The Graduate Record Examinations (GRE) program is described in this article from the standpoint of the policy-making and administrative arrangement which provide the context within which the Advanced Literature and 22 other similar tests exist. The development and dissemination of the Advanced Tests is outlined. A discussion of policy-making and control covers the functions of the recently founded GRE Board and its relationship to the Educational Testing Service. Considerable attention is devoted to such achievements of the GRE Board as (1) the separation of the Institutional Testing Program from the National Program for Graduate School Selection, (2) improving communication between graduate education and the GRE program, (3) providing better interpretive aids for test scores and evidences of test validity, and (4) an interest in research. (AF)
Professor Booth's paper describes in some detail the Advanced Literature in English Test of the Graduate Record Examinations and the activities and concerns of the examination committee which is responsible for producing the Test. It is my task to tell you something about the GRE program as a whole—that is, about the policy-making and administrative arrangements which provide the context within which the Advanced Literature Test exists and which it shares with twenty-two other tests.

I hope that I will be forgiven by those of you who already know the program well if I begin by describing briefly, at a rather basic level, what the program is and does. It has been my experience that, in discussing the program, it is the better part of wisdom to assume virtually total ignorance. I will come shortly to matters in which I think even the most knowledgeable of you will find a modicum of interest.

It is the purpose of the program to make available a series of tests which can be used in admitting students into graduate study, primarily at the doctoral level, and in granting fellowship awards and financial assistance. In pursuit of this end, the program provides a series of twenty-three tests, one of them an Aptitude Test from which separate Verbal and Quantitative scores are derived, the remainder being the so-called Advanced Tests which are achievement tests in the areas of the most commonly taught undergraduate majors.

The tests are given on six occasions during the year at centers established by the Educational Testing Service throughout the world. Prospective graduate students who are required or advised to take one or more of the tests by the schools to which they are applying register directly with ETS. They are sent tickets admitting them to centers which they choose from a published list; they take the test under supervisors and proctors employed by ETS; their answer sheets are scored centrally and, within a month after the administration of the test, score reports are sent to graduate schools designated by the candidates. Scores are kept on file for later reporting to additional schools if the candidate so directs. The system is designed in such a way that the graduate school or department need only announce its requirement or recommendation that specified GRE tests be taken. Arrangements to take the tests then become the subject of negotiation between ETS and the candidate. In due course, if all goes well, the scores will appear on the desk of the appropriate official in the graduate school and they can then be made part of the record on which decisions regarding admission and financial support are based.

The GRE program has been with the Educational Testing Service during the twenty years of the latter's existence and, as a matter of fact, its origin antedates the founding of ETS by some fourteen years. During that time, the program has grown enormously, partly as the result of an increasing tempo of adoption by graduate schools and partly, no doubt, as a concomitant of the greatly increased number of students entering graduate education. During the past academic year, over 190,000 candidates took one or more of the tests. The corresponding number will exceed 200,000 during the current academic year. Last year, some 11,700 students took the Advanced Literature Test.

What I have been describing so far are the processes by which the tests are brought to the candidates and by which the scores reach the schools. Equally important, and perhaps of greater interest to this audience, is the process whereby the Advanced Tests are developed, more particularly the process by which the Advanced Literature Test comes into being. Professor Booth's paper provides an admirably complete description
of the Test as it now exists, of considerations which shaped its design, and of some of
the Committee's concerns as it looks to the future. Let me supplement his remarks, if
I may, with a brief account of the steps leading to the production of a form of the
Advanced Literature Test.

ETS has in its Test Development Division a large number of people who combine expertise
in the techniques of testing with competence in a particular subject. While this
Division can produce and does produce many tests from its own resources, it does not have
within its own ranks the number of people nor the variegation of background that would
enable it to produce unaided the amount and variety of test material demanded by all
the tests for which it is responsible. It is customary, then, in a program such as the
GRE or the College Board where large numbers of achievement tests are required--partic-
ularly when the test must reflect changing conditions in the educational field they
represent--to call on the services of examination committees recruited from appropriate
fields and educational levels.

In the GRE program, such committees are selected with the approval of the appropriate
professional association. In the case of the Advanced Literature Test, the Executive
Secretary of the MLA is asked to give his estimate of the probable suitability of
various named individuals for work on the Examination Committee. The work of the
Committee and the considerations which go into its selection are described to provide
criteria in terms of which he can make his evaluations. He is also asked to provide
additional names of possible committee members. All of this is done informally and
in no way implies official endorsement or sponsorship of the Committee or of the Test
it produces by the Association. The final selection of the committee members is made
by ETS from a panel of names for which the approval of the appropriate professional
association has been obtained in the sense and in the manner described.

The composition of the committee is determined by a number of factors: the necessity
of giving representation to various subspecialties within general fields; the desir-
ability of having some geographic spread; the need to represent various approaches to
the teaching of the subject; the likelihood that a prospective member of the committee
will be comfortable with objective techniques and that he will become adept at writing
multiple-choice questions (this is matter on which judgments are often difficult to
make until after the first term of appointment); our luck in persuading busy people
to take on yet another responsibility at a less than princely emolument. Appointment
is characteristically for two years.

Once appointed, the committee becomes responsible for a number of crucial functions
in the production of a test. First, it must create a design for the test, if the
test is one which is just being introduced into the program. Alternately, if a
previous committee has worked on the test, the test design which governed its work
is reviewed by the new committee and revised where necessary to make it reflect more
accurately the current state of education in the subject concerned or to embody the
ideas of the new committee about what information is needed to make reasonable admissions
decisions at the graduate level. Second, the committee is responsible for writing a
large share of the questions which will eventually be included in the test. In some
instances—and this is more characteristic of tests in the sciences—additional question
writers are hired to strengthen a test in a field in which no committee member happens
to have specialized. In any case, whether all questions are written by the committee
or whether supplemental writing is needed, all questions considered for the test are
reviewed by all members of the committee. On the basis of their criticisms, questions
are discarded, revised by the committee, or retained in their original form—this last
being somewhat of a rarity. Finