before, but we were never held so accountable until our present financial crisis. I refer to the record system with easy retrieval to supply factual data for reporting, for research, and for updating procedures. As aware of the financial pinch as anyone, I firmly believe that we cannot afford to remain inactive in this area. Referring to the 1970 Graduate Record Examinations Board study (*Graduate Admissions and Fellowship Selection Policies and Procedures, 1971*), the data for which were

gathered in the fall of 1969, it seems safe to assume that the vast majority of graduate schools are in trouble in this area. In my own experience the tighter the financial squeeze, the more we are called on to describe and justify (with hard data) what we are doing. Admissions in general, but this aspect in particular, cannot go unsupported. Indeed, new money or reassignment of current dollars may be necessary. Unless we make the investment, however, I see us in serious trouble, and I do not mean 20 or 30 years from now. Institutional facilities will dictate the means, but whether the methods used be quill pen and high stool or the most sophisticated data processing equipment modern technology places at our disposal, the data will be called for.

What kind of data am I talking about? Not just a good looking transcript - we already have that! I am talking about demand as measured by inquiry, but broken down by program. Program costs for the various degree fields at the master's and doctoral level. Decision data: Admit - Reject (by field); Admit - show; Admit - No show. Reject - why? Scholastic deficiency? Lack of adequate facilities? It makes a tremendous difference.

Wisely or unwisely, funding for higher education has relied almost exclusively on body count. Enrollment may decline and yet, apart from inflation, more dollars may be needed. Will we be able to justify them? I am hearing about the need for truly innovative programs, programs to retread (even old Ph.D.'s), and to me it sounds expensive.

I have only spoken of functions and not of persons or job slots, and by design. Where it is done is probably not important but that it be done is critical. Perhaps both graduate and undergraduate admissions should be under the jurisdiction of a single admissions officer. Perhaps, foreign applications should be the business of a foreign student adviser or international student officer. A central data processing unit should possibly have the records responsibility. All this may be true, *BUT* the graduate dean *MUST* establish the policy and have input in the establishment of priorities for the graduate admissions function if it will ever work efficiently. The dean, or more likely an associate or assistant dean, will specialize in this aspect of the graduate enterprise, but only the dean can establish and support the high priority that the admissions function requires. The job cannot be assigned to a loser! Support, to assure continuity, is a *sine qua non*.

This brings me to an explicit statement of my own bias. A central office core may be the most efficient way of insuring that policy is made, reviewed and updated, and carried out equitably. Many of the functions described demand a degree of expertise which cannot be afforded at the level of a department or graduate program. The continuity which I believe is important has not, in my experience, been built in the highly decentralized system. At the program level, admissions activity is quite often, if not generally, an additional duty.

Graduate admissions requires full-time involvement if we are to keep pace with relevant research as a basis for change. Interest must transcend the program and, in the case of the multicampus institution, even geography.

Thom Rhue

The controversy over the admission of women and minority students emerges from two long-standing traditions in America - sexism and racism. Most educators became familiar with and first grappled with the issues of minority

admissions during the late 60's. The issue of admitting women is a more recent concern. Before looking at the admissions picture as it relates to graduate education, it is useful to briefly review the several concerns which lead to a re-examination of admission policy. Let me say from the beginning that the graduate enterprise can carry on the research it feels is important, train future professors for colleges and universities with the same kind of record of successes and failures it has established in the past, and continue to attract the student group it is most accustomed to - white males - with no review or change in current policy. Even today, when the majority of graduate divisions are asked about efforts to extend opportunities for advanced education to minority and women students, it is not uncommon to read responses that every applicant is treated equally, or, now and then, that the graduate school is not the place for social welfare programs. This group prefers to see the graduate enterprise as a neutral agent of knowledge which allegedly benefits all of society.

There is another group who looked at the same graduate situation and concluded something like the following:

Yes, graduate education can benefit all society, but there are fewer than 100 Chicano Ph.D.'s and less than 1% Black Ph.D.'s nationally to carry out research which directly benefits their communities. There are only 4000 Black lawyers, a handful of Indian professionals of any type, and too few doctors for anybody. It may be sensible to take another look at our efforts since there is good reason to respond to the critical professional needs of native American, Black, Chicano, and Puerto Rican communities.

With varying degrees of enthusiasm and institutional commitment and money, these schools began programs of minority student recruitment and support aimed at providing the professors and researchers of color needed, if for no other reason, to change the complexion of their own faculties.

More recently, some of this spirit and commitment have influenced policies with respect to women.

The two groups have some similarities and some significant differences. Let us look at women first. While American society as a whole does not expect its women to amount to much, judging from the occupational opportunities it offered them, it went to great pains in some areas to insure that they were nevertheless well educated. The Radcliffes, Vassar's and Wellesleys attest to that. But for reasons which women are now loudly exposing as partial truths and full myths, graduate schools accepted them in painfully few numbers, and the undergraduate enterprise socialized them for non-professional roles.

My Black brothers and sisters, and other cousins of color, face different problems with respect to education. When professional services are needed by an Anglo woman in our society, there is someone in the white community who has the responsibility for her welfare. Even though she may not have received graduate training, her husband or family friends may have. This is not the case with minority and oppressed communities. Because we have been denied advanced training and education, we are still dependent on you for services we could provide for ourselves given the chance. This observation simply suggests that the demands for minority and female graduate training come from different community needs and expectations.

Graduate admission procedures are, at best, somewhat rational. The standard procedure is to screen undergraduate applicants by grade point average, that is, if the undergraduate institution does not utilize too many pass-fail grades; by the GRE, that is, if the applicant is not minority, in which case we

know "they don't test well on these exams" by the letter of recommendation; that is, if it comes from a faculty member who has some reputation beyond his home institution or if it is not from a member of the Black Studies Department because we know "they never say anything negative about their students", or by the prestige of the undergraduate institution, except if the student was poor and attended a less prestigious public institution or decided to attend a black college in his area.

From this process with its flaws, the extremes are not too difficult to identify. The really strong student is easy to spot and shows a strong probability of success in graduate school. The really weak student is equally easy to spot and equally easy to predict academically; that is, unless he happened to come from a family of eight brothers and sisters where full-time work was expected of him to help support the family while also enrolled full-time in college. In this case we do not know what his success might have been. Sometimes letters of recommendation help, more often they do not.

The problem of predicting success is most difficult with the middle achievers, those applicants with 2.7 to 3.1 GPA's, those with the low 500's or high 400's on the GRE's. But you should remember that for many minority students, simply the acquisition of a Bachelor's Degree represents overcoming a serious number of obstacles and is in itself a decent test of motivation.

We are faced with some real admissions problems. Among them is the white institution's commitment to recognizing a need and attempting to genuinely respond. In the case of women, this means identifying and admitting qualified female applicants by at least the same ratio of acceptances as that of men. In this respect, let me relate some of Stanford's experience. It may interest you to know that a recent study of Stanford's undergraduate women showed, among other things, that the distribution of occupational goals parallels quite closely the distribution of occupational goals sought by the male undergraduates. The schools of medicine and engineering are actively seeking female applicants through brochures and public announcements. While admission of women for graduate and professional schools, as a whole, equals the ratio of male applicants to acceptances, the women's ratio is somewhat higher in the humanities, sciences and medicine.

The national graduate enrollment, according to statistics provided by the National Center for Educational Statistics, is roughly 1,092,000 students represented by 637,000 men or 61% and 377,000 women, roughly 39%. That same national group predicts that the end of the decade will see 1,499,000 graduate students, an increase of almost 50% with a ratio of men to women at 57% for men and 43% for women. While I know that several deans have made the affirmative action philosophy known to their departments, I know of no active recruitment effort for women students other than leaflets. The primary thrust should be a radical change about the role and competencies of women and, of course, as the women pointed out in yesterday's panel, equal treatment once inside the system.

The above statistics can be misleading, however. They mask the fact, for example, that of the 39% women there is a heavy concentration in one-year master's programs, teacher education programs and part-time enrollment. Males continue to dominate Ph.D. and professional programs.

In the case of admissions of minority students, there are additional problems of identification, recruitment, financial support, attitude change on the part of applicants and faculties, improved undergraduate opportunities, understanding





standardized tests, trust, and commitment. While rough estimates place all minority undergraduate enrollment around the 10% mark, graduate enrollment may be around 3% or 4%. We will discuss the problems related to increased minority enrollment during the question period. But first, you may be interested in some findings of a recent survey of CGS schools with respect to minority programs at the graduate level. I am indebted to Mr. Bruce Hamilton of ETS for the data and appreciate his careful reporting and analysis.

The responses came from 196 usable questionnaires and 64.9% of CGS institutions on programs for disadvantaged, minority graduate students. We must cautiously view the results as only a broad indication of the direction graduate schools are taking, since several institutions with minority programs found the nature of the questionnaire inappropriately designed to tap their efforts. General responses to key questions are as follows:

	yes		no		no response	
	N	%	N	%	N	%
1. Does the graduate school have a policy with regard to the enrollment and education of m/d students?	79	40.5	107	54.9	9	4.6
2. Is a special effort made to recruit m/d graduate students at the graduate school level?	105	53.8	83	42.6	7	3.6
3. Does the graduate school give special attention to m/d graduate school applications in the admissions procedures?	83	42.6	99	50.8	13	6.7
4. Do one or more departments give such special attention in admissions procedures?	114	58.5	61	31.3	20	10.3
5. Are there special efforts, programs, or arrangements directed toward the needs of enrolled m/d graduate students?	84	43.1	103	52.8	8	4.1
6. Are you developing or have you developed an academic program designed to reflect the needs and interests of the m/d graduate students on your campus?	43	22.1	137	70.3	15	7.7
7. Are there special funds allocated solely for financial aid to m/d students?	70	35.9	115	59.0	10	5.1
8. Has any attempt been made to evaluate or assess the success of your graduate m/d student efforts?	69	35.4	113	57.9	13	6.7

One dean seems to have summarized the issue from an institutional point of view quite accurately:

"The major strength of the program is the commitment of the Academic Vice President and the Dean of the Graduate School to continued intensified recruitment of minority students as exemplified by their declared willingness to reward or to punish, to put the matter bluntly, departments which do not make decent efforts in

that direction . . . The major weakness is the reluctance of faculty to admit graduate students of less than the very highest academic ability . . . The crux of the matter is the willingness of those responsible for the implementation of affirmative action programs to carry them through by whatever power they possess. The personal consequences are not pleasant; it is impossible to satisfy either side: on the one hand, you are accused of destroying quality and standards, and, on the other, you are accused of being insincere, etc. Nevertheless, there are no third or fourth alternatives: either the universities will increase minority enrollment in their way, or, it will be done to them and in ways scarcely to their liking.

Cliff Sjogren

Increasingly, students from abroad are seeking educational experiences in U. S. graduate level programs. As overseas postsecondary educational opportunities expand, particularly in third world countries, the demands of foreign students for specialized graduate school training in the United States increased. *Open Doors, 1971*<sup>1</sup> reports that there are more than 65,000 foreign students matriculated in U. S. graduate and professional schools, although it is likely that at least twice that number are actually enrolled. U. S. graduate school administrators must view international student enrollments as important forces on their campuses.

This presentation is divided into two parts. First, I will share with you some observations about the current status of foreign student admissions in U. S. graduate schools. These observations are derived primarily from the results of a survey conducted by the Field Service Program of the National Association for Foreign Student Affairs (NAFSA). A NAFSA Task Force on Crucial Issues was created to examine departmental policies on foreign students at twelve selected graduate schools.<sup>2</sup> Following this brief review of existing conditions and practices, I shall discuss a limited number of critical characteristics that are often associated with the processes of foreign student admissions.

The following statements summarize some of the crucial issues that should be considered as institutions develop rationales for continued foreign student admissions:

1. Most universities believe that they have demonstrated their commitment to international educational exchange even though institutional policy or position statements on foreign student admissions are rare. The current emphasis on accountability may lead to a more critical analysis of the reasons for foreign student enrollments.
2. Most universities are willing to make special concessions to entering foreign students by reducing course loads for language or cultural adjustment reasons.

<sup>1</sup> Annual Report of the Institute of International Education, *Open Doors*, 1972. (New York City: IIE, 1972).

<sup>2</sup> National Association for Foreign Student Affairs Field Service Program, Report of the Task Force on Crucial Issues, *An Inquiry Into Departmental Policies and Practices In Relation to the Graduate Education of Foreign Students*. (Washington, D.C.: NAFSA Central Office, 1972), pp3-17.

3. The academic performance of a foreign student is generally evaluated by the same academic criteria that are used for a domestic student.
4. Foreign students generally perform academically as well as domestic students and receive their degrees in the same length of time.
5. Institutional written and unwritten policies usually have little effect on foreign student admissions to graduate schools. The primary influence on the decision is the availability of places in the department.
6. Admissions decisions are normally made by department heads with graduate school administrators providing credential evaluation services, English language proficiency screening, etc.
7. Departments in the Task Force survey reported foreign student enrollments ranging from 2% to 49% of their total enrollment.
8. Admissions decisions are based on academic and space availability factors with little attention given to political or geographical factors. An exception to this generalization is the practice of admitting most government and agency sponsored students.
9. In order of importance, the criteria listed below are generally considered in the admissions decision:
  - a. Academic performance as measured by grades and marks on transcripts.
  - b. Type and quality of previous educational system.
  - c. Type and quality of previous institution.
  - d. Examinations (GRE, ATGSB, Miller Analogies, etc.)
  - e. Proficiency in English.
  - f. Letters of Recommendation.
 (This rank does not take into account the important influence of sponsorship or other financial considerations.)
10. Preliminary screening by outside agencies, including government, does not guarantee that sponsored students are academically qualified for graduate study.

There are several unique characteristics of the foreign student admissions process, some of which require a special sensitivity on the part of the graduate school admissions officer. Three of these characteristics are now briefly described:

#### A. Submission of Credentials

Once the candidate has decided to apply for admission, he must arrange for the submission of his credentials. The traditional U. S. procedure of requiring a complete dossier on an applicant before the decision is made oftentimes causes a great hardship for the foreign student. While you need the complete file to admit a student, you may be in a safe position to reject a student on the basis of a partial file. A common complaint heard among foreign students relates to this matter. A young Philippino, for example, may apply and be routinely asked to submit scores from the Graduate Record Exam (GRE) and the Test of English as a Foreign Language (TOEFL). At great expense (when one considers the dollar/peso exchange rate and the travel costs) the candidate fulfills the request only to learn that his grades were unsatisfactory, or, that the department "does not admit foreign students at the PhD level!" While these test results may be used to apply to another institution, it may be too late to do so, or the other institution may require different tests. Locally administered English language tests such as the American University Language Center Test (AULC) or the American Language

Institute of Georgetown University (ALIGU) might be utilized as English language screening devices. We should be sensitive to these conditions when corresponding with students from other parts of the world. Universities should utilize a preliminary application system for foreign student admissions.

**B. Standardized Examinations**

Another concern to be dealt with is the matter of standardized tests. Personally, I accept the position that reliable examinations such as the Miller Analogies, ATGSB, and the GRE have a significant role in the admissions process. Further, there does not seem to be a rebellion against U. S. tests among foreign students. There is, however, concern over the way admissions officers interpret the test results. Low test scores are ambiguous when applied to applicants from non-U. S. cultures, while high test scores are relatively free from ambiguity for the candidates. Therefore, tests will sometimes be useful predictors for foreign applicants. We must appreciate the anxiety-producing characteristics of a U. S.-designed test that will be used to judge the academic readiness of a third world student. Foreign students are suspicious of the different ways in which these tests are interpreted by North American admissions officers and there is reason to believe that their fears are valid. Students outside of the United States are accustomed to taking "do or die" tests in which non-negotiable cut-off scores determine their educational future. This test psychosis must be taken into consideration as we assess an overseas applicant's potential for success in our institution.

We must also take into consideration some of the logistical characteristics of testing in many countries. At times tests will arrive after the date on which they are to be administered. This places the student in a very difficult situation and, in contrast to the U. S. student, his counselor cannot pick up the phone and dial ETS for an explanation. Most test centers are clearly below the standards that one would expect for similar facilities in the United States. The lighting is generally poor, and in many test centers "lap boards" are used instead of desk tops. It is true that the foreign student may have been conditioned to this type of instructional environment and such conditions may not affect his test performance; however, he is usually not being compared with students who have taken the tests under more satisfactory conditions. Well-lighted, soundproofed, ventilated testing facilities simply are not available in most third world countries. While little can be done to correct that situation, it is another point that should be appreciated by admitting officers in the United States.

**C. A Plan**

There is a substantial amount of debate over the appropriateness of U. S. doctorates for students from developing countries. I would like to present an idea that has been discussed by many U. S. and foreign educators. This idea addresses itself to the task of encouraging scholarly studies designed to identify and solve the problems of less developed countries. The plan allows students to complete most of their course work in the United States including training in research techniques such as data gathering, sampling, interviews, and other experimental design

methods. The student would then return to his home country for six to twelve months for the purpose of collecting data. He could then return to utilize the computer, write and defend his thesis, and take the additional course work necessary to complete his degree. Each year this process would contribute thousands of original studies designed to identify and systematically solve some of the pressing social, health, economical, and educational problems of developing countries. Many people also feel that such a practice would help reduce the migration of talent to the United States. Finally, the cost for such a practice would probably not exceed the amount of money needed to maintain an individual in the U. S. for that period of time because of the cost of living differential between this country and most other countries of the world.

#### D. Conclusions

Increasingly, foreign students are seeking entrance to U. S. universities. Our institutions and our respective societies will benefit from this exchange experience if the admissions decisions reflect the many overt and subtle forces that influence the process. Our responsibilities as admissions officers, therefore, have been defined. We must make available to serious international applicants the essential and accurate information they need to make wise educational choices. If the prospective foreign students also choose to perform their prescribed role, that is, to make realistic choices based primarily on educational and social considerations, we will have created a useful student exchange model that is distinctly human oriented.

### Summary

David L. Jacobson

Most of the discussion and questions following the format papers concerned the two groups that had been singled out for special attention in those papers: applicants from foreign countries and those from domestic minority groups. Several issues were raised relating to the language problems of students whose native tongue is not English: the reliability of TOEFL scores, the validity of scores on the verbal section of the Graduate Record Examination, and academic difficulties subsequent to admission and arising from a poor grasp of English were among these. There appeared to be general agreement that both TOEFL and GRE scores of foreign applicants were useful if limited indicators of prospective students' chances of academic success in this country and that such scores should not - by themselves - be used as final determinants of students' admissibility. The value of both tests for foreign students is often reduced because of the physical circumstances under which the examinations are sometimes given abroad.

Several questions were raised concerning the problems of evaluating the academic records of international students. Mr. Sjogren and others stressed the necessity for training experts in the evaluation of such materials.

Finally, with regard to foreign students, there was a long discussion of changing attitudes and practices towards the place of such students in American graduate schools. In previous years, foreign students have often changed their

intentions after a few years here and decided to remain in this country. The consequent brain drain has been a problem for some underdeveloped countries. Now the Immigration Service has changed its policy and become much more inclined to compel students to return to their homelands upon the completion of their graduate study. In addition, foreign students are confronted with a decline in the support available to them from American institutions and more stringent Immigration Service requirements that they provide evidence of their ability to pay their way during their studies in this country. Several speakers emphasized the desirability of having a clear statement of the role or philosophy of American institutions in providing graduate education to foreign students.

From problems of foreign students, the discussion gradually moved to questions concerning the admission and recruitment of students from domestic minority or disadvantaged groups. One speaker suggested that while special programs in English language training were readily available for foreign students, comparable programs were scarce for domestic minority students who might also lack competence in the standard English used for graduate education. The same speaker contended that while graduate admissions offices were often willing to make exceptions in considering applicants from abroad who did not meet normal requirements of course preparation or academic achievement, they were less willing in his experience to make exceptions for minority students with similar deficiencies. Other members of the audience noted that the recruitment of minority applicants or special consideration of their qualifications were sometimes hampered by the lack of information as to the ethnic backgrounds of applicants.

By way of a concluding set of remarks, Mr. Rhoe and Mr. Sjogren both emphasized the desirability of using a variety of materials - not merely grades or test scores - in evaluating all applications for graduate study. They stressed the need for admissions officers to develop a special expertise in looking for other indicators of a student's potential for success in reviewing applications from foreign students and domestic minority students.

## RE-EXAMINATION OF THE RESIDENCY REQUIREMENT

Moderator: William J. Burke, *Arizona State University*  
Panelists: Charles A. Leone, *Bowling Green State University*  
Michael J. Brennan, *Brown University*  
Recorder: John P. Noonan, *Kansas State University*

William J. Burke

In an address given last year before the Annual Meeting of the College Entrance Examination Board, one of our colleagues, Sterling McMurrin, Dean of the Graduate School at the University of Utah noted:

"In education, innovation is easy to write and talk about but difficult to do. We talk about it frequently - but do it infrequently.

We talk about it frequently, because today to be an advocate of innovation is to be on the side of academic virtue. Our schools and colleges may not be saved, we are told, but if they are saved, it will be through innovation.

We do it infrequently, because in practice most of us in education are ultra-conservatives. We are willing to be on the side of virtue in our talk, and sometimes even in our planning - but when it comes to action we are quick to back down. To do something in education that is *really* new is difficult not simply because it means the breaking of habits that are older than ourselves, but because a break with academic habit and convention is like the profaning of a sacred temple. We have sanctified our old ways of doing things, and to change those ways is more than difficult; it is traumatic."

A quick look at the program for this annual meeting of the Council of Graduate Schools will show that graduate deans are indeed quite willing to talk about prospects for change in graduate education. Only time will tell whether we will be willing and able to bring about meaningful innovations.

The topic for this panel "Reexamination of the Residency Requirement" gives us all an opportunity to consider the need for and importance of one of the most widely accepted and cherished concepts in graduate education.

Ann Heiss in her recent book on *Challenges to Graduate Schools* points out that:

In terms of its rationale, the residence requirement is quite defensible. It is based on the assumption that by withdrawing from mundane responsibilities and "residing" for a block of time in the university community, the student will be in the company of persons and in the proximity of resources and facilities which can enrich his intellectual development and expedite his progress toward the degree. In this environment, presumably, he can learn directly - from literature, from his models, or from a wide variety of cultural and intellectual experiences - the discipline and life style of the scholar. Of equal import is the fact that his instructors can learn from and about him. An important component of the

rationale for the residence requirement is that it provides the faculty with opportunities to evaluate the quality of the students' intellectual promise as they observe it over an extended period.

By far the most common residence requirement for the doctorate is one academic year of on-campus residence although a few universities do require three or even four semesters. The interpretations of the requirement vary considerably, however, with some institutions requiring a year of full time, continuous on-campus residence while others specify registration for varying amounts of credit for a certain number of terms or make provision for students to obtain "residence" credit when they are not on campus. Teaching assistants are given full residence credit at many universities but only partial at some.

Residence requirements also differ for the Ph.D. and the Ed.D. degree at the same university. Some institutions count the summer term toward meeting the residence requirement for the doctorate while others do not. Most universities specify a minimum of the equivalent of three years of post-baccalaureate studies. The maximum elapsed time allowed for the completion of the degree requirements varies, most generally, between five and ten years.

With this wide variety of patterns, it is perhaps not surprising that Ann Heiss found in her study that 75% of the graduate faculty were satisfied with the residence requirement at their institution. Many of the 15% who thought the requirement should be modified were in favor of more required course hours. The other 10% felt that the requirement should be dropped.

Residence requirements for the masters degree are generally spelled out in terms of semester or quarter credit hours completed on campus rather than in terms of actual time on campus. Many institutions permit a limited amount of their own extension credit and accept a minor number, usually six semester hours, of transfer credit of acceptable quality from accredited institutions.

While there are differences in the application of residence requirements among institutions, in the main, there is much in common. The rapid development of graduate education since World War II saw many institutions undertake master's or doctoral level work for the first time. There was little evidence of innovation with regard to either curriculum or general graduate school requirements. The faculty in developing institutions, drawn largely from mature universities, elected almost invariably to adopt the type of program that they had completed. In the desire for prestige and recognition, and spurred on by reputational reports and by accrediting groups, developing institutions sought respectability and acceptance through emulation of the procedures of the off referred to, but somewhat ambiguous, "top twenty."

The identification of general university-wide requirements which foster good and viable graduate programs is a challenge we must all face. We should expect no simple answers, for the nature and goals of the institution, the particular discipline, the interests of the faculty, and certainly the background, potential and motivation of the individual student are all important.

It is not so much *how* a quality program is developed, but rather that it is developed by whatever means will produce the best results with the available resources. One of the great strengths of American higher education is its diversity. We should not hesitate to capitalize on this advantage in developing residency requirements and other regulations governing graduate work, at our individual institutions.

As ubiquitous as the foreign language requirement, the residency requirement is one of those things that has always been carefully preserved in descriptions of Ph.D. degree programs. It appears today, in similar form, in virtually all graduate bulletins as a general requirement of the graduate school or college. Why it is there and whether or not it should be, in present times, are appropriate topics for discussion. Self-perceptions of universities are currently in transition and it is proper to examine the usefulness of the residency requirement as a viable component in all Ph.D. programs.

The residency requirement, to me, is a hold-over from an earlier era when Ph.D. departments had only a few faculty members, say five to seven. There were presumed benefits to both the students and to the faculty by requiring graduate students to spend at least a year on-site in intense, sustained, academic effort. It assured the major professor the supervisory time in which his student would develop the professional research skills that would enjoy peer approval. There were other gratifications for the professor. He could enjoy the transformation of his students into able scholars and, perhaps, secretly relish the image of himself as the teacher with his admiring students gathered around and merged into the harmonious community of scholars of his academic department and even of the university. The residency requirement was there, too, as a mechanism for achieving a self-sustaining "critical mass" of academicians which, in those early times, was an instinct for survival rather than a nuclear phenomenon following physical laws.

The realities of modern universities, both commuter (urban) and residential types, are vastly different from those of universities of the 1920's and 1930's when the residency requirement in doctoral programs was axiomatic along with the foreign language requirements (French and German only) and the minor academic area. The steady change and decline of foreign languages as a required research tool has its own history and need not be reviewed here. Modern doctoral departments or programs are usually manned by a faculty of 20 or more members who represent four or five major specialties within a discipline. The faculty base and experience are often so broad that the need for an academic minor no longer exists. The concept of the minor area of study has disappeared entirely from many doctoral programs or has been completely transformed into interdisciplinary, non-major programs such as American Studies, Cell Biology, or Popular Culture. The residency requirement has remained relatively unchanged, if you believe what you read in present-day graduate bulletins. There is, however, much bending or stretching of the rule to accommodate to the pressures growing from the changing academic environments in our universities.

A survey of the residency requirement as given in the graduate bulletins of 150 universities reveal the following:

1. They all seem to say the same thing, namely, one academic year of full-time study in residence;
2. However, a close reading of the statements reveal a range of requirements from the very specific:  
"two semesters of post-master's work of not less than 12 hours per semester-taken in residence in the last year of study"  
to the very obtuse—  
"a period of continuous enrollment of at least three-quarters."

One statement allows for almost no variations, the other is almost completely wide open as to interpretation.

Urban universities and residential universities seem to say in their bulletins the same things concerning residence and this was surprising to me. Apparently, modern doctoral programs in all universities have made few concessions to the recent Carnegie Report on *Less Time, More Options*. I am not sure yet whether we are to be condemned or praised. In urban universities, the part-time graduate students may be 80% or more of the total headcount and, to me, this makes for an unconceivably difficult situation with respect to residency. In residential universities, part-time students are a small percentage of the total number and the residency requirement can be enforced with more certainty.

Some disciplines by their nature have no difficulty about residence. The experimental or laboratory sciences and engineering compel compliance simply because more than one year is needed to complete the experiments, analyze the data, and write the dissertation, and almost invariably the work is done on-site. However, the emergence of national laboratories and other major research facilities is encouraging scientific research to be done away from the university and is forcing revisions of published attitudes in the sciences toward the terminal year-in-residence to read in bulletins now as "a post-master's year," or simply "one year" in residence.

In the language arts, humanities and some of the social sciences, the rule concerning residence is the only device that can be employed to force senior graduate students to remain around to write their dissertations. Even so, the departed ABD student is plentiful at all campuses. This latter situation implies unkind things about the importance of library resources and close faculty supervision to modern dissertations. Or perhaps, it speaks to the plentitude of jobs or to the inadequate salary levels of graduate assistantships and teaching fellowships. Whatever is addressed, the justification of the residency requirement on grounds of student need or faculty need or on the concept of a community of scholars becomes increasingly difficult and seems to be becoming lost.

In doctoral programs implemented by departments in colleges of Education, the concepts of high standards and excellence of performance have been replaced largely by the notions of flexibility in curriculum and service to the in-service teacher. Given the preeminence of the latter two ideas in the thinking of many Educationists, there is nothing in an institution's published degree requirements that cannot be waived, altered, or substituted (often *ex post facto*) so that a particular student may receive his doctoral degree. And, of course, the residence requirement is one of the easiest to fumble. (A curious dichotomy of attitude prevails among Educationists about externally imposed certification requirements [non-negotiable] and internally imposed degree requirements [completely negotiable]). As much as we, in other disciplines, may deplore the abandonment of standards and performance by the Educationists, we have not had to cope, like they, with large numbers of graduate students who are under continuing pressures to meet externally imposed professional requirements in order to obtain pay increases or promotion. I am not confident that the virtuous attitudes professed in the liberal arts and sciences concerning standards and performances will survive assaults by even a few students. I have already seen staunch academicians in the sciences rebel viciously when a good or sound requirement was inflexibly forced upon them by one of their students.

The graduate dean is often called upon to be the conscience of the university in academic matters. A single example relating to residency will

suffice to illustrate how being such yields anything but the gratitude of those involved. In some ways, the following could be called an example of the deterioration of a concept. One residency deviation, generally supported by Educationists, is three consecutive summers of full-time study rather than a year of full-time study in residence. Once a university accepts this as filling its residency requirement, there is an immediate appeal to allow for a variance that "summers" be interpreted to mean the five- or six-week semi-semester or semi-quarter rather than a full summer semester or quarter, because "our principals and teachers need to be back on the job before the end of August." You learn, in addition, that such students, in fact, during these same summers, often commute daily between their homes and the campus while completing their "residence" requirement. The justification of their behavior quickly follows with statements by the Education faculty that teaching assistants often live several miles from campus and no one questions their "in residence" status. It all becomes a complete farce when you probe further and learn, that, if the summer student enrollments are for dissertation or research, the day of registration may be the only one in which they are physically present on the campus in the entire session. One wonders, when a dissertation is ultimately submitted: how, when and where it was done. Certainly, the faculty and library resources of the university were largely ignored by the candidates. Queries into such cases, induce stinging rebuttals by faculty members and accusations of your being "anti-faculty" or "anti-Education" or, more charitably, "insensitive to the special needs of students in Education" or, still more charitably, "inflexible and interested more in rules than in people."

Lest you think that I am truly all these things and worse, allow me to insist that I am most sympathetic towards the problems of the part-time graduate students, and to the special problems they create for faculties that try to implement programs of higher education in classroom or course situations in which virtually 100% of the students are preoccupied with full-time jobs at points some miles from the campus. Whether you believe that the realities in graduate work in Education are a complex, self-fulfilling plan, designed to guarantee summer employment for faculty members *via* a device called certification, or whether you believe the motivations that created the present situation are altruistic, a genuine concern for higher educational quality in our primary and secondary schools, is immaterial. In colleges of Education, major problems already exist with which all the rest of us in both residential and urban institutions will, eventually, have to cope. We all could do well to examine their problems carefully and sympathetically, and use the effort to address ourselves to the emerging new modes in graduate education.

Some colleges of Business Administration are becoming aware of the problem, for the first time, as one not solved merely by a departmental fiat of "one year of post-master's residence." Industries are gradually imposing education requirements on higher management personnel that force the latter into post-MBA work. As yet, there is little evidence that the industries are inclined to grant a year's leave of absence with pay, merely so that a residency requirement can be met. The arguments against the residency requirement that emendate from Colleges of Business typically are tough and couched in a business jargon that reduces the doctoral diploma to the product equivalency of a piece of merchandise. Although the languages differ, the point being made is, the same as that by the Educationists, namely that the customer is always right, especially in state-supported universities, and that *service* and *flexibility*.

are to be prime characteristics in the graduate programs, in their academic areas. None of this is new to graduate education. The same arguments raged four and five decades ago. Then, the scholars prevailed, and the Ph.D. emerged as an appellation which indicated the holder could do independent research in his discipline, that he had sacrificed and met a set of stern course demands, that he completed the foreign language (two of them) requirement, the minor area requirement and the residency requirement and, indeed, he was something special, deserving of everyone's respect and admiration. The largest flaw in all this is that the degree was meaningful only to tiny segments of our society, and these were all located in geographic enclaves or sanctuaries called universities. In the world, outside of the enclaves, miraculous changes have occurred in the past four decades. However, the outreach by the universities has been trivial. The impact of the society of modern man on the university, on the other hand, has become awesome. The old sanctuaries are going or already are gone. The word "accountability" has acquired new definitions and respectability in university affairs. Societal needs are literally forcing our universities to develop new styles and new profiles, sometimes as self-serving, survival adaptations, and sometimes as truly concerned endeavors to be part of and responsive to the real world.

Undergraduate curricular requirements are in transition in many universities. Newly defined general studies, liberal studies, experimental studies, etc. are commonplace adjustments. Modular achievement programs that break the four-year pattern for baccalaureate degrees are emerging. Graduate schools and colleges are only now beginning to cope with the consequences of the end products of the new undergraduate educational modes. Similarly, the perennial, part-time students, formerly a minority nuisance, are rapidly growing into a major component to which we must make adjustments in our academic programs.

As suggested above, residence requirements are even now satisfied using means that are little short of complexities, by faculty and students, to participate in duplicities, mostly to preserve the facade of academic respectability described in the typical graduate bulletin. The aggravations to the faculty and to the dean are simply not worth what is presumed to be achieved by forcing strict compliance to a non-academic barrier. There are enough exceptions-to-the-rule already being sought to make me recommend that the residence requirement in doctoral programs be dropped as an all-university requirement of graduate schools and colleges and that the quality demands of the disciplines dictate how students complete their degree requirements.

Michael Brennan

To the best of my knowledge, at least three meanings have been given to the residency requirement. One meaning of residence is the bodily presence of students on campus - either on a full-time or equivalent part-time basis. Another meaning is the number of courses or credit hours to be completed for a degree. And the third is a financial obligation imposed on each student, namely minimum tuition and/or fees required for an advanced degree. This third interpretation applies mostly, but not solely, to private institutions.

Usually, some combination of the three meanings is involved in every discussion of the residency requirement, which I believe serves only the purposes of the god of confusion. I offer this observation because it sets the context

within which effective dialogue can be easily frustrated. So my first point is an assumption: I take it that we are concerned exclusively, or at least primarily, with the first meaning -- required presence on the campus.

Residence, itself, is hardly an exciting topic. It assumes significance only in the light of current trends in the education of women, resumed education, greater opportunities for part-time study, external degrees, universities without walls, and so on. These trends raise questions of real importance. Why should graduate students be required to be present on campus at all? If they should, how many and what kind of degree requirements ought to be satisfied on campus? In spite of popular trends, are programs designed for off-campus graduate study really in the best interests of quality education?

I have been asked to address myself to these questions from the perspective of an established graduate school and with respect to the humanities and social sciences, including also certain professional schools -- all these in contrast to scientific and technological studies. The lines are drawn here between those disciplines requiring laboratory experimentation, therefore demanding access to extensive physical facilities on the one hand, and those for which access to specialized equipment is far less important on the other hand; for nonavailability of equipment will impair graduate study or research in the fields of science and technology, generally speaking. A similar case cannot be made, even for access to a digital computer, in other disciplines. Nonfaculty resources consist primarily of library resources, which are not monopolized by a university and (in any event) are exportable, at least in duplicated form.

Most established universities stress full-time study *on campus*. It is not uncommon to find rules stipulating that a master's degree must be completed within a total time limit that discourages part-time study or interrupted study. If the equivalent of three-years of full-time study is required for a doctorate, this requirement is almost always accompanied by another, which states that at least one of these years must be spent on campus in full-time study. Aside from formalized rules, predominant attitudes in the faculty and administration enforce and even extend barriers to off-campus study prior to the dissertation stage.

Some of the arguments against any changes in these rules and attitudes I put down to either habit or myth. There are two arguments, however, which cannot be dismissed lightly. The first argument runs as follows. Serious graduate study demands a rigorous, concentrated, and sustained intellectual effort. If doctoral education -- and to a somewhat lesser extent, education to the master's degree -- is taken in "drips and drabs" so to speak over very long periods, then graduate education loses continuity and self re-enforcement. Satisfaction of the residency requirement by greatly extended part-time study produces discontinuities, course-by-course fragmentation, and a vacuum where single-purpose integration ought to reside. Worse still, complete absence from the campus denies the student interaction with faculty members and with other students. Thus, external degrees at the graduate level violate the principle tenets of effective education, namely the on-going personal give and take, and give and retake, involved in on-campus, full-time study.

While the first argument might be described as an argument from the individual student's experience, the second argument is concerned with the graduate school's own reputation and effectiveness brought on by a change in the school's mix of full-time students *vis-a-vis* part-time or off-campus students. It has been argued that a significantly greater mix of part-time, resumed

education, and off-campus students dilutes the quality of education -- and, incidentally, thereby cheats full-time students of the care and quality we owe them. From the perspective of the established institution, faculty and administrators bring home stories (often, quite accurate stories) of other institutions which have sacrificed their full-time students to the practical necessities of serving large numbers of so-called "moonlighters" with far more interest in occupational promotion than in learning. As you know, some "moonlighters" are just as serious and dedicated as any other students, but too many others are engaged in a mindless pursuit of purely quantitative, credit-hour, criteria for civil service upgrading or salary increments in the public school system. When a university admits a large number of such applicants in order to gain tuition income, or to satisfy certain dictates of a state board of regents, and the faculty finds too many courses dominated by an attitude of get-by-to-get-the-credit, the quality of instruction tends to reduce to the lowest common intellectual denominator.

Here, as I see it, are the most persuasive arguments against changes in prevailing rules and attitudes. What, then, are the arguments in favor of changes? These are largely social. They extend upward from efforts to enlarge educational opportunity at the undergraduate level. As a national educational system -- allowing for all our diversity -- we are embarked upon a new effort at more widespread, if not universal, higher education. Having introduced closed circuit T.V. lectures, college courses at home, etc., we as a nation are now asking the graduate schools to share in this effort. To put the issue in question form: Why should graduate schools insist upon the crusty precedents of accumulated requirements when imaginative revisions would open opportunities to members of society heretofore denied access to advanced study?

There is a real sense in which existing rules and attitudes in established institutions, when uniformly applied, must be discriminatory in that they close opportunities to qualified potential students. True, all graduate schools with which I am familiar make exceptions. But how many potential applicants do not know about the exceptions? How many capable, or really outstanding, students retreat from an application because they are led to believe that continuous full-time study is required, regardless of a student's ability and regardless of his or her adaptability to circumstances that force part-time study and greater than normal time off-campus?

I submit that the real issue is not a disagreement between continuous, full-time, on-campus study on one side of the wall of debate and all the deviations from this norm on the other side. Instead, I submit that the issues center on the criteria for judging two things: (1) the signs that any applicant will or will not do well in graduate study, and (2) the conditions under which a student will realize the potential shown at the time of admission to the graduate school. The former is a matter of deciding whether an applicant has the qualities a graduate school expects, irrespective of practical constraints that may affect the timing or continuity of study. This is what our faculties are fond of calling "maintaining standards". The latter is an offshoot of the former. Once the decision has been made that an applicant has the necessary stuff, then the question arises as to whether *that individual* can effectively turn his or her stuff into performance that warrants a degree. In reaching the second judgment, obviously there are no universals that can apply. Therefore, there should be no residency rules that discriminate against qualified students who cannot meet preconceived time limits.

My conclusions may sound like unqualified support for all forms of continuing graduate education, especially those forms entailing large numbers of students away from the campus. Let me, therefore, hasten to add the following cautions. First, I do not predict wholesale relaxation of residency requirements. Established graduate schools will not undergo anything like complete conversion to various forms of part-time and off-campus study. Changes will occur at the margin. Second, I do not believe that established graduate schools should undergo a complete conversion. The arguments presented earlier against predominant part-time and off-campus study carry enough weight to restrain vast changes in residency requirements.

Nevertheless, I find it difficult to accept an allegation that there are not fully qualified candidates who, for a variety of reasons, cannot engage in continuous full-time study. The arguments advanced earlier are generalities, and even now exceptions are made to existing rules for good cause.

One might describe the issue as one of expanding the exceptions through a loosening of rules written in our catalogs. It is a matter of changing the graduate schools' public stance from that of indiscriminate discouragement to selective encouragement.

### Summary

John P. Noonan

The papers dealing with the award of residence credit stimulated lively discussion among the workshop participants. Many of the vexing problems associated with graduate education surfaced. Particularly significant were attempts to distinguish among various types of Ph.D. programs and to identify unique residence requirements for them.

There was a strong sentiment that residence, for some prolonged span of time, should be required for graduate students who are working for research degrees and plan to do research in the years immediately ahead. Other kinds of activities should be provided for non-research degrees. The implication is that the Ph.D. program may be, and probably is in many cases, awarded for efforts other than research. Although this concept was contrary to the perception of many participants, there was little opposition voiced to it. Residence for the non-research degree is of less importance. In fact the term *non-residence requirement* was used to emphasize the need for providing off-campus experience for students whose degree work is in applied or professional areas. Certain programs in education, business, engineering, and clinical psychology were identified as examples of where non-resident activities might not only be desirable but required.

As the discussion developed, there arose the problem of defining residence. Many deans reported that significant amounts of research work, even in traditional research degrees, is done off-campus well away from the traditional intellectual community. It is becoming more common for scientific research to be done in laboratories of business firms, in private laboratories, in a variety of field stations, and other facilities removed from the central campus. The practice is even more widespread in the social sciences and the humanities. The notion that residence identifies work done on campus is widely held, but a substantial

amount of research, while called residence, is in fact not.

Central to the acceptability of off-campus work is the matter of accountability for our high standards, both for research and internships. These activities are most difficult to supervise and finance because the administrative structure of universities may not allow for travel and other expenses required of the faculty members.

Other points mentioned were the following: transferability of credit, problems of developing institutions and graduate work, the proliferation of rules and regulations, the number of kind of students going into higher education, the possibility of involving more off-campus people as adjunct professors in graduate programs, and the duplicity created by the difference between requirements as stated in the catalog and as demanded in practice.

Although no formal action was taken, it seemed to be the consensus that all graduate schools should rethink their notions regarding residence credit. It was even suggested that all statements requiring residence be deleted from catalogs.

## SELF-EVALUATION OF GRADUATE PROGRAMS

Moderator: John K. Major, *New York University*  
Panelists: Lyle Jones, *University of North Carolina, Chapel Hills*  
Sam Webb, *Georgia Institute of Technology*  
Recorder: Arthur Veis, *Northwestern University*

John K. Major

Self-evaluation is central to every profession, since each profession -- law, medicine, education -- claims that only those who are qualified to practice it are entitled to judge it. The public has accepted that claim. But it is the public which determines, directly or indirectly, the allocation of resources to education, through the congress, state legislatures, governing boards, and, of course, the consumer: the tuition-paying citizen. It is clear that this allocation of resources decides the nature and future of our institutions.

Graduate education, as you know only too well, is in a crisis; the Sputnik era is past, federal fellowship programs are vanishing, the public is convinced of a surplus of graduates, the younger generation cries for relevance, the older generation cries for lower taxes, and a decline in the college-age population throughout the next decade is certain. The brakes have been applied to graduate education: New York and Ohio (among others) have a statewide moratorium on new doctoral programs. Lyman Glenny<sup>1</sup> suggested two years ago that no institution should start a new program unless it is highly innovative, fully interdisciplinary, or in a discipline where there is a national shortage. Clark Kerr of the Carnegie Commission on Higher Education recently wrote that "our Commission is convinced that we need no single additional Ph.D. program in the whole United States for the next decade".

Few expect any graduate schools to close up shop in the immediate future, especially those with a variety of sound, established programs, but the same cannot be said of individual programs. Universities and university systems are critically examining their graduate programs for candidates for termination. Last week, the Florida State University System announced it would review the 126 doctoral and 311 master's programs in the nine universities in the system in order to eliminate or consolidate high-cost, low-productivity programs; those which have not averaged at least two degrees annually over the past three years will come under particular scrutiny. Forty-six master's and doctoral programs have been suspended by the South Dakota Regents. And at New York University, several doctoral programs are likely to be among the victims of a 30% slash in the arts and sciences budget over a two-year period.

<sup>1</sup>"*Doctoral Planning for the 1970's*," Lyman Glenny, *Research Reporter*, Volume VI, Number 1 (1971) (presented at the Annual Meeting, Southern Regional Education Board, Houston, Texas, June 11-12, 1970).

What criteria should apply to initiating, continuing, or terminating graduate programs? Clearly if the universities do not establish and apply their own criteria, outside bodies will: governing boards, state systems, federal agencies, or other organizations, adopting measures of productivity, efficiency, and economy far more appropriate to industry than to higher education. Self-evaluation is a must if institutions are to maintain quality programs and to determine their own destinies.

Nine years ago Alvin Weinberg<sup>2</sup> discussed criteria for scientific choice, in asking how the government should decide which scientific efforts to support, and distinguished between internal criteria (Is the field ready for exploitation? Are the scientists in the field really competent?), and external criteria which he considered more important: technological, scientific, and social merit. He defined scientific merit in terms of the way the field "contributes most heavily to and illuminates most brightly its neighboring scientific disciplines". Then he proceeded to apply these criteria to such disparate branches of science as high-energy physics, molecular biology, and space exploration.

Various criteria have been suggested for reviewing graduate programs. The University of Maryland<sup>3</sup> reviews each program every five years, and considers a host of factors in arriving at particular recommendations; among them are the numbers of faculty and students, faculty salaries compared to those in the same field elsewhere, fraction of students awarded financial aid, criteria for admission and for financial aid, student attrition, careers of graduates, and the employment market.

In 1968, Tulane University<sup>4</sup> decided to suspend one M.A. and five Ph.D. programs on the basis of four criteria: (1) involvement of the program in the undergraduate curriculum; (2) involvement in the graduate curriculum, as measured by enrollment, degrees awarded, and other data; (3) national recognition and reputation, as indicated by the American Council on Education studies, National Defense Education Act Title IV fellowship evaluations, and Council of Graduate Schools evaluations; and (4) the additional resources necessary for the program to achieve national recognition.

At Princeton University, the Priorities Committee<sup>5</sup> charged with major budgetary surgery developed the following criteria for graduate programs: (1) the quality of the faculty and program, in the opinion of other scholars in the field, faculty in related fields, and graduate students; (2) the number and quality of applicants, acceptees, and graduates; (3) the future of the field, in terms of current trends and national needs; (4) the national contribution made by the program, compared to other programs in the field; (5) the comparative advantage of Princeton in the field; (6) the interaction between the program and graduate programs in other fields; (7) the interaction between the program and undergraduate offerings in the field; and (8) the cost of the program.

<sup>2</sup>"Criteria for Scientific Choice", A. M. Weinberg, *Minerva*, pages 160-171 (Winter 1963).

<sup>3</sup>*Five-Year Review of Graduate Programs*, University of Maryland, Graduate School.

<sup>4</sup>*Suspension of Ph.D. Programs: Tulane's Experience* (distributed by David H. Deener at the Eleventh Annual Meeting, Council of Graduate Schools in the United States, Washington, D.C., December 2-4, 1971).

<sup>5</sup>*Recommendations Concerning the Budget for the Fiscal Year 1971-1972*, Report of the Priorities Committee to the President, Princeton University, January 20, 1971.

Last year, at this meeting, Dan Alpert<sup>6</sup> narrowed the field down to five "orthogonal" criteria: centrality, societal demand, uniqueness of the contribution, quality of life and leadership in the program, and, lastly, quality of scholarship.

My own criteria fall into four categories: significance, need, quality, and solvency.

Significance includes the uniqueness of the field, its central role to the arts and sciences, its impact on and importance to other disciplines, and its future as an academic discipline. Need can be judged not only by the societal demand (as reflected, for example, by the employment market) and local circumstances, but also by student demand, in terms of the number and quality of inquiries, applications, and acceptances.

Quality includes the quality of the faculty (as judged by scholars in other fields as well as outside scholars in the same field), the quality of the students (as measured by admission qualifications, educational backgrounds, and success in national competitions), and the quality of the program (as reflected in national studies, the opinions of other scholars, student attrition, and the careers of graduates).

Finally, solvency takes into account both internal efficiency, through those quantitative measures which ignore quality but which are inescapable in any activity for which the public demands accountability (student/faculty income/cost, and other ratios), and external support, especially its stability and the opportunities for new support.

The present crisis is not likely to vanish. It offers graduate education an opportunity to consolidate its gains of the past several decades and not only survive but also to become stronger than ever. Graduate education can be strengthened only if the universities themselves engage in a continuing and searching self-evaluation, adopt explicit criteria for continuing or discontinuing degree programs, and apply them to their current activities. The alternative is an arbitrary and ruthless pruning by authorities far less knowledgeable and qualified than those in the universities.

Lyle V. Jones

Originally, a tentative title for this part of the program was stated to be "Internal Ratings of Graduate Programs" - in contrast, I suppose, to external ratings. The title then was altered, and became "Self-Evaluation of Graduate Programs," apparently excluding from consideration the evaluation by others.

Let me presume that neither title is quite on target; the distinction between internal and external ratings, or between evaluation initiated by self or by another, would seem to be of relatively minor importance. Perhaps what is intended is to focus upon an evaluation of graduate programs as a guide for decision-making within the university, rather than as a vehicle for competition in prestige between universities. If our topic is so construed, then, whether evaluative evidence were generated from within or with outside help becomes

<sup>6</sup>Proceedings of the Eleventh Annual Meeting, Council of Graduate Schools in the United States, Washington, D.C., December 2-4, 1971, pages 93-94

secondary. In either case, that evidence would be assembled and processed for decision-makers within the university community. Possible decisions might include increased or decreased support and growth for a program in terms of budget and enrollment, changes in goals and objectives for a given degree program, realignment of a program in terms of its affiliation with administrative units within the university, or discontinuation of a degree program. Any evaluation should be pertinent to these decision alternatives.

With this understanding, let us consider what to evaluate and how.

The primary output of a graduate degree program is men and women, educated to the master's or doctoral level in a particular discipline or field of study. Hence, the primary benefit of a graduate program should be evident in terms of changes in the knowledge and skills or the attitudes and beliefs of students between the time they are admitted and the time they complete a degree program. Please note that I do not here claim that the student is the sole beneficiary of graduate training, nor even necessarily the primary beneficiary. But the educated, degree-bearing student is the primary output from the program. And whomever the beneficiaries -- the student, the community, the society at large -- one would expect that the marginal value of the graduate program would depend upon some consequence of the learning experience. If important consequences are associated with the learning process, there would be detectable changes in the students. Rather surprisingly, I am unaware of any systematic efforts having been made, for purposes of program evaluation, to assess changes in graduate students during the course of their study.

To estimate change in a person's knowledge and competence between entrance in and successful completion of a graduate degree program would necessitate the development of suitable tests of knowledge, skill, and achievement. It is possible that tests could be developed for a particular graduate program at one university. However, the high costs of constructing adequate tests would seem to prohibit this approach. An alternative, perhaps to be discussed with the Graduate Record Examinations Board, is for GREB to assume responsibility for developing appropriate tests. Indeed, it might prove possible to extend the content of the carefully constructed Advanced Tests of the Graduate Record Examinations to serve these purposes. Test results would not be made available to the general public, but would be reported, upon request, to those graduate schools wishing to collect such evaluative evidence about their own students. In any case, the most direct approach to the evaluation of the contributions of a particular graduate program would be based upon an assessment of the students. The development of suitable tests for this purpose, seems worthy of further consideration.

As an alternative to an ambitious plan for comparing test results before and after experience in a graduate program, consider the simpler expedient of maintaining records of the careers of graduate school alumni. For doctorates, and sometimes for master's degree recipients, the student's faculty sponsor typically does maintain current information about his place of employment, and the nature of his scholarly or professional contributions. Some departments systematically collect and disseminate news concerning employment, awards, promotions, and publications of their graduate alumni.

In the spring of 1972, I communicated with all members of our graduate faculty, asking that they provide information, via their departments, concerning noteworthy contributions of alumni who had completed graduate degrees during the previous ten years. The replies were voluminous, and of considerable interest

within the university. From several departments, we received many references to records of great success achieved by individual graduate alumni, in the form of research grants received, noteworthy publications, fellowship awards, service contributions, and a variety of other distinctions. In departments able to present current employment information for all degree recipients over a given time period, that information appears to reveal, quite well, the educational mission of their graduate programs. Thus, from one department, doctoral recipients hold faculty positions at major universities throughout the country. That department seems to have succeeded in its mission of training students to become research scholars and academic leaders within their discipline. In another department, more oriented toward needs within the state and the region, graduates serve as faculty and department chairmen at a number of nearby colleges. Still another department, with a professional program in the health sciences, has placed graduates largely in public health laboratories throughout the United States.

As a side effect of our request for information of this kind, many departments have become sensitized to the importance of retaining such records for their own purposes -- information useful for self-evaluation and reconsideration of training goals.

Quite a different approach to evaluation of graduate programs and deserving of wider consideration is internal evaluation both in purpose and in means. While less direct than that of measuring change in student competence, it does not entail the construction of test instruments, nor does it await consideration by the GRE Board. This procedure, as pioneered at the University of Nebraska, entails departmental review committees, each with five graduate faculty members. At Stanford, a similar procedure has been carried out with departmental visitation teams, each consisting of six persons, three professors and three graduate students. Both at Nebraska and at Stanford, the visiting teams included representatives of fields closely related to the department to be visited.

Let me note some of the effects of this review procedure. At Nebraska, in 1971, these evaluations led to administrative decisions to suspend doctoral training in several disciplines: Biochemistry and Nutrition, Pharmaceutical Science, and Romance Languages and Literatures. 3 of the 15 areas reviewed by this means during the year. Dean Norman Cromwell has told me that, in addition, faculty in a fourth reviewed program formally requested that the graduate program be discontinued; their request was granted by vote of the graduate faculty.

Through continuing evaluation at Nebraska, it was expected "that certain existing programs (would) be consolidated to bring strength to all parts of the new combination," and that additional "weak programs (would) be phased out since attempted consolidation would simply compound the weaknesses of the departments included." From the reports of Dean Cromwell, it is clear that the judgments from the departmental review committee, and subsequent evaluations by the Graduate Council, formed the bases for the administrative decisions that subsequently were made.

The Stanford experience with departmental visiting teams is documented in a recent monograph, *The Study of Graduate Education at Stanford*, Stanford University, June, 1972. Three departments had been studied by this means through the spring of 1972, the Departments of Anthropology, Spanish and Portuguese, and English. The chairmen of the three visitation teams were unanimous in their belief that more such visits should be made in the future.

According to one, "Nothing will help bring about such improvements as quickly as visits of the kind we have been conducting."

In contrasting the value of review-by university teams and outside visiting teams, the Stanford report comments as follows: "The reports of such outside visiting teams -- and we have looked at several that were done for departments here and elsewhere -- tend to concentrate on the faculty and the research being conducted in the visited departments, and give little attention to the details of the graduate program. For our purposes, therefore, such reports, though extremely valuable in other ways, would be of little use."

At Stanford, every member of all three visitation teams felt that he had learned a great deal from the experience. Indeed, one team chairman suggested that it was perhaps more valuable to the reviewing committee than to the department. Clearly, the process does serve to acquaint interested members of the graduate-school community with the problems, the strengths, and the weaknesses of graduate education in the department being reviewed.

The purposes of review were somewhat different at Nebraska and at Stanford. Possible discontinuation of the graduate program was announced in advance to be a possible result of the review at Nebraska. Reviewers were asked to provide ratings of each program in terms of its overall quality and the possible effects of its suspension on other university programs. At Stanford, visitation teams were asked, on the basis of extensive individual interviews with faculty and graduate students in the program, to recommend for departmental consideration, ways in which the program might be improved. In both cases, the aims of the evaluation seem to have been served well by these internal review committees.

One feature of the generally constructive emphasis upon evaluation and accountability in graduate education has disturbed me, and I know that this worry is shared by others. It is the view that graduate programs can be assessed by economic cost-benefit analyses, -- that dollar costs may be ascertained, and that benefits are also amenable to objective assessment in economic terms. No one seems eager to claim that the benefits of graduate education may be nearly priceless, to individuals and to society. But might that, in fact, not be so? Should we accede to an analysis of educational processes and benefits in the same terms and analyses of industrial production processes and automobiles or TV sets?

My intention is not to criticize CGS for its participation in the GRADCOST study (McCarthy, J.L. and Deener, D.R. *The Costs and Benefits of Graduate Education: A Commentary with Recommendations*, Washington, D.C.: The Council of Graduate Schools in the United States, 1972). These authors wisely conclude that "It is clear that the basic definitions, procedures and data are not yet available for evaluating costs of graduate education," and they indicate that we are even less adequately prepared to measure outputs and benefits.

Graduate education has the capacity for improving the quality of life, both for the individual student and for society. It also should enhance other functions of the university, its undergraduate programs, its role in the discovery of knowledge, its capacity to serve needs in its community. Techniques for assigning an economic worth to such benefits might be developed, but they are unlikely to do justice to the human values involved. Certainly, we should strive to specify the objectives of a graduate program, to evaluate its success, to change it or even to discontinue it if it is found wanting. But we should resist equating dollar values with the benefits of such a program, thereby encouraging economic comparisons of its value with its cost. Depending upon the arbitrary assumptions

assumptions employed, such an approach could be used to justify either the continuation or the elimination of all existing programs. To base programmatic decisions upon this approach might prove to be more a disservice than a service to the cause of excellence in graduate education.

Sam C. Webb

An important function of the graduate dean is to monitor the several programs over which he has jurisdiction. This function may apply to a variety of aspects — administrative, financial, academic, or what not — depending on the responsibilities assigned to the dean. Usually, however, the quality of programs from an academic point of view is of primary concern.

In special situations, as when a department and interdisciplinary group may be seeking approval for a new program or when a program appears to be unsatisfactory, it may be appropriate to request an evaluation and recommendation for action from a panel of experts or consultants brought in from the outside. Further, on some occasions the assessment of some programs in relation to their counterparts at other institutions is desired. And, again evaluations made by persons external to the local institutions may be appropriate.

On the other hand, there are needs for a periodic, if not a continuing, assessment of quality that permit a differential evaluation of the several programs on campus. Since such assessments are usually performed within the framework of the local institutional setting and are made by local personnel (often by the dean himself), they may be referred to as internal ratings of graduate programs. How, and on what basis, such ratings should be made is a concern of this workshop.

Since quality is in essence an attribute of value, an evaluation thereof is necessarily a subjective judgment and not an objective assessment. Though ratings will, therefore, always ultimately be subjective in nature, the reliability, validity and meaning of such judgments can be maximized and biased. Unreliability and irrelevance can be eliminated by following several well known principles related to the making of ratings. Let us briefly note a few of these.

1. The characteristics or dimensions of a program in terms of which its quality will be evaluated should be clearly identified and defined. Such definitions will hopefully insure that the evaluators are aware of the several aspects of programs considered relevant to the assessment of their quality. They will insure that the several programs are evaluated in terms of the same defined set of characteristics, and they will permit the personnel within programs being evaluated to know on what basis they are being evaluated.

2. For each dimension there should be a listing (with such definitions as may be necessary) of criteria or variables that are thought to describe or reflect the several characteristics included in the definition. To the extent possible, these variables should be directly observable and amenable to objective description and quantification. These variables, in essence, identify for the evaluator what observations or data he should consider as a basis for making his ratings for the respective dimensions.

3. To the extent possible data relevant to these criteria should be collected and recorded in appropriate form for the several programs to be evaluated.

4. Using the data assembled as the base for making judgments, the evaluator should make his rating for each dimension.

5. The rating for each dimension should be recorded on a rating scale consisting of an appropriate number of intervals. Each interval should be defined in terms of fitting adjectival words or phrases. For example, poor, weak, passable, good, strong, superior, et cetera.

6. If an overall rating for a program is desired, the ratings of the several dimensions may be transformed into numerical form and combined after weighting each according to its judged relative importance to yield a single value. When, ordered according to magnitude, these values provide a ranking of the several programs according to overall judged quality.

In many respects the outcome of an evaluation program is dependent upon the care and expertise with which the first two of the steps I have described, are carried out. For specification of the dimensions to be rated and the criterion variables to be observed is the heart of the matter. By way of illustration of how these steps might be approached, I want to describe some efforts we have made at Georgia Tech to develop criteria for assessing the quality of our graduate programs.

As a part of a Developmental Plan for Graduate Education, suggested procedures for improving the quality of the graduate program were offered with a recognition of the need for a periodic assessment or evaluation of progress being made. Since it was expected that these evaluations would be made by the academic deans, it seemed appropriate that the criteria, in terms of which they would assess the quality of the several graduate programs, should be clearly stated so that department heads and their faculties could be fully cognizant of the basis in terms of which their programs were being evaluated.

After considering the available literature on the evaluation of graduate programs and after numerous discussions, the deans decided they would evaluate the quality of programs in terms of six dimensions: (1) the calibre of the faculty, (2) the calibre of the students, (3) the nature of the programs and curricula offered, (4) research and scholarly activity, (5) instruction, and (6) planning and evaluation.

Each dimension was carefully described in sufficient detail to indicate what it encompassed. And, finally for each dimension a list of variables considered to provide information relevant to it, was developed.

By way of illustration, let me note the materials developed for two of the six dimensions. Consider first the dimension entitled, Programs and Curricula. This dimension was defined as follows:

"The substance of any graduate program is found in the degree programs and curricula that it offers. The degrees and courses offered should be consistent with the goals and aims of the department, with faculty qualifications and interests, and with present and anticipated trends of the discipline. At the same time they should be sensitive to societal needs. The programs offered should provide an appropriate balance between general and specialized offerings; they should assure development of competency, but at the same time provide for adequate flexibility of programming to meet student needs. In addition to the presentation of facts, they should stress the development of such skills and attitudes as foster independent and creative thought and flexibility and breadth of perspective as are appropriate for professional and research oriented occupations. The level of work demanded should be equivalent to that found in other institutions with superior programs in comparable areas and sufficiently

broad based as to equip the student for continued growth and development subsequent to the completion of his degree.

These characteristics will normally be reflected through such indices as a sense of intellectual ferment among students and faculty, frequent review and updating of program options and curricula, student interest and participation in interdisciplinary programs, wide usage of seminars, directed readings, and special problem type course offerings, frequent change of course materials, wide usage of library materials as opposed to a single text in courses, frequent use of library by faculty and students, efficient use of course offerings of other schools, and frequent use of guest speakers and visiting professors.

The dimension called Instruction is described as follows:

While research is regarded as the heart of any graduate program, this aspect is generally an outgrowth of a sound instructional program. This latter dimension emphasizes the excellence in the instructional process, *per se* (in contrast to professional competence of faculty and curriculum) content previously discussed). Such excellence is characterized by use of pedagogical procedures expertly executed appropriate to concepts, skills, perspectives, and values to be taught (these may involve a variety of techniques, such as carefully prepared lectures for teaching facts, properly arranged seminars for encouraging student discussion and the raising of questions and issues for which solutions and answers are not available, laboratory exercises for skill development, and essentially apprentice training in highly technical research skills) interest in and enthusiasm for developing more effective teaching methods, sensitivity to student needs, careful planning and organization of classes, clear statement of objectives, and careful evaluation of student progress and appropriate feedback procedures, and encouragement of independent study under appropriate guidance.

These characteristics will usually be reflected in such indices as recognition of teaching excellence by peers and students, lively discussions of teaching techniques, frequent use of seminars, special topics and special problem type courses, usage of a variety of teaching methodologies, publication of textbooks and other instructional materials, experimentation with innovative teaching procedures, general recognition of the importance of good teaching, supervised instructional experiences for graduate students, and clear recognition of good teaching through suitable reward mechanisms.

Materials for the other four dimensions resemble those just quoted. These materials were distributed to all department heads for comments, criticisms and suggestions, and after the necessary revisions they were assembled in the form of a Graduate Division Policy and Procedure Memorandum and distributed to all department heads and to members of the faculty who work with graduate students.

How useful these materials will prove to be remains to be seen. Since the Institute is heavily engaged in the self-study required by the Southern Association of Schools and Colleges; and the Engineering College is being evaluated by the Engineer's Council for Professional Development, it has not seemed appropriate to engage in other evaluation activities at this time.

Though we have not yet used these materials as part of an evaluative effort, we are nevertheless aware of some of their assets and liabilities. On the negative side, the definitions seem long, cumbersome and sometimes unduly complicated. Some of the criteria do not seem precisely to correspond to the characteristics included in the definitions; and some lack the degree of

objectivity and ease of observability we would like for them to have. On the other hand these materials keep us aware of the complex nature of the programs we are asked to evaluate and make us cognizant of the multiplicity of criteria available for consideration in judging the quality of a program even within the perspective of a single dimension.

The length to which an institution may be willing to go in order to develop these kinds of materials will depend upon a number of considerations, such as the use that will be made of evaluations, or perhaps the temperament of the persons devising or using the evaluation system. But if the evaluative effort is to be effective some systematic specification of the substantive elements about which judgments are to be made and the criteria on the basis of which the judgments are to be made are essential.

### Summary

Arthur Veis

Dean Rosenberg of the University of Pittsburgh questioned Dean Sam Webb about the emphasis placed on quality point grading of programs and whether this system did not place limits on the decision making ability of the graduate dean. Dean Webb agreed, but pointed out that different people like to make decisions in different ways. As long as it is made clear exactly what criteria are to be used in reaching a judgment, the quality point system can work, particularly with the kinds of programs involved at Georgia Tech. In any case, the dean must not become a slave to the rating system. Dean Joseph McCarthy of the University of Washington and Dean Webb felt his review system could work at institutions other than Georgia Tech. Dean Webb agreed that Georgia Tech is a highly specialized institution and that evaluation of non-research oriented programs, in particular, would not be amenable in this kind of process.

Dean Norman Cromwell of the University of Nebraska described the department program rating recently completed for all 45 departments on his campus. He pointed out that two crucial factors had to be established: (1) Credibility - the graduate faculty had to feel a strong sense of participation in the evaluation. (2) Motivation - the faculty must be convinced that quality improvement is the essential goal. Departments which are weak should have their graduate activities consolidated with stronger allied departments or be phased out. In either case, one does not save money - only uses it better.

Dean Arnold Schwartz of Clemson University commented further on the economic aspects of phasing out graduate programs, indicating that teaching time devoted to graduate programs is generally only a small component of departmental teaching efforts. Dean Lyle Jones of the University of North Carolina stated that crisis termination of graduate programs in departments with large undergraduate programs is neither an attractive nor viable way to save costs.

Dean Thomas Rumble of Wayne State University reported that the most severe response to evaluation and suspension of programs came from students in the phased out programs. They felt much more threatened than even the faculties of these departments. Deans Cromwell (Nebraska) and Major (N.Y.U.) concurred in this result in view of their own program terminations. Dean

Mortimer Appleby of the University of Massachusetts, described a regional effort to help place students affected by terminations in nearby schools, continuing fellowships or other commitments from the original institution. A similar exchange program is underway in a "Mid-America" group of schools in Kansas, Nebraska and Missouri (Dean Cromwell, Nebraska).

Dean S. D. S. Sprague of the University of Rochester, suggested two additional dimensions in program evaluation: (1) Outcomes - where do departmental graduates go, what kind of career success do they have? (2) Quality of the Ph.D. dissertations themselves? Dean James Bartoo of Penn State, indicated that his institution has some departments which keep 100% records of the activities of their Ph.D. graduates and felt this should be extended. He also felt that continuing and systematic program review is more valuable and successful than financial crises generated reviews.

The problem of "inside" vs. "outside" reviewers was discussed inconclusively, as was the question of early identification of problem departments.

**Sixth Plenary Session  
President's Report and Chairman's Address**

Friday, December 1, 1972, 11:00 a.m.

J. Boyd Page, *Council of Graduate Schools*  
David R. Deener, *Tulane University*

**President's Report**

**J. Boyd Page**

This, in many ways, has been a successful year. The Council is involved in new enterprises, and services to our members are being expanded. We are in the process of changing our organizational patterns to make the Council more representative and responsive to the needs of its members.

We continue to grow. There are two applications for membership now in the final stages of approval. If these are accepted, our membership will stand at 307. It is worth noting that the number of eligible institutions at the doctorate level not holding membership is very small indeed. Coverage at this level is essentially complete. At the master's level, the situation is a little more open. There are a significant number of institutions which might qualify for membership, but our member institutions award more than four out of every five master's degrees awarded. It is safe to say then that the Council is, in fact, widely representative of graduate education in the United States.

At the outset, I would like to comment briefly on our very effective staff. Dr. Ryan, Assistant to the President, has only been with us since June; but he serves in many ways with increasing effectiveness. Mrs. Corbin handles the myriad of details involved in keeping our financial affairs in order. Mrs. Pittore is a most efficient secretary, but she does many other things and does them not only well but with dispatch. These people carry out the day-to-day operations of the Council in a very effective way. They are the contacts between most of our members and the office, and we hope you will feel free to contact them at any time. They all do an excellent job, and I should like to make public my appreciation to them both individually and collectively. At this time, I will ask them to stand so you may identify them better and join me in an expression of appreciation.

Our institutional membership has not changed very rapidly, but the rate of change of individual representatives continues at a surprisingly high level. Since last year, some 60 new deans out of 303 have been added to our membership list. To those deans who are here attending their first CGS meeting, welcome. We hope you have found it pleasant, stimulating, and helpful.

One of the most exciting and, I believe, effective activities of the Council is our summer workshop. Many of you here were able to attend the workshop held on the campus of Colorado State University at Fort Collins the first week in August. According to all reports, and by my own personal testimony, this was a

highly successful as well as a pleasant workshop. The local hosts, headed by Dean Bragonier, provided everything, including near-perfect weather. The workshops provide an opportunity for "novices" and "experts" to explore in depth, for an entire week, central concerns of graduate study and administration. As an added bonus, the discussions are conducted in a pleasant, relaxed atmosphere. We are looking forward to the workshop this coming summer to be hosted by the deans of the Washington universities on the campus of the University of Washington in Seattle.

We are collectively proud and pleased at implementation of the Gustave O. Art Award at our annual luncheon. The first recipient, Professor Landow, was clearly most deserving. His gracious humility was evident to all. It was especially gratifying to have our distinguished President Emeritus, for whom this award was established, here for the ceremony. We are very close to our goal of having sufficient funds in hand to guarantee continuity of this significant award. Additional contributions to the Fund will be gratefully accepted.

You are aware of our expanded *Newsletter* for which Dr. Ryan is largely responsible. We have had many good comments and wish to continue the series on a regular bi-monthly basis. Suggestions and contributions will be welcome.

The consultation service continues to grow. During the early part of the year, activity was low. It is apparent now, however, that many institutions are initiating evaluation of programs; and they are calling upon the Council in increasing numbers to provide this service. We hope that the new brochure describing the consultation service will be useful both to you and to your colleagues. There is increasing evidence that the consultation service is one of the most essential and important services offered by the Council.

To give you some basis for comparison, in 1971 the consultation service conducted reviews of 91 programs, utilizing 159 consultants. Including the requests now in hand, through November in this year, consultations for 76 programs at 27 institutions have been requested. Fewer institutions have been utilizing this service, reflecting a change from reviews of new programs to reviews of established programs. It is not unusual now to receive requests from a single institution for review of five to fifteen programs.

Many of you may recall that in a simple survey conducted last year, a projection of essentially steady state Ph.D. production was made. This was based on students enrolled and foreseeable trends with respect to financing and admissions. There is reason to believe that this is a reliable and realistic projection. Other widely publicized predictions and projections range all the way up to double the current rates of doctorate production by the end of the decade. The concern of the Council has not been with which "expert" is correct but rather that those who plan support of graduate education, or who are in a position to affect its future, should have accurate and reliable information available so that the wisest choices can be made. Our projections stand, at least as a partial refutation, for the frequently voiced accusation that we are irresponsibly encouraging expansion particularly of doctorates, beyond any likelihood of their being effectively absorbed and utilized by society. Considering the time requirements for the doctorate, it is quite possible that shortages may plague us in certain key fields within the next few years if present indications of zero or declining rates of production continue indefinitely.

You may have heard the brief report of the activities of the Panel on

Alternate Approaches to Graduate Education. This is an activity jointly sponsored by the Council of Graduate Schools and the Graduate Record Examinations Board. It is obvious that new demands are being made and will be made with increasing frequency upon graduate education at all levels. It seems clear also that new elements or modifications of existing practices will be introduced into graduate education as our collective enterprise responds to the emerging needs of society, and expanded goals and career objectives of those seeking entry into our system. The Panel is now at the mid-point in its considerations and in development of realistic and meaningful recommendations. It is hoped that the Panel will be able to provide analyses and recommendations which will be useful to graduate schools as they move into new dimensions of activity. The projected schedule is for the Panel to finish its work some time next summer. We hope to be able to present a full report to the Council at its next annual meeting.

The Council maintains close and, we hope, effective contact with many agencies and organizations whose activities impinge upon graduate education in many and variable ways. The situation with regard to implementation of the Higher Education Amendments of 1972 is very much in a state of flux. It is too early to indicate what the final outcomes might be. Until the administration's budget proposals are submitted, the field is wide open for speculation; but there is little profit to be gained from such activity.

We have an increasing amount of involvement in a number of operative programs with the Graduate Record Examinations Board. Through utilization of the excellent staff and facilities of the Educational Testing Service and working in full cooperation with the GREB, the Council is able to participate in significant surveys and studies which would be impossible if we were dependent entirely upon our own limited resources. The *Graduate Programs and Admissions Manual* has been very well received. It quite obviously fills a strongly felt need. Its acceptability by students, as well as counselors, has been far beyond our expectations. Some of us have had the opportunity to present the Manual to admissions workshops overseas; and there, too, the response has been enthusiastic. As you know, the demanding task of assembling the data, and publishing and distributing the Manual, have all been handled by the excellent staff at ETS in a most effective and efficient manner. The Council has participated in policy and editorial decisions. It is clear that the Manual should be updated and re-issued every year, and this is now the present plan. We do most sincerely urge your continued cooperation in providing basic data for your institution on time and in the form requested. It is recognized that no taxonomy can match the realities of the differing organizational patterns in our graduate schools, but it is clear that the effort involved in adjusting your own data to the overall pattern is fully justified; and we do hope that you will continue to maintain the essentially complete response to our requests for the necessary data. The editorial committee and the staff are already working on the next edition, and we believe that it will not only be much improved but that individual institutions will find it easier to respond to the requests for their own information. The joint CGS-GREB advisory committee was chaired through preparation of the first edition by Dean Springer whose untimely death occurred just before the edition went to press. He has been succeeded in the chairmanship by Dean Burke, of Arizona State University. As I have indicated, the committee

is already hard at work in making preparations and plans for future editions.

There is a new project about which you may not have heard but which may be of great importance to all of graduate education. This is a cooperative project between CGS and GREB, seeking to identify and to evaluate acceptable criteria by which the elements of quality in doctorate education may be judged. Efforts to obtain funding for this significant project will be initiated in the next few weeks. This is, as you will have recognized, a follow-up of an earlier activity of the Council. A task force was requested to make recommendations as to whether the Council should undertake preparation of a third edition of the Cartter and the Roose-Anderson reports, or in some other way undertake the up-dating of the rating of graduate programs. As you know, this remains a controversial subject. It is felt that the development of acceptable, realistic criteria for determining dimensions of quality would be both significant and timely. The many urgent requests for re-evaluation of programs and for accountability underscore the urgency and potential importance of this activity.

There are other significant studies underway which I will not take time to report, but there is one I should like to mention; namely, our continuing enrollment survey. Again, the excellent staff at ETS, headed by Robert Altman, Program Director for GRE, handles the necessary details involved in assembling and summarizing the data. Response rates from our member institutions is exceptionally and most gratifyingly high. Again we solicit your continued strong support. There is no other source of current reliable data on actual enrollments in graduate education. It is increasingly clear that such data are needed and that they have been effective in dispelling some of the myths about current trends and levels of activity in graduate education. Copies of the summarization and analysis of the October 15 enrollment statistics will be available at the end of this session. They are almost literally "hot off the press," having just been completed, with some difficulty, in time for presentation at this session.

You will recall that this year's survey was broken into two parts. The overall enrollment data will now be before you. The more detailed analysis, hopefully by discipline and by categories of students, will be completed, again if all of the required data are submitted promptly, early in 1973.

The full report of the 72-73 enrollment survey will be sent to all member institutions and will be made a part of the permanent record of this meeting.<sup>1</sup>

In closing, let me say with all sincerity that it is a pleasure to serve the Council. We look forward with eagerness to what I am sure will be a busy year and to the next annual meeting which, as you know, will be held in Colonial Williamsburg, Virginia, the second week in December. We will welcome your suggestions as to how the Council can be made more responsive to your needs and interests. May I thank you again for your strong support and your willingness to participate in all of the activities of the Council.

<sup>1</sup>Editors note - the full text of the survey may be found in the Appendix on page 135

## Chairman's Address

David R. Deener

"The winds of change." These words, popularized by a British Prime Minister with a flair for phrase, aptly characterize the decade of the 1960s. To an historian of 2001 A.D., they may even more aptly mark the decade of the '70s.

In the 1960s, these winds caromed about the externalities of our universe, catapulting the oceans via jetliner, eroding and rebuilding the political face of Africa, vaulting to the moon and toward the outback of space. During the decade of the '70s, these winds will likely bore through the innards of our society, remaking, reshaping, buffeting institution after institution, from the mightiest of governments to the tiny wayside inns.

The winds of change have not and will not leave Academia unscathed. Of particular currents of change, we have developed quite a complete catalogue. They touch the full range of the graduate enterprise: admissions, program structure, degree requirements, and financial aid.

The direction of some of these changes seem fairly well set — decreasing financial assistance, more open admissions, relaxed degree requirements, and relaxed residency requirements. We have had visions, some might say hallucinations, as to the gross impact of these changes on the graduate enterprise — the university without walls, the open university, statewide or regional educational systems replacing individual educational institutions. To these must be added the impact of cable TV and the electronic media that is to come.

I do not propose to dwell on this whole catalogue of change, but rather to speak briefly about one area of consequence. What will be the consequences of these changes for the university as an individual institution? Will the "ivory tower" become a tower of Babel? Will the unity of the university be fractured? Will the universalism of the university be replaced by provincialism?

To explore these questions, let me begin with the territorial principle, which seems to be one of the basic organizing principles of human life. Even the biologists have discovered that animals react and group along the territorial principle. I would suggest that the university as we have known it for the past 100 years or more has been built on the territorial principle. It has a campus — a territorial place. It attempts to rule on the territorial principle, by controlling who can come on campus, students by admissions policy, faculty by appointment standards; and by specifying who may stay on campus through the devices of expulsion of students and denial of tenure to faculty.

I think the university of this nature, unity built on the territorial principle, is going to change. Other groups are forming and are challenging this concept of the academic institution. I will mention just three groups.

First, the academic disciplines themselves — that is, the economist, the political scientist, the mathematician, who are tending to think of their disciplinary group as the predominant group to which they belong, and not the university at which they happen to teach.

A second grouping that is emerging is the faculty as such and as a whole, especially in connection with the growing movement toward collective

bargaining. If one looks back at the history of collective bargaining as it developed in the U. S. in the 1930s and afterwards, one will recall that bargaining in one plant was soon transformed into industry-wide bargaining. A faculty member, if he does not occupy a strong place within his own discipline, will, I think, try to find his next most secure home in a general faculty-wide organization, which he hopes will challenge the territorial rule of the university, especially if the university attempts to throw him off campus by denial of tenure.

Finally, there have been rewritten and restated into public law (they have always been there) the ideals of equal opportunity and non-discrimination. Behind these ideals are those groups of human beings who see in these ideals a way of bettering their lives: namely, the disadvantaged, minority groups and the like.

The above just about covers the people who live on the university campus and do not want to be tossed off, and those who have not been accustomed to admission to the campus and want to get on. Twenty, thirty years ago, these groups would have accepted governance of the university on the territorial principle: they would have accepted stated admissions and expulsion policies, appointment and tenure standards. I doubt that these groups will any longer placidly accept such policies and standards. They will instead question whether the university which houses our graduate programs should continue to be the instrument through which graduate education is administered and developed.

Perhaps the territorial principle in Academia will survive, but: Is there any other principle that is viable once the territorial principle has gone? I wish history had an answer, for I surely do not. History has seen many institutions, and politics based upon the territorial principle crumble. Most of these never re-grouped again except on the territorial principle. Some, especially in the field of religion, having lost part (but not all) of their territorial clout have managed to linger on, but with waning strength.

Let me conclude by asking a speculative question. What will be the roles of the individual academic institution and of this Council five years from now if these trends, "the winds of change," continue? The graduate community and this Council are on the verge of moving into accreditation, evaluation, and costing of graduate programs. We are doing this partly out of fear that somebody else will do it for us if we do not; and partly, I suppose, out of the deep wellsprings of our belief in the tenets of scholarship. Will graduate education be able to re-group as a partially autonomous group and regain direction of itself, utilizing the university as an instrument? Or, will the power of direction pass to the political authorities in Washington and the various state capitols or to the marketplace? These latter alternatives must be seriously considered. For, there is a power vacuum in the university. It cannot govern itself as it once did. Someone is going to move into that vacuum.

Will the principle of self-governance through cooperation prove workable in higher education? Or, will discipline be imposed from outside? These are the choices, I believe, that we must make and quickly, for once power vanishes, it tends never to come back. So, if I may return to the historian of 2001 A.D., which will he be? A Gibbon writing on the history of the fall of the academic empire? Or, a Toynbee, looking at the decade of the '70s, and chronicling a successful response to the challenges of "the winds of change" and the

re-grouping of graduate education, perhaps all of higher education, within an autonomous, but therefore "free," territorially based university?

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## Business Meeting

Friday, December 1, 1972, 1:30 p.m.

Presiding: David R. Deener, *Tulane University*

D. Deener: At the request of the Executive Committee, may I ask you to rise for a moment in memory of Dean George Springer.

One of the first orders of business is to announce the person who has been elected as Chairman-elect. We are very pleased to announce that Charles Lester, of Emory University, has been elected Chairman-elect.

Let me change the order of business just a little and take up the proposed constitutional amendment. As you will recall, we are working to make the Council more flexible and responsive. Last year, a constitutional amendment was adopted setting up a new nominating committee. It was sent to you along with my proposal to amend the constitution and expand the size of the Executive Committee. I would like to call for a vote on the approval or disapproval of the amendment.

Are there any comments you would like to make about it? Would you like the substance of it? There shall be an Executive Committee composed of twelve instead of nine voting members composed of the Chairman, the Chairman-elect, and past Chairman and nine instead of six members-at-large. Three members-at-large shall be elected by the Council at each annual meeting for terms of three years each, beginning immediately after the end of the meeting. Is there any discussion? All those in favor of the constitutional amendment, please hold up your hands. Proposed — passed unanimously.

I would now like to ask Dean Mariella and Mary Evelyn Huey, the Chairman of the Nominating Committee, to come to the podium. As you will recall, the Nominating Committee for this meeting was established in the following way: three members from outside the Executive Committee and two members from the Executive Committee were asked to serve and Dr. Huey was kind enough to accept the chairmanship of this committee.

M. Huey: I would like first to recognize the members of the committee who worked so faithfully and promptly and so effectively on this committee — James Hornig, Dartmouth College; Robert Johnson, Florida State University; Philip Rice, University of South Florida; and Robert Wolverson, College of Mount St. Joseph on-the-Ohio.

Mr. Chairman, it is the pleasure of this committee to place into nomination the following names. There are two one-year terms to fill unexpired places on the Executive Committee. We suggest to you the names of Dr. Wendell Bragonier, of Colorado State University, and Dr. S.D.S. Spragg, of the University of Rochester.

For the three-year terms, the regular terms under the old provisions of the constitution, Dr. Sanford Elberg, of the University of California at Berkeley; and Dr. Kathryn McCarthy, of Tufts University. Pursuant to the amendment which has just been adopted, we came prepared to start the one- and two-year terms

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which will begin the rotation pattern and the full three-year term. For the one-year term, Dr. D.C. Spriestersbach, of the University of Iowa; for two years, Dr. Donald Taylor, of Yale University; and for three years, Dr. John K. Major, of New York University.

For the Nominating Committee for 1973, the elected portion includes Dr. Trevor Colbourn, of the University of New Hampshire; Dr. Lincoln Moses, of Stanford University; and Dr. Arliss Roaden, of Ohio State University.

D. Deener: You have heard the report of the Nominating Committee. Are there any nominations to be made from the floor? If not, then would you signify that the slate has been elected without dissent. Proposed — passed unanimously.

The next order of business will be committee reports. I would like to make one report from the Executive Committee and call upon two or three committee member chairmen who are here and indicated they have reports to present.

It was mentioned by Dr. Page that the Executive Committee has had under study for some time the committee structure of the Council and the Committee on Policies, Plans, and Resolutions made several suggestions. Very briefly, we have come to the conclusion that the number of standing committees be kept very, very small. We have identified the following standing committees, three of which are constitutional: First, the Executive Committee; second, the Committee on Membership; and third, the Nominating Committee for members of the Executive Committee.

The standing committees in the non-constitutional sense are these: the Annual Meeting Program Committee, the Publications Committee, and the Gustave O. Arlt Award Advisory Committee. Then, we propose the institution of task forces, in lieu of standing committees, and special purpose or *ad hoc* committees. The Executive Committee has approved the following procedure for establishing task forces: First, any institutional representative may submit a proposal for establishment of a task force or a task panel. The submission is to contain the following: a statement of the mission of the task force, proposed membership, including non-members of CGS where appropriate, a schedule of operations for the task force, including the number of meetings, a tentative budget, possible sources of outside support, and finally, the date that the task force is expected to complete its work and report back to the Council.

The submission then will go before the Executive Committee for its specific review and approval. We felt that this would leave the number and kind and manner of special *ad hoc* committees to the membership themselves. Hopefully, the task force idea will catch on and members of the Council really concerned with the problem will come forward.

In addition, a certain number of committees already standing in *ad hoc* have been identified by the Executive Committee to continue as task forces. I will read you the list of these, and they will be published as rules-of-procedure in the January Newsletter. We urge people to write in to the home office if they would care to serve on any of these task forces.

The following are the task forces and will continue as task forces: first, on the Preparation of College Teachers; second, on the Organization and Structure of Graduate Schools; third, on Internal Program Evaluation; fourth, on Entry into Graduate Study; fifth, on the Economic Status of Graduate Students; sixth, Disadvantaged Students; seventh, Joint Task Force on the Dimensions of Quality of Graduate Programs; and finally, the GRADCOST Committee.

I have just been handed the names of two informally suggested task forces.

and I will read them to you. The problems of urban universities and the problems of graduate study in medical schools. I hope this will give you some idea of what we hope this organization will accomplish.

There will be an early February meeting of the new Executive Committee. If you have any ideas for the task forces, please get them into the Washington office so that we can begin work on the composition of these task forces at the February meeting.

One other report, the Membership Committee has recommended and the Executive Committee has received into membership the following schools: The Medical College of Pennsylvania, Arkansas State University, and the University of Illinois Medical Center in Chicago. This brings the total number of members of the Council to 306.

Now, I would like to ask the following if they have any reports they would care to make at this time. Dean Pelczar, would you like to report on any activities of GREB?

### Report From Graduate Record Examinations Board

Michael J. Pelczar

As in the past, the activities of the GRE Board during 1972 were concentrated in three major areas of program activity: the improvement and administration of the GRE testing program; the review and carrying out of an on-going program of research, and the development and operation of service projects. The present CGS appointees to the GRE Board are:

David Deener	Dean, Graduate School, Tulane University
Robert H. McFarland	Dean, Graduate School, University of Missouri
Michael J. Pelczar, Jr.	Vice President for Graduate Studies and Research, Graduate School, University of Maryland
Allen F. Strehler	Dean, Graduate Studies, Carnegie-Mellon University

Recognizing that several of these activities of the Board have already been highlighted at this meeting, such as the Panel on Alternate Approaches to Graduate Education and the GRE Board Research Seminar, or were in Boyd Page's report, let me briefly review some of the other major activities which have occupied the GRE Board over the past year.

The GRE Program test development activity in 1971-72 was devoted to the completion of the restructuring of the Advanced Tests and to resolving the situation with respect to the restructuring of the Aptitude Test. Committees of Examiners for the Advanced Tests finalized their decisions regarding subscores for their tests and work on new forms of the tests moved ahead. Nine of the 19 Advanced Tests will report subscores beginning with the October, 1972 administration, just completed; these are Biology, Engineering, French, Geography, Geology, History, Music, Psychology, and Spanish.

As a result of several studies, it became apparent that the plans for restructuring the GRE Aptitude Test as planned could not be carried out. The item type on which the shortening of the Quantitative Test was dependent, the

Quantitative Comparison item was found to be coachable to an unacceptable degree. The test chosen by most of the Committees as an addition to the offerings, if the Quantitative Test could be shortened, the Logical and Critical Reasoning Test, proved to be highly correlated with the GRE Verbal Test and would not have provided additional information. As a result of these developments, the GRE Board decided to continue the Aptitude Test as presently structured for the indefinite future and to ask ETS to continue efforts to determine ways in which the test could be improved.

In the furtherance of its research program, the GRE Board Research Committee met four times in 1971-72 and considered and acted on a number of precise proposals, and drafts of research reports. A number of these research projects were discussed in some depth at a GRE Board sponsored seminar this past Wednesday morning which I hope many of you had the opportunity to attend. A summary of current and completed research sponsored and supported by the GRE Board was prepared for that seminar, and copies are available from the secretary to the Board in Princeton, N.J., for those of you who did not have the opportunity to pick one up earlier this week.

The major development in the research area in 1971-72 was a decision by the Research Committee and the Board to commit a portion of its resources to basic research. This decision was effected by the funding of two large projects to run over several years in the areas of Cognitive Styles and Creativity. Plans were also made to hold a Conference in this area, which I will touch upon a little later in this report.

The major service activities of the Board, coordinated and supervised by the Board's Services Committee, may be considered in two broad categories, those accomplished independently by the GRE Board and those accomplished cooperatively with CGS. Boyd has commented on several of the latter - the *Graduate Programs and Admissions Manual*, the annual Survey of Graduate Enrollment, and the Panel on Alternate Approaches to Graduate Education - so that my remarks in regard to these projects can be brief. Suffice it to say more information is available about each of these projects, and I trust many of you had the opportunity to join in the discussions yesterday with respect to the Panel. And, as you are already aware, the results of the initial section of this year's enrollment survey are available. I hope that each of you will continue your marvelous participation - which has led to a consistent 90% response - as we move to the second section of the survey during early 1973.

Three major service activities were carried out by the GRE Board during the past year which were not reported on in Boyd's report, and one additional activity - a series of regional conferences in conjunction with the spring meetings of the regional associations - has been approved and warrants some time today. Let me touch on each of these activities in turn.

At its March meeting of 1972 the GRE Board approved the introduction of a Minority Graduate Student Locator Service in the fall of 1972. The Locator Service is designed to help identify prospective graduate students who are members of racial and ethnic minorities in the United States to graduate schools for possible admission to graduate study. There is no cost to the student and, during this initial year which is considered experimental, there is no charge made to the graduate schools. Prospective graduate students register with the service and as of mid-November, over 5,000 students had submitted information to be transmitted to graduate institutions. The graduate schools are then allowed to request student names based on any combination of five factors - intended

graduate major, race, residence, region of preference for study, and degree objective -- and will receive student names from the service, as well as all information provided by the student in his initial form. It now appears as if well over 100 institutions will avail themselves of this service, which does not involve GRE scores in any way and does not require that a student take the GRE in order to participate. Contacts between graduate schools and students are directly between the parties involved, with ETS providing the operating mechanisms to facilitate and encourage these contacts.

At its September meeting a year ago, the Board approved the development of a Self-Counseling Guide to Graduate Study for Minority Students, a publication which would list for a number of graduate fields the nature of the field, the prerequisite study, admissions standards and career opportunities for minority students. Work is proceeding on the development of this publication and it is hoped that the publication will be ready for distribution by the spring of 1973.

The third special project, which I mentioned earlier, was the sponsorship by the GRE Board of a Conference on Cognitive Styles and Creativity in Montreal earlier this month. The Conference, which brought together approximately 85 administrators, faculty, and researchers from throughout the country, focussed on the state of the art with regard to research and development in the area of cognitive styles and creativity as they relate to higher education. It is hoped that the conference will also stimulate further inquiry and research in this area, and communicate to the graduate community the importance, dimensions, and promise of work relating to cognitive styles and creativity. A major publication is expected in late spring.

I would like to touch on one additional service activity which has not yet occurred, but for which planning is under way and which will, I hope, involve many of you directly. With the cooperation of the Western Association of Graduate Schools, the Conference of Southern Graduate Schools, and the New England Conference on Graduate Education, the Graduate Record Examinations Board will sponsor a series of one day conferences on graduate admissions and financial aid immediately preceding each of these regional meetings this spring. Some of you will recall that the Board sponsored a series of regional Conferences in this area two years ago and a survey following them indicated that such an effort should be repeated sometime in the future. With the assistance of an advisory committee, an agenda for these conferences has been developed which includes consideration in depth of several current concerns in graduate admissions and of related GRE Board activities. Included in the sessions will be presentations and discussion of the minority recruitment, graduate school financial aid, and the basic testing program of the GRE Board. It is our hope that a productive interaction of ETS staff familiar with these problems, and outside experts and members of the graduate community can lead to increased effectiveness in our programs.

Finally, during the past year, the GRE Board has been cooperating with professional schools in the development of a Graduate and Professional School Financial Aid Service (GAPSFAS) to provide a common means to assess financial need for the awarding of financial aid for those post-baccalaureate institutions that wish to use it. The effort grows out of interest of the Conference of Chairmen of Graduate and Professional Schools Testing Programs and involves, in addition to representatives of the GRE Board, the Law School Admissions Council, the American Association of Medical Colleges, the Graduate

Business Admissions Council, and the College Scholarship Service. The involvement of each of these groups is to provide representation to a Council charged with the development of the new service.

## Report of The Committee On Disadvantaged Students

W. L. Lively

A major charge of this Committee is to develop guidelines for desirable practices in the recruitment, financial aid, and special counseling of minority students. After considerable preliminary discussions, agreement to conduct a survey to obtain appropriate data for this purpose was agreed upon. The GRE Board approved co-sponsorship with CGS and the Joint Committee approved the final version of the questionnaire.

It is the intention of the Committee to issue a separate report, through CGS, containing guidelines and recommendations based on the data in the report. There are a few preliminary observations that I would like to present at this time. About 80 percent of the questionnaires were returned with 196 out of 230 responses in usable form. This refers to institutions who had an identifiable program or policy directed toward minority disadvantaged students. Most institutions reported a desire to increase the enrollment of these students, but few have set goals whose attainment might serve as measure of success. The most common method of recruiting is by mailings. The second most common is by visitation. A number of institutions do modify existing procedures in their efforts to enroll minority disadvantaged students. These include waiving application fees, relaxing minimum GRE scores or eliminating the requirement of standardized tests. Several institutions have adopted a different procedure in the admission process of these students. Almost all schools reported a combined consideration of need and merit in making financial awards, although there is variation and a relative emphasis of one over the other.

Schools generally have mixed feelings about the success or progress achieved by their activities, however there is no indication that their efforts will be increased for a time. The representativeness of the returns is very good both by characteristic of school and nature of program. There is some evidence that many schools are engaged in much more elaborate activity for minority disadvantaged students at the undergraduate level than at the graduate. On the other hand, a sizable minority of the institutions report that funds are available annually for minority or disadvantaged student support, ranging from a few thousand to several hundred thousand dollars.

I would like to conclude this report by paraphrasing some comments that one dean made at the end of his questionnaire concerning his institution's efforts. The major strength of the program is the commitment of the academic vice-president and the graduate dean to continue intensified recruitment of minority students by their declared willingness to reward or punish departments in relation to departmental efforts. A major weakness is the reluctance of faculty to admit students with less than the highest academic ability; in other words, a clash between academic standards and a consciousness of the complexity of the problem of minority students. The crux of the matter is the willingness of those responsible for affirmative action to carry through with whatever power they possess. The personal consequences are not pleasant. It is impossible to satisfy

either side.

Nevertheless, there are no third or fourth alternatives. Either the university will increase minority enrollment in their way or it will be done to them in a way scarcely to their liking. We hope to have a more complete report at a later date.

**D. Deener:** Thank you Dean Lively. Are there any other members of committees who would like to make a report at this time? If not, let me just make one brief statement on the costs of graduate study. Dr. Page already mentioned it this morning.

It seems as though we can look forward to at least two sets of institutional figures in early February and the hope of getting at least four additional institutions to provide data. I am hoping to complete the second phase of getting some actual figures by the end of the spring semester.

Now, I would like to ask Dr. Page to convey some information items which he has.

### New Business

**J.B. Page:** You may already know this, but just as a reminder, the 1973 meeting is scheduled for colonial Williamsburg. I am sure you will be enthusiastic about the opportunity of going there. It is a lovely place, and the facilities are superb. The date, however, will be a week later than usual as we were not able to get this corresponding week.

The 1974 meeting is already booked at Del Webb's Townhouse in Phoenix. We are negotiating for the 1975 meeting which will be held in Atlanta. I have been asked to announce and remind the membership of the Council that the Southern Conference, which I believe is the oldest association of graduate deans in the United States and was disbanded when the Council was formed, has now reconstituted. They had their first meeting last year. Their second meeting will be on February 27 and 28. It does, of course, center in the South, and institutions having graduate study or concerned with graduate study are invited to apply for membership. Dean Toland, of Baylor, is President.

I wanted to comment just briefly on the Proceedings. The Executive Committee, partly in terms of economy and partly in terms of utility, suggested that we delete the detailed transcription of all we have said after the formal papers in the Proceedings. So, the Proceedings for this meeting will include papers, the reports of the recorders from the work sessions this morning, and possibly some brief digest of the flavor of comments that might have been made after the sundry presentations. Because of the reduction and the great opportunity for saving by not having to go through a transcription, we hope to have the Proceedings out very much earlier indeed. They will be shorter, but we think they will be more significant to you and will include material which will be of some lasting value.

**D. Deener:** This concludes the business. Are there any new matters that anyone would like to bring to the floor?

Before I commit my formal act of expiration, I would like to thank all of the committees, especially the new Nominating Committee and the Advisory Committee on the Gustave Arlt Award.

Finally, I want to thank every member of the Executive Committee. They really worked this year, and I just wanted to say, thanks.

Now, I shall turn the gavel and podium over to Dean Cobb.

J. Cobb: I want to express my thanks to Boyd Page for the work he has done this year. I think we ought to give Dave Deener a round of applause for the work he has put in this year, and he has done a hard year's work.

I would also like to express appreciation to Elizabeth Foster, Phil Rice, and Bob Wolverton for the duty which they put in on the Executive Committee.

These three people are leaving the Committee this year, and you saw I am sure, manning the coffee urn and some of the other things out on the table in the passage way, two delightful ladies. I think we ought to express our appreciation to Mrs. David Deener and Mrs. Bollier who manned that table.

Now, those are the four things I wanted to get in before the official act. We are adjourned.

# Report on the Council of Graduate Schools—Graduate Record Examinations Board 1972-73 Survey of Graduate Enrollment

— Part I —

Robert A. Altman  
Program Director  
GRE Program

## Introduction

As a result of the difficulty of obtaining accurate information on graduate enrollments, and particularly trends in enrollments, the GRE Board and the Council of Graduate Schools jointly undertook last year the first in an annual series of surveys of enrollment of the membership of the Council of Graduate Schools in the United States. The Council membership consists of some 303 graduate institutions who grant either the master's or doctorate as the highest degree. The members of the Council grant 98% of the earned doctorates and 85% of the master's degrees awarded.

Due to the early timing of last year's questionnaire, some institutions were unable to provide responses to all questions; accordingly, this year's survey was divided into two sections, the first of which was distributed in the early fall of 1972 with a request that results be returned no later than mid-November. Data were requested on enrollment as of mid-October for 1971 and 1972; even given the postponement of several questions until the second questionnaire mailing in January of 1973, a number of institutions were not able to report data on all questions asked or for both years.

It is anticipated that the results of the second questionnaire mailing will be available early in the spring of 1973, and that the survey will be repeated annually with whatever modification in procedure and questionnaire seems appropriate.

## Sample Description

Survey questionnaires were sent to 303 graduate schools who are members of CGS. A total of 277 questionnaires were returned or an amazing 91% response rate, an indication of the continued high interest among graduate schools in the topic of the survey. Since the primary purpose of the questionnaire was to develop comparative data between 1971 and 1972, responses to questions were included in the analysis only when data were supplied for both years. Thus, the effective response rate per question will vary from a high of 91% for the overall sample to a low of 77% for some more detailed questions. While this is probably to be expected, the variability does reduce somewhat the value of some questions and makes comparisons across some questions of restricted value.

Extreme care should also be taken in attempting to compare results of this year's survey with published results of last year's survey insofar as 1971 data reported in the current survey differs significantly from 1971 data reported last year. There are several reasons for this difference, despite the almost identical number (276 in 1971 compared to 277 in 1972) of graduate institutions responding.

First, the definition of "graduate school" was changed between the two years. In 1971, institutions were asked to define graduate school as "those parts of the institution under the administrative control of the graduate dean." In 1972, institutions were asked to include "all students considered as registered in the graduate school" including "Education, Engineering, Social Work, Medical and Business Programs leading to MA/MS or Ph.D., Ed. D. or other doctorates." Second, many institutions noted that the data for 1971, which they were able to provide for this year's survey was different from, and better than, the 1971 data which they provided last year.

Finally, although the actual number of institutions responding remained almost constant, the specific institutions responding in 1972 were not always identical to those responding in 1971. It is hoped that a longitudinal study, by institution, can be accomplished at a later date which will provide comparable data across both institutions and survey years.

Despite these limitations, the overall obtained sample (i.e., those submitting usable questionnaires on time) appears to be very representative of the total CGS population. Below are comparisons of number and percentages of several ways of describing the available population and sample. It should be noted that "Master's Highest Degree" refers, throughout this report, only to those institutions for which the master's degree is, in fact, the highest degree awarded. Data for these institutions do not reflect master's degrees offered by institutions which also offer the doctorate.

#### Comparison of Usable Sample and Base Population

	CGS Institutions		Usable Survey Sample		% (Sample of each population subgroup)
	Number	Percent	Number	Percent	
Public	191	63%	174	63%	91%
Private	112	37%	103	37%	92%
Public-Master's Highest Degree	48	16%	37	14%	77%
Private-Master's Highest Degree	31	10%	28	10%	90%
Public-Ph.D. Highest Degree	143	47%	137	49%	96%
Private-Ph.D. Highest Degree	81	27%	75	27%	93%
Master's Highest Degree	79	26%	65	24%	82%
Ph.D. Highest Degree	224	74%	212	76%	95%

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It is readily apparent that the sample is highly representative of the total population, despite the slight underrepresentation of public-master's highest degree awarding institutions. Since the sample becomes less complete as the complexity of the questions or the difficulty of obtaining the data increases, number and percentages of total group and subgroup are given for each question in the data presentation.

### Results

The results of the survey are displayed in Tables 1 through 7. The tables present the number of respondents with usable data to each question (i.e., data for both years and for all parts of the question), the percentage that number represents of the total group or of the subgroup, e.g., Public, the total number of students reported each year and the percentage change from 1971 to 1972. All data are presented by public, private and total. In addition, Tables 1-3 also present data for institutions classified by means of the Educational Directory, Part 3, in terms of the highest degree awarded. These categories are: Public-Master's Highest; Private-Master's Highest; Public-Doctorate Highest; and Private-Doctorate Highest. This additional breakdown was not applied to later questions because it was not felt to be particularly important or because the differences were too small to affect the overall results.

Finally, data were summarized by size of the responding graduate school, although these summaries do not appear in Tables 1-7. Size categories used included 0-100 students, 101-500 students, 501-1,000 students, 1,001-5,000 students, and over 5,000 students, and were based upon the institution's response to Question 1 (Total Graduate School Enrollment). Results including these summaries are noted in the following discussion.

### Discussion

A review of Table 1 shows a slight overall increase in total graduate school enrollment for the institutions reporting; 1.9% overall. However, when more than the total figures are reviewed, it becomes apparent that the increase is less marked for Ph.D. institutions than for master's institutions, and less marked for private institutions than for public institutions. For all Ph.D. institutions there is a 1.2% increase, an increase of 0.4% for private institutions and an increase of 1.5% for public institutions. For all master's institutions there is an increase of 6.0%, an increase of 2.6% for private institutions and an increase of 6.8% for public institutions.

Rates of increase differ not only for categories of institutions, but for institutions of differing size within categories. All sizes of private Ph.D. institutions (overall increase, 0.4%) showed increases in enrollment except those enrolling 501-1,000 students, where 11 institutions showed a decrease of 1.4%. Increases in enrollment in public Ph.D. institutions (overall increase, 1.5%) were markedly different by size, with 24 institutions enrolling fewer than 1,000 students showing an 8.7% decrease while 112 institutions enrolling more than 1,000 students showed a 1.7% increase. Public master's institutions (overall increase, 6.8%) showed consistent increases except for institutions enrolling more than 5,000 students, where a slight (2.2%) decrease was found. Private master's institutions (overall increase, 2.6%) showed 13 institutions enrolling fewer than 500 students with a 2.6% decrease and 15 institutions enrolling

greater than 500 students with a 3.5% increase.

First-time enrollments show a similar pattern, with the overall increase (3.5%) being less marked for Ph.D. institutions than for master's institutions, and less marked for private institutions than for public institutions. For all Ph.D. institutions there is a 2.7% increase, an increase of 1.7% for private institutions and an increase of 3.1% for public institutions. Similarly, for all master's institutions there is an 8.2% increase, an increase of 7.9% for private institutions and an increase of 8.2% for public institutions.

Size differences appear to be reflected less in first-time enrollments than in total graduate school enrollment. All master's institutions, both public and private, showed first-time enrollment increases, regardless of size. Private Ph.D. institutions showed first-time enrollment increases for those institutions with total enrollment between 101 and 500 and for those between 1,001 and 5,000; institutions with total enrollment between 501 and 1,000 and over 5,000 showed slight decreases in first-time enrollment. Only in public Ph.D. institutions was a marked pattern apparent, with 7 institutions with total enrollment of less than 500 students showing a 25% decrease in first-time enrollment and 112 institutions with total enrollment of more than 500 students showing a 3.2% increase in first-time enrollment.

Number of assistantships held by graduate students increased in 1972, with increases being greater for Ph.D. institutions, as might be expected, and for private institutions, as might not. For all Ph.D. institutions, assistantships increased 2.5%, an increase of 4.9% for private institutions and 2.1% for public institutions. For all master's institutions, where the numbers of assistantships were much smaller, the overall increase was 0.6%, an increase of 3.0% for private institutions and 0.1% for public institutions.

Size differences are also apparent in number of assistantships. Both public and private Ph.D. institutions showed a consistent pattern, with institutions enrolling fewer than 500 total students showing a decrease in assistantships, while those enrolling more than 500 students showed an increase in assistantships. Public master's institutions showed a similar pattern, with institutions enrolling fewer than 1,000 total students showing a decrease in assistantships and institutions enrolling more than 1,000 students showing an increase in assistantships. The pattern for private master's institutions was mixed; the number of assistantships was up at institutions enrolling 0-100 students and over 500 students, and down at institutions enrolling between 100 and 500 students.

Fellowships showed a continuing decline in 1972, particularly at public institutions. There was an overall decrease of 8.4% among the institutions reporting. In the public institutions, the decrease was 12.2%, while in the private institutions it was 2.0%. Fellowships decreased in all size categories of public institutions and in all size categories of private institutions except those enrolling more than 5,000 students. The number of fellowships involved at master's institutions was too small to warrant separate treatment.

The number of degrees awarded continued to increase but at a somewhat slower pace for doctorates than for master's. Master's degrees were up 8.4% during 1972 and Ph.D. degrees up 5.9% for the same period. The public Ph.D. increase was somewhat higher (7.1%) than the private (3.1%). The percentage of increase for master's degrees was also greater for the public institutions (9.1%) than for private institutions (6.1%). Master's awarded increased in all size categories of both public and private institutions except private master's degree

highest where 5 institutions enrolling under 100 students showed an 8.7% decrease. Award of Ph.D.'s increased in all size categories for both public and private Ph.D. institutions.

Table 7 indicates a breakdown of full- and part-time students for those institutions reporting. The table indicates that the percentage of full-time and part-time to total students is almost identical for 1971 and 1972 for institutions reporting.

### Conclusion

The first section of the second CGS-GRE Board Survey of Graduate School Enrollment met with great success in terms of number of responses and, to a slightly lesser degree, in terms of response rate to individual questions. The representativeness of the sample and its overall completeness do lend validity to the results of the survey, which will not surprise many actively engaged in graduate education but may not support the assumptions of much of the general public.

One exception may arise from the attempt this year to review responses by size of responding institutions. Although this additional analysis tended to uncover patterns which might have been expected, it did reveal, for example, that enrollment growth appears to be markedly tied to institutional size with smaller institutions showing enrollment decreases in the face of continuing increases at larger institutions. And, while total enrollment, first-time enrollment, and degrees awarded continue to increase, financial support for graduate education, particularly as reflected in the number of available fellowships, continued to decline.

It seems important that information of this type continue to be collected, and that current efforts to make it more complete and detailed by dividing this survey into two parts have had a positive effect. If the second section of the survey receives the same response as has its predecessor, the survey should serve as a valuable addition to the total pool of information about graduate education.

TABLE 1

Total Graduate School\* Enrollment by Type of Institution

	<u>Number</u>	<u>%**</u>	<u>1971</u>	<u>1972</u>	<u>% Change</u>
Public - Master's Highest	37	77%	75,779	80,921	6.8% increase
Private - Master's Highest	28	90%	16,385	16,812	2.6% increase
Public - Ph.D. Highest	136	95%	397,413	403,306	1.5% increase
Private - Ph.D. Highest	74	91%	135,202	135,726	0.4% increase
Master's Highest	65	82%	92,164	97,733	6.0% increase
Ph.D. Highest	210	94%	532,615	539,032	1.2% increase
Public - Master's and Ph.D.	173	91%	473,192	484,227	2.3% increase
Private - Master's and Ph.D.	102	91%	151,587	152,538	0.6% increase
Total*	275	94%	624,779	636,765	1.9% increase

\* For purposes of this survey, institutions were asked to include all students considered as registered in the graduate school, including Education, Engineering, Social Work, Medical and Business Programs leading to MA/MS or Ph.D., Ed. D. or other doctorates.

\*\* Percentage figures are percent of the number responding of the number available in the total group. For example, 37 Public Master's Highest Degree institutions responded out of a possible 48 such institutions in the CGS membership for a 77% response rate for that group of institutions.

TABLE 2

First Time Graduate Enrollment by Type of Institution

	<u>Number</u>	<u>%</u>	<u>1971</u>	<u>1972</u>	<u>% Change</u>
Public -- Master's Highest	27	56%	14,669	15,876	8.2% increase
Private -- Master's Highest	24	77%	3,756	4,054	7.9% increase
Public -- Ph.D. Highest	119	83%	89,372	92,137	3.1% increase
Private -- Ph.D. Highest	62	76%	30,286	30,789	1.7% increase
Master's Highest	51	65%	18,425	19,930	8.2% increase
Ph.D. Highest	181	81%	119,658	122,946	2.7% increase
Public -- Master's and Ph.D.	146	76%	104,041	108,013	3.8% increase
Private -- Master's and Ph.D.	86	77%	34,042	34,843	2.4% increase
Total	232	77%	138,083	142,856	3.5% increase

TABLE 3

Number of Graduate Assistants (Service Required)

	<u>Number</u>	<u>%</u>	<u>1971</u>	<u>1972</u>	<u>% Change</u>
Public - Master's Highest	35	73%	3,210	3,214	0.1% increase
Private - Master's Highest	26	84%	558	575	3.0% increase
Public - Ph.D. Highest	126	88%	85,900	87,681	2.1% increase
Private - Ph.D. Highest	65	80%	16,744	17,557	4.9% increase
Master's Highest	61	77%	3,768	3,789	0.6% increase
Ph.D. Highest	191	85%	102,644	105,238	2.5% increase
Public - Master's and Ph.D.	161	84%	89,110	90,895	2.0% increase
Private - Master's and Ph.D.	91	81%	17,302	18,132	4.8% increase
Total	252	83%	106,412	109,027	2.5% increase

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TABLE 4

Number of Graduate Fellows (Non-service Required)

	<u>Number</u>	<u>%</u>	<u>1971</u>	<u>1972</u>	<u>% Change</u>
Public -- Master's and Ph.D.	146	76%	32,460	28,504	12.2% decrease
Private -- Master's and Ph.D.	86	77%	19,155	18,765	2.0% decrease
Total	232	77%	51,615	47,270	8.4% decrease

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TABLE 5

Number of Master's Degrees

	<u>Number</u>	<u>%</u>	<u>1970-71</u>	<u>1971-72</u>	<u>% Change</u>
Public	171	90%	110,910	120,987	9.1% increase
Private	101	90%	36,124	38,337	6.1% increase
Total	272	90%	147,034	159,324	8.4% increase

TABLE 6

Number of Ph.D. Degrees

	<u>Number</u>	<u>%</u>	<u>1970-71</u>	<u>1971-72</u>	<u>% Change</u>
Public	136	95%	19,945	21,366	7.1% increase
Private	74	91%	8,754	9,028	3.1% increase
Total	210	94%	28,699	30,394	5.9% increase

TABLE 7

Full-time - Part-time\* Total Enrollment

	<u>1971</u>						<u>1972</u>			
	<u>Number</u>	<u>%</u>	<u>Full-time Number</u>	<u>%</u>	<u>Part-time Number</u>	<u>%</u>	<u>Full-time Number</u>	<u>%</u>	<u>Part-time Number</u>	<u>%</u>
Public	155	81%	198,240	48%	212,013	52%	199,900	48%	218,708	52%
Private	95	85%	61,598	50%	60,708	50%	60,400	49%	63,943	51%
Total	250	83%	259,838	49%	272,721	51%	260,300	48%	282,651	52%

\* Institutions were directed to apply their own institutional definitions to "part-time" and "full-time."

**Report on the Council of Graduate Schools—Graduate Record  
Examinations Board 1972-73 Survey of Graduate Enrollment**

— Part II —

**Robert A. Altman  
Program Director  
GRE Program**

**Introduction**

As a result of the difficulty of obtaining accurate information on graduate enrollments, and particularly trends in enrollments, the GRE Board and the Council of Graduate Schools jointly undertook last year the first in an annual series of surveys of enrollment of the membership of the Council of Graduate Schools in the United States. The Council membership consists of some 303 graduate institutions who grant either the master's or doctorate as the highest degree. The members of the Council grant 98% of the earned doctorates and 85% of the master's degrees awarded.

Due to the early timing of last year's questionnaire, some institutions were unable to provide responses to all questions; accordingly, this year's survey was divided into two sections, the first of which was distributed in the early fall of 1972 and reported at the CGS meeting in November. Questionnaires for Part II were distributed early in 1973, with data requested on enrollment as of mid-October for 1971 and 1972. Even given the postponement of several questions until the second questionnaire, a number of institutions were not able to report data on all questions asked or for both years.

**Sample Description**

Survey questionnaires were sent to 303 graduate schools who are members of CGS. A total of 272 questionnaires were returned or an amazing 90% response rate, an indication of the continued high interest among graduate schools in the topic of the survey. Since the primary purpose of the questionnaire was to develop comparative data between 1971 and 1972, responses to questions were included in the analysis only when data were supplied for both years and when the effective response rate (percent of the number responding of the number available in the total group) was greater than 50%. Thus, the effective response rate per question varies from a high of 93% for some questions involving Private-Master's Highest institutions to the lower limit of 50%. This variability, while probably to be expected, reduces not only the number of questions for which results can be reported, but the value of some questions and the ability to compare results across questions as well.

Extreme care should also be taken in attempting to compare results of Part II of this year's survey with the earlier Part I, despite the fact that the definitions of graduate school have remained constant and that the number of institutions (272 for Part II compared with 276 for Part I) is almost identical. Although many of the same institutions responded to both Part I and Part II, the specific institutions responding to Part II are not always identical to those which

responded to Part I; in addition, different institutions responded to different questions within both Parts I and II. It is hoped that a longitudinal study, by institution, can be accomplished at a later date which will provide comparable data across both institutions and survey years.

Despite these limitations, the overall obtained sample (i.e., those submitting usable questionnaires on time) appears to be very representative of the total CGS population. Below are comparisons of number and percentages of several ways of describing the available population and sample. It should be noted that "Master's Highest Degree" refers, throughout this report, only to those institutions for which the master's degree is, in fact, the highest degree awarded. Data for these institutions do not reflect master's degrees offered by institutions which also offer the doctorate.

#### Comparison of Usable Sample and Base Population

	<u>CGS Institutions</u>		<u>Usable Survey Sample</u>		<u>%(sample of each population subgroup)</u>
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	
Public	191	63%	170	63%	89%
Private	112	37%	102	37%	91%
Public-Master's Highest Degree	48	16%	39	14%	81%
Private-Master's Highest Degree	31	10%	29	11%	94%
Public-Ph.D. Highest Degree	143	47%	131	48%	92%
Private-Ph.D. Highest Degree	81	27%	73	27%	90%
Master's Highest Degree	79	26%	68	25%	86%
Ph.D. Highest Degree	224	74%	204	75%	91%

#### Results

Some of the results of the survey are displayed in Tables 1 through 7; other results, which lend themselves less well to tabular presentation, are presented in the discussion section below. Two types of tables are presented.

Tables 1, 2, 5, and 6 report percent change between 1971 and 1972 by discipline area. Each of these tables shows both the percent change between the years in question and the effective response rate (in parenthesis) for that type of institution and discipline area. Discipline areas, as defined in the original questionnaire, include Education (all fields of education), Humanities (English and journalism, fine and applied arts, foreign languages and literature, library science, philosophy, and religion), Social Sciences (anthropology, business, economics, geography, history, political science, and sociology), Physical Sciences (chemistry, computer sciences, geology, mathematics, physics, and statistics), Engineering (all fields of engineering), and Biological Sciences (agriculture, biology, health professions, home economics, psychology, and zoology).

Tables 3, 4, and 7 present the number of respondents with usable data to the question (i.e., data for both years and for all parts of the question), the percentage that number represents of the total group or of the subgroup, the total number of students reported each year and the percentage change from 1971 to 1972.

Finally, all data were summarized by size of the responding graduate school, although these summaries do not appear in the tables presented. Size categories used included 0-100 students, 101-500 students, 501-1,000 students, 1,001-5,000 students and over 5,000 students, and were based upon the institution's response to Question 4 (Total Graduate School Enrollment by Sex). Results including these summaries are noted in the following discussion where appropriate.

#### Discussion

A review of Table 1 shows an overall increase in total graduate school enrollment for the discipline areas of education (5.7%), humanities (2.8%), social sciences (3.2%), and biological sciences (4.5%), and an overall decrease in total graduate school enrollment for the discipline areas of the physical sciences (6.5%) and engineering (2.0%). Despite the variability of response rates which limits the extent to which results can be compared across cells, different institutional types have obviously experienced different rates of growth or decline by discipline area. For education, public Ph.D. highest institutions show an increase of 7.1%, while private Ph.D. highest institutions show an increase of only 1.8%. For humanities, however, private Ph.D. highest institutions show an increase of 7.6% while public Ph.D. highest institutions show an increase of 0.1% and private master's highest institutions show a decrease of 2.1%. Also in the humanities, 65 institutions with total enrollment of fewer than 1,000 students showed a decrease in enrollment of 3.3%, while 169 institutions with total enrollment greater than 1,000 students showed an increase of 3.3%. For the physical sciences, a decrease is shown for private master's highest institutions (8.3%), public Ph.D. highest institutions (7.2%), and private Ph.D. highest institutions (6.0%), while public master's highest institutions show the only increase (0.1%), however slight.

First-time graduate enrollment, displayed in Table 2, shows a similar pattern with increased enrollment in the discipline areas of education (8.8%), humanities (5.7%), social sciences (4.7%), and biological sciences (7.1%), and a decreased first-time enrollment in the physical sciences (8.6%). Different rates of growth or decline are once again apparent by institutional type: the overall

increase in first-time enrollment in the biological sciences (7.1%) is a result of the increases (8.3%) at 139 Ph.D. highest institutions which outweigh the decreases (3.3%) at 50 master's highest institutions. In the social sciences, private master's highest institutions showed a 22.6% increase, while private Ph.D. highest institutions showed an increase of only 0.2%; in the physical sciences, only private master's highest institutions showed an increase (16.6%), while public master's highest institutions (3.6%), public Ph.D. highest institutions (11.7%), and private Ph.D. highest institutions (1.6%) showed a decrease. And in education, despite the overall increase in first-time enrollment of 8.8%, the 21 institutions with total graduate enrollment greater than 5,000 showed a decrease in first-time enrollment of 10.2%.

The proportion of first-time enrollment classified as part-time, not shown in the tables, increased slightly, with a concomitant decrease in the proportion of first-time enrollment classified as full-time (institutions were asked to apply their own definitions of full- and part-time). While 414 public institutions reported 58% of their first-time enrollment as full-time in 1971 and 53% of their first-time enrollment as full-time in 1972, 79 private institutions reported a shift from 58% full-time in 1971 to 53% effective response rate of 64% and reported a decrease in full-time first-time enrollment from 55% in 1971 to 53% in 1972.

Table 3 shows the number and proportion of men and women enrolled for full-time graduate study, while Table 4 shows the number and proportions of men and women enrolled as first-time graduate students. Although no significant difference was seen in comparing the proportion of men enrolled at public or private institutions, significant differences appear when the distinction is drawn between master's highest and Ph.D. highest institutions. A review of Table 3 shows that while the proportion of women enrolled in full-time graduate study increased between 1971 and 1972 for both master's highest institutions (from 46% to 47%) and Ph.D. highest institutions (from 33% to 35%), the proportion of women enrolled in Ph.D. highest institutions still remains significantly below the proportion of women enrolled at master's highest institutions. A review of Table 4 shows a similar pattern with respect to the first-time enrollment of men and women. At master's highest institutions, women represented 52% of the 1972 first-time enrollment as compared to 50% in 1971; at Ph.D. highest institutions, women represented only 37% of first-time enrollment in 1972. It should be noted, however, that the absolute number of women enrolled at Ph.D. highest institutions remains well above the number of women enrolled at master's highest institutions, due both to the greater number of Ph.D. highest institutions and to the greater average size of those institutions.

The number of non-U.S. nationals enrolled at responding institutions, not shown in the tables, decreased between 1971 and 1972 by 1.6% at public Ph.D. highest institutions (73% effective response rate), by 3.7% at private Ph.D. highest institutions (73% effective response rate), and by 2.4% at private master's highest institutions (58% effective response rate). Somewhat surprisingly, the number of non-U.S. nationals enrolled at public master's highest institutions appeared to increase by 11.9% between 1971 and 1972, although the effective response rate for this group of institutions on this question was only 46%.

All institutions participating in this survey were also asked to provide enrollment data for 1971 and 1972, for full-time enrollment and for part-time enrollment, by race; regrettably, the effective response rates for this series of questions ranged from a low of 13% to a high of 45% making reporting of the

data impossible. Regardless of the reasons for which these data were not reported—whether lack of availability or lack of enrollment—its absence is unfortunate and provides serious limitation to the value of this survey in understanding the developing trends in American graduate education.

The number of graduate assistants on appointment, whether for teaching, research, or other purposes, appeared relatively stable between 1971 and 1972, and no clean patterns are obvious. Although no tables are presented—the effective response rate for these questions ranged between 35% and 79%—the number of teaching assistants appeared to rise in private master's highest and public Ph.D. highest institutions while declining slightly in public master's highest and private Ph.D. highest institutions. The number of research assistants appeared to rise in all types of institutions except public master's highest institutions, while the number of other assistantships appeared to rise in all types of institutions except public Ph.D. highest institutions. In no case was the increase or decrease greater than 4%, except for the rise in other assistantships at private master's highest institutions, where 10 institutions reported an increase of 27%, accounted for in large measure by an increase of 36% reported by 4 institutions enrolling between 500 and 1,000 students.

Table 5 displays the percent change in fellowships or traineeships (non-service required) for Ph.D. highest institutions by discipline area, and shows a decrease in every discipline area except social sciences for both public and private institutions. As in earlier tables, public institutions appear to show greater decreases (or lesser increases) than private institutions, with the difference being relatively small in biological sciences and physical sciences, but quite large in the humanities, where public Ph.D. highest institutions showed an 18.5% decrease compared to a 2.9% decrease in private Ph.D. highest institutions. Table 1, it will be recalled, showed a 0.9% increase in humanities enrollment for public Ph.D. highest institutions and a 7.6% increase in humanities enrollment for private Ph.D. highest institutions. It should also be noted that decreases in non-service awards—and the relatively greater decreases in public institutions—are entirely consistent with the results reported in Part I of this survey last November.

Table 6 displays the percent change in master's degrees awarded between 1971 and 1972 by discipline area, and shows a pattern once again consistent with results reported both in Part I (which showed an overall increase in master's degrees awarded between 1971 and 1972) and reported earlier in this survey (which showed increasing enrollments and support in the social sciences, biological sciences, education, and humanities, and decreasing enrollments and support in the physical sciences and engineering). Public and private institutions show a consistent pattern within Table 6 as well, both increasing in education (8.6% public and 13.1% private), humanities (3.9% public and 4.9% private), and social sciences (5.1% public and 11.3% private), with the proportional increases consistently greater in the private sector. In the physical sciences, both public and private institutions showed a decrease in the number of master's degrees awarded; somewhat surprisingly, given the earlier results of this survey, public institutions increased the numbers of master's degrees awarded in engineering and biological sciences while the numbers were decreasing in private institutions.

The number of Ph.D.'s awarded by discipline area—not shown in tables—increased by less than 1% for private institutions and by less than 4% for public institutions. Within private institutions, the proportion of Ph.D.'s awarded by discipline area changed by less than 1% except that social studies doctorates

accounted for 23% of Ph.D.'s awarded in 1972 as opposed to under 20% in 1971 and that physical science doctorates accounted for only 20% of Ph.D.'s awarded in 1972 as opposed to over 23% in 1971. The absolute number of Ph.D.'s awarded in private institutions increased in education (8.5%), humanities (2.1%), and social sciences (16.7%), while decreasing in physical sciences (13.2%), engineering (7.2%), and biological sciences (2.0%). The number of Doctor of Arts degrees awarded increased by 1.6%.

A somewhat similar picture emerges at public institutions, where the overall number of Ph.D.'s increased by slightly under 4%, with increases in education (9.3%), humanities (8.3%), social studies (7.2%), and engineering (3.7%), and decreases in physical sciences (2.9%) and biological sciences (less than 1%). The proportion of Ph.D.'s awarded by discipline area changed by less than 1% for all discipline areas in public institutions. The number of Doctor of Arts degrees awarded increased by 11.3%, significantly higher than the rate of increase (1.6%) noted in private institutions.

Finally, Table 7 shows the number of post-doctoral students enrolled in 1971 and 1972. As can be seen, the effective response rate for both public and private institutions is below 50%; these data are included, however, on the assumption that non-respondents may well be institutions which enroll few or no post-doctoral students. In any case, those institutions responding showed an increase in post-doctoral students enrolled between 1971 and 1972, an increase of 7.0% for the public institutions and an increase of 9.3% for the private institutions.

#### Conclusion

Part II of the second CGS-GRE Board of Survey of Graduate School Enrollment met with great success in terms of number of responses and, to a lesser degree, in terms of response rate to individual questions. And, while the effective response rate to individual questions varied considerably, several overall conclusions can nonetheless be drawn.

First, the increasing enrollment at graduate institutions noted in Part I last November is not a universal increase, but is concentrated in the humanities, social sciences, and education, and is distinctly absent in the physical sciences. Second, although female enrollment in graduate study is increasing, women still enroll in significantly smaller numbers than do their male counterparts. And, finally, one must conclude that it is still impossible to collect meaningful data on the racial composition of graduate schools on a regular basis by means of a survey such as this.

It seems important that this information be collected, and that those types of information for which meaningful results were achieved continue to be surveyed. It also seems apparent that, despite the occasionally small effective response rates, the efforts to provide for more complete and detailed information by dividing this survey into two parts have had a positive effect. Given these results, the survey should continue to serve as a valuable addition to the total pool of information about graduate education.

TABLE I

## Percent Change in Total Graduate School Enrollment, by Discipline Area, 1971 to 1972

	<u>Education*</u>	<u>Humanities</u>	<u>Social Sciences</u>	<u>Physical Sciences</u>	<u>Engineering</u>	<u>Biological Sciences</u>
Public-Master's Highest	4.6%* (79%)	4.5% (77%)	5.8% (77%)	0.1% (79%)	-0.6% (50%)	3.2% (79%)
Private-Master's Highest	4.9% (86%)	-2.1% (93%)	14.4% (86%)	-8.3% (79%)	**	19.5% (90%)
Public-Ph.D. Highest	7.1% (85%)	0.9% (86%)	3.5% (89%)	-7.2% (89%)	-2.3% (76%)	3.7% (89%)
Private-Ph.D. Highest	1.8% (62%)	7.6% (72%)	0.1% (78%)	-6.0% (80%)	-2.3% (55%)	6.9% (78%)
Master's Highest	4.7% (84%)	3.6% (81%)	8.1% (78%)	-1.5% (77%)	**	6.6% (81%)
Ph.D. Highest	6.1% (72%)	2.7% (76%)	2.4% (80%)	-6.9% (81%)	-2.3% (64%)	4.3% (80%)
Public Master's & Ph.D.	6.5% (78%)	1.4% (78%)	3.9% (80%)	-6.7% (81%)	-2.2% (64%)	3.6% (81%)
Private-Master's & Ph.D.	2.7% (67%)	7.0% (76%)	1.7% (78%)	-6.1% (78%)	-1.7% (50%)	8.2% (79%)
Total	5.7% (75%)	2.8% (77%)	3.2% (80%)	-6.5% (80%)	-2.0% (59%)	4.5% (80%)

\*See definitions under "Results", page 146

\*\*Not included due to effective response rate lower than 50%

TABLE 2

Percent Change in First-time Graduate School Enrollment, by Discipline Area, 1971-1972

	<u>Education*</u>	<u>Humanities</u>	<u>Social Sciences</u>	<u>Physical Sciences</u>	<u>Engineering</u>	<u>Biological Sciences</u>
Public-Master's Highest	10.4%* (58%)	11.8% (56%)	8.9% (56%)	-3.6% (58%)	**	-3.7% (58%)
Private-Master's Highest	24.5% (61%)	0.7% (68%)	22.6% (61%)	16.6% (55%)	**	-2.2% (71%)
Public-Ph.D. Highest	9.0% (59%)	4.0% (60%)	5.1% (63%)	-11.7% (63%)	6.5% (53%)	9.2% (62%)
Private-Ph.D. Highest	**	8.3% (59%)	0.2% (64%)	-1.6% (64%)	**	5.1% (63%)
152 Master's Highest	12.9% (59%)	10.3% (61%)	12.3% (58%)	-0.7% (57%)	**	-3.3% (63%)
Ph.D. Highest	7.1% (55%)	5.2% (60%)	3.5% (63%)	-9.1% (63%)	5.9% (50%)	8.3% (62%)
Public-Master's & Ph.D.	9.4% (59%)	4.9% (59%)	5.5% (61%)	-11.1% (62%)	**	8.1% (61%)
Private-Master's & Ph.D.	6.0% (51%)	7.9% (62%)	2.1% (63%)	-1.0% (62%)	**	4.2% (65%)
Total	8.8% (56%)	5.7% (60%)	4.7% (62%)	-8.6% (62%)	**	7.1% (62%)

\*See definitions under "Results", page 146.

\*\*Not included due to effective response rate lower than 50%

TABLE 3

Male and Female Full-time Enrollment, 1971 and 1972

	Number		1971		1972		1972			
	Men	Women	Men	Women	Men	Women	Men	Women		
Master's Highest	61	77%	44,265	54%	37,159	46%	46,246	53%	40,175	47%
Ph.D.	186	83%	305,823	67%	151,868	33%	305,162	65%	163,543	35%
Total	247	81%	350,088	65%	189,027	35%	351,408	63%	203,718	37%

TABLE 4

Male and Female First-time Enrollment, 1971 and 1972

	Number		1971		1972		1972			
	Men	Women	Men	Women	Men	Women	Men	Women		
Master's Highest	44	56%	15,905	50%	5,906	50%	6,579	48%	7,091	52%
Ph.D.	140	63%	56,587	64%	31,306	36%	58,838	63%	34,425	37%
Total	184	61%	62,492	63%	37,212	37%	65,417	61%	41,516	39%

\*Number is institutions responding. Percentage figures are percent of the number responding of the number available in the total group. For example, 61 Master's Highest Degree institutions out of a possible 79 such institutions in the CGS membership for a 77% response rate for that group of institutions.

TABLE 5

Percent Change in Fellowships or Traineeships (Non-Service), by Discipline Area, 1971-1972

	<u>Education*</u>	<u>Humanities</u>	<u>Social Sciences</u>	<u>Physical Sciences</u>	<u>Engineering</u>	<u>Biological Sciences</u>
Public-Ph.D.	-11.1% (55%)	-18.5% (57%)	-0.3% (57%)	-19.7% (62%)	-15.5% (53%)	-13.4% (61%)
Private-Ph.D.	**	-2.9% (52%)	2.1% (51%)	-18.3% (58%)	**	-10.8% (57%)
Total	**	-11.3% (55%)	0.3% (54%)	-19.2% (61%)	-15.5% (50%)	-12.6% (59%)

TABLE 6

Percent Change in Master's Degrees Awarded, by Discipline Area, 1971-1972

	<u>Education*</u>	<u>Humanities</u>	<u>Social Sciences</u>	<u>Physical Sciences</u>	<u>Engineering</u>	<u>Biological Sciences</u>
Public-Master's & Ph.D.	8.6%* (79%)	3.9% (80%)	5.1% (82%)	-1.4% (84%)	6.0% (65%)	13.0% (83%)
Private-Master's & Ph.D.	13.1% (71%)	4.9% (79%)	11.3% (79%)	-2.7% (78%)	-2.5% (84%)	-2.8% (81%)
Total	9.5% (76%)	4.2% (80%)	6.9% (81%)	-1.8% (82%)	2.9% (61%)	10.5% (82%)

\*See definitions under "Results", page 146

\*\*Not included due to effective response rate lower than 50%

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TABLE 7

Post-Doctoral Students, 1971 and 1972

	<u>Number</u>	<u>%</u>	<u>1971</u>	<u>1972</u>	<u>% Change</u>
Public-Ph.D.	69	48%	2,784	2,981	7.0%
Private-Ph.D.	33	41%	931	1,018	9.3%
Total	102	46%	3,715	3,999	7.6%

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## The Constitution of the Council of Graduate Schools in the United States

### 1. *Name*

This organization shall be called the Council of Graduate Schools in the United States.

### 2. *Purpose*

The Council is established to provide graduate schools in the United States with a comprehensive and widely representative body through which to counsel and act together.

Its purpose is the improvement and advancement of graduate education. The purview of the Council includes all matters germane to this purpose. The Council shall act to examine needs, ascertain best practices and procedures, and render assistance as indicated; it may initiate research for the furthering of the purpose. It shall provide a forum for the consideration of problems and their solutions, and in meetings, conferences, and publications shall define needs and seek means of satisfying them in the best interests of graduate education throughout the country. In this function the Council may act in accordance with the needs of the times and particular situations to disseminate to the public, to institutions, to foundations, to the federal, state, and local governments, and other groups whose interest or support is deemed of concern, information relating to the needs of graduate education and the best manner of satisfying them.

In the analysis of graduate education, in the indication of desirable revision and further development, in the representation of needs and all other functions related to effecting its purpose, the Council not only shall be free to act as an initiating body, but it shall assume direct obligation for so doing.

### 3. *Membership*

Institutions applying for membership shall be considered in the light of the following criteria:

- a. Applicants for membership must be accredited by the appropriate regional accrediting agency as a college or university approved for the offering of graduate work.
- b. Applicants must have conferred at least thirty degrees of Master of Arts or Master of Science or ten Doctor of Philosophy degrees, or appropriate combination, within the three-year period preceding application.
- c. The degrees conferred must be adequately distributed over at least three distinct disciplines, such as but not limited to:

agriculture  
anthropology  
astronomy  
bacteriology  
biochemistry  
botany  
chemical engineering  
chemistry  
civil engineering  
classics  
economics

electrical engineering  
English  
entomology  
fine arts  
French  
geography  
geology  
German  
history  
mathematics  
mechanical engineering

music  
pharmacology  
philosophy  
physics  
physiology  
political science  
psychology  
Russian  
sociology  
Spanish  
zoology

The Committee on Membership shall consider all applications in the light of these criteria and make appropriate recommendations to the Executive Committee. The Executive Committee shall take final action on all applications for membership and shall report such action at each Annual Meeting.

The Executive Committee may invite and approve applications by foreign institutions of good standing for affiliation with the Council if such institutions meet all criteria for membership except accreditation by an American regional accrediting agency. Such affiliates will be extended all the courtesies of membership except the privilege of voting.

#### 4. *Voting Power*

In all activities of the Council, each member institution shall have one vote.

More than one representative of any institution may attend the meeting of the Council, but the member's vote shall be cast by the individual designated as the principal representative of the member by the chief administrative officer of the member institution.

#### 5. *Officers and Executive Committee*

The officers of the Council and the Executive Committee shall be a Chairman, a Chairman-Elect, and the immediate Past Chairman, each serving for a term of one year. In the absence of the Chairman, the Chairman-Elect shall be the presiding officer of the Executive Committee and the Council.

There shall be an Executive Committee of nine voting members, composed of the Chairman, the Chairman-Elect, the Past Chairman, and six members-at-large. Two members-at-large shall be elected by the Council at each Annual Meeting for terms of three years each, beginning immediately after the Annual Meeting.

The Chairman-Elect, chosen by the Executive Committee from its own past or present membership, shall serve in that capacity for one year. The following year, he will assume the office of Chairman, and the following year, the office of Past Chairman.

Each voting member of the Executive Committee must be the principal representative of a member of the Council, and none may serve for two consecutive full terms.

If the Chairman is unable to continue in office, the Chairman-Elect shall

succeed immediately to the chairmanship, and the Executive Committee shall choose a new Chairman-Elect.

Any vacancies occurring among the membership-at-large of the Executive Committee shall be filled by the Executive Committee until the next Annual Meeting, at which time the Council shall elect a replacement for the balance of the term.

#### 6. *Executive Officers*

The chief executive officer of the Council shall be a President, who shall be a salaried officer, appointed by the Executive Committee and serving at its pleasure. The President shall serve as an *ex-officio* member of the Executive Committee without a vote.

#### 7. *Duties and Powers of the Executive Committee*

In addition to the duties and powers vested in the Executive Committee elsewhere in this Constitution, the Executive Committee may, specifically: employ such staff and establish such offices as may seem necessary; incorporate; undertake itself, or through its agents, to raise funds for the Council and to accept and expend monies for the Council; take initiative and act for the Council in all matters including matters of policy and public statement except where limited by this Constitution or by actions of the Council.

#### 8. *Committees*

In addition to the Executive Committee, there shall be (1) a Nominating Committee, (2) a Committee on Membership, whose members shall not be members of the Executive Committee, and (3) such other standing committees as may be established by the Executive Committee.

Except for the Nominating Committee, all standing committees and *ad hoc* committees shall be appointed by the Chairman with the advice and consent of the Executive Committee.

The Nominating Committee shall consist of five members of whom three shall be elected each year by the Council at its annual meeting, and two shall be the members-at-large of the Executive Committee who are completing their terms. The Chairman shall be elected by the Committee.

At least two weeks before each annual meeting of the Council, the Nominating Committee shall propose to the members of the Council one nominee for each member-at-large position of the Executive Committee to be filled and three nominees for members of the Nominating Committee. These nominations shall be made only after suggestions accompanied by supporting vitae have been solicited from the membership-at-large.

At the annual business meeting of the Council, additional nominees may be proposed from the floor. The election will then be held, and the nominees receiving the largest number of votes for the positions to be filled shall be declared elected.

9. *Meetings*

The Council shall hold an Annual Meeting at a time and place determined by the Executive Committee. The Council may meet at other times on call of the Executive Committee.

The Executive Committee shall be responsible for the agenda for meetings of the Council. Reports and proposals to be submitted for action by the Council shall be filed with the Executive Committee before they may be submitted for general discussion by the Council. No legitimate report or proposal may be blocked from presentation to the Council, but action on any proposal may not be taken until the Executive Committee has had an opportunity to make a recommendation.

In matters not provided for in this Constitution, parliamentary procedure shall be governed by *Robert's Rules of Order, Revised*.

10. *Limitation of Powers*

No act of the Council shall be held to control the policy or line of action of any member institution.

11. *Dues*

Membership dues shall be proposed by the Executive Committee and must be approved by the majority of the membership after due notice.

12. *Amendments*

Amendments to this Constitution may be proposed by the Executive Committee or by written petition of one-third of the members. However they originate, proposals for amendment shall be received by the Executive Committee and forwarded with recommendations to the members, in writing, at least ninety days before the meeting at which they are to be voted upon or before formal submission to the members for a mail ballot. To be adopted, proposed amendments must receive the approval of a two-thirds majority of the members voting at the announced meeting or on the designated-mail ballot.

13. *Bylaws*

Bylaws may be established by the Executive Committee at any regular or special meeting, subject to ratification by a simple majority vote of the Council at the next Annual Meeting.

## BYLAWS

1. In conformity with Article 6 of the Constitution, the President of the Council of Graduate Schools in the United States shall be paid an annual salary to be determined by the Executive Committee plus such perquisites as may be necessary for the proper conduct of the office and such travel as may be deemed essential. The President is authorized to employ such additional personnel as is, in his judgment, necessary for the proper

conduct of the office, to establish bank accounts in the name of the Council of Graduate Schools in the United States, and to draw checks and invest monies against the Council's account or accounts, subject to an annual audit of the books of the Council by a Certified Public Accountant and approval by the Executive Committee.

2. The Riggs National Bank of Washington, D.C., is hereby designated a depository for the funds of this association and the said bank is hereby authorized and directed to pay checks and other orders for the payment of money drawn in the name of this association when signed by the President and the said bank shall not be required, in any case, to make inquiry respecting the applications of any instrument executed in virtue of this resolution, or of the proceeds therefrom, nor be under any obligation to see to the application of such instrument of proceeds.
3. In the event of the dissolution of the Council of Graduate Schools, all then existing assets of the Council shall be distributed in equal parts to the institutions which will at that time be members of the Council.
4. After January 1, 1969, the fiscal year of the Council of Graduate Schools in the United States will correspond to the calendar year. (Prior to this date, the fiscal year ran from April 1 through March 31.)
5. In the event of the death or disability of the President of the Council, the Chairman shall immediately call a meeting of the Executive Committee to select an Acting President, who shall assume the responsibilities of the President, as they are specified in Article 6 of the Constitution and in Bylaws 1 and 2, until the appointment of a new President.

### PROCEDURAL POLICIES

1. Annual meetings of the Council shall be held during or near the first week of December.
2. If a member resigns, it must reapply for admission in the normal way if it wishes to resume membership.
3. Membership or affiliation, with or without vote, of non-academic institutions, associations, or foundations is undesirable.
4. Institutions accepted to membership prior to September 1 in any given year are required to pay dues for that fiscal year.

The Council of Graduate Schools in  
The United States

Member Institutions

- Abilene Christian College  
Adelphi University  
Air Force Institute of Technology  
Alfred University  
\*American University  
Andrews University  
Appalachian State University  
Arizona State University  
Arkansas State University  
Atlanta University  
Auburn University  
Ball State University  
Baylor College of Medicine  
Baylor University  
\*Boston College  
Boston University  
Bowling Green State University  
Bradley University  
\*Brandeis University  
Brigham Young University  
Brooklyn College of the  
City University of New York  
\*Brown University  
\*Bryn Mawr College  
\*California Institute of Technology  
California State University at Chico  
California State University at Fresno  
California State University at Fullerton  
California State University at Hayward  
California State University at  
Long Beach  
California State University at  
Los Angeles  
California State University at  
Northridge  
California State University at Sacramento  
California State University at San Diego  
California State University at  
San Francisco  
California State University at San Jose  
Canisius College  
\*Carnegie-Mellon University  
\*Case Western Reserve University  
\*Catholic University of America  
Central Michigan University  
Central Missouri State College  
Central Washington State College  
Chicago State College  
The City College of the  
City University of New York  
The City University of New York  
\*Claremont University Center  
\*Clark University  
Clarkson College of Technology  
Clemson University  
Colgate University  
College of Saint Rose  
College of William and Mary  
Colorado School of Mines  
Colorado State University  
\*Columbia University  
Connecticut College  
\*Cornell University  
Creighton University  
Dartmouth College  
De Paul University  
Drake University  
Drexel University  
\*Duke University  
Duquesne University  
East Carolina University  
East Tennessee State University  
East Texas State University  
Eastern Michigan University  
\*Emory University  
Fisk University  
Florida Atlantic University  
\*Florida State University  
\*Fordham University  
Fort Hays Kansas State College  
George Peabody College  
\*George Washington University  
\*Georgetown University  
Georgia Institute of Technology

Georgia State University  
 Hahnemann Medical College and  
 Hospital of Philadelphia  
 \*Harvard University  
 Hofstra University  
 Holy Names College  
 Howard University  
 Hunter College of the  
 City University of New York  
 Idaho State University  
 \*Illinois Institute of Technology  
 Illinois State University  
 Immaculate-Heart College  
 Indiana State University  
 \*Indiana University  
 Indiana University of Pennsylvania  
 \*Iowa State University  
 John Carroll University  
 \*Johns Hopkins University  
 Kansas State College of Pittsburg  
 Kansas State Teachers College  
 \*Kansas State University  
 Kent State University  
 Lamar University  
 \*Lehigh University  
 Loma Linda University  
 Long Island University  
 Louisiana Polytechnic Institute  
 \*Louisiana State University  
 Louisiana State University  
 in New Orleans  
 Lowell Technological Institute  
 \*Loyola University of Chicago  
 Loyola University of Los Angeles  
 Mankato State College  
 Marquette University  
 \*Massachusetts Institute of  
 Technology  
 Medical College of Georgia  
 Medical College of Pennsylvania  
 Medical College of Virginia  
 Memphis State University  
 Miami University  
 \*Michigan State University  
 Michigan Technological University  
 Middle Tennessee State University  
 Mississippi College  
 Mississippi State University  
 Montana State University  
 Montclair State College  
 Morgan State College  
 Murray State University  
 Naval Postgraduate School  
 New Mexico Institute of Mining  
 and Technology  
 New Mexico State University  
 \*New School for Social Research  
 \*New York University  
 Newark College of Engineering  
 Niagara University  
 North Carolina Central University  
 \*North Carolina State University  
 at Raleigh  
 North Dakota State University  
 North Texas State University  
 \*Northeast Louisiana University  
 Northeastern Illinois State College  
 Northeastern University  
 Northern Illinois University  
 Northwestern State College  
 \*Northwestern University  
 Oakland University  
 \*Ohio State University  
 Ohio University  
 \*Oklahoma State University  
 Old Dominion University  
 \*Oregon State University  
 \*Pennsylvania State University  
 Pepperdine University  
 \*Polytechnic Institute of Brooklyn  
 \*Princeton University  
 \*Purdue University  
 Queens College of the  
 City University of New York  
 \*Rensselaer Polytechnic Institute  
 \*Rice University  
 \*Rockefeller University  
 Roosevelt University  
 \*Rutgers, The State University  
 Saint Cloud State College  
 \*Saint John's University  
 \*Saint Louis University  
 Saint Mary's University  
 Sam Houston State University  
 Sanford University  
 Seattle University  
 Seton Hall University  
 Shippensburg State College

South Dakota State University  
Southern Illinois University  
at Carbondale  
Southern Illinois University  
at Edwardsville  
Southern Methodist University  
Southwest Texas State University  
\*Stanford University  
State University College of Geneseo  
State University of New York  
at Albany  
State University of New York  
at Binghamton  
\*State University of New York  
at Buffalo  
State University of New York  
Downstate Medical Center  
State University of New York  
at Stony Brook  
Stephen F. Austin State University  
Stetson University  
Stevens Institute of Technology  
\*Syracuse University  
\*Temple University  
Tennessee Technological University  
\*Texas A&M University  
Texas Christian University  
Texas Southern University  
Texas Tech University  
Texas Woman's University  
Thomas Jefferson University  
Trinity University  
Tufts University  
\*Tulane University  
Tuskegee Institute  
United State International University  
Utah State University  
\*Vanderbilt University  
Villanova University  
\*Virginia Polytechnic Institute  
Wagner College  
\*Washington State University  
\*Washington University  
\*Wayne State University  
Wesleyan University  
West Texas State University  
\*West Virginia University  
Western Carolina University  
Western Illinois University  
Western Kentucky University  
Western Michigan University

Western State College of Colorado  
Western Washington State College  
\*Wichita State University  
Winthrop College  
Worcester Polytechnic Institute  
Wright State University  
Xavier University  
\*Yale University  
Yeshiva University  
University of Akron  
\*University of Alabama  
University of Alabama in  
Birmingham  
University of Alabama in  
Huntsville  
\*University of Arizona  
University of Arkansas  
\*University of California at Berkeley  
University of California at Davis  
University of California at Irvine  
University of California at  
Los Angeles  
University of California at  
Riverside  
University of California at San Diego  
University of California at  
Santa Barbara  
\*University of Chicago  
\*University of Cincinnati  
\*University of Colorado  
University of Connecticut  
University of Dayton  
\*University of Delaware  
\*University of Denver  
University of Detroit  
\*University of Florida  
University of Georgia  
University of Hawaii  
University of Houston  
University of Idaho  
University of Illinois at  
Chicago Circle  
University of Illinois at the  
Medical Center  
\*University of Illinois at  
Urbana-Champaign  
\*University of Iowa  
\*University of Kansas  
\*University of Kentucky  
University of Louisville  
University of Maine

\* University of Maryland  
University of Massachusetts  
University of Miami  
\* University of Michigan  
University of Minnesota  
University of Mississippi  
University of Missouri at  
Columbia  
University of Missouri at  
Kansas City  
University of Missouri at Rolla  
University of Missouri at St. Louis  
University of Montana  
\* University of Nebraska  
University of Nebraska at Omaha  
University of Nevada  
University of New Hampshire  
University of New Mexico  
\* University of North Carolina at  
Chapel Hill  
University of North Carolina at  
Greensboro  
\* University of North Dakota  
University of Northern Colorado  
University of Northern Iowa  
\* University of Notre Dame  
\* University of Oklahoma  
\* University of Oregon  
University of the Pacific  
\* University of Pennsylvania  
\* University of Pittsburgh  
University of Rhode Island  
University of Richmond

\* University of Rochester  
University of San Francisco  
University of Santa Clara  
University of Scranton  
University of South Carolina  
University of South Dakota  
University of South Florida  
\* University of Southern California  
University of Southern Mississippi  
\* University of Tennessee Medical  
Units  
\* University of Tennessee System  
University of Texas at Arlington  
\* University of Texas at Austin  
University of Toledo  
University of Tulsa  
\* University of Utah  
University of Vermont  
\* University of Virginia  
\* University of Washington  
\* University of Wisconsin  
University of Wisconsin-Milwaukee  
\* University of Wyoming

\* Founding institutions.



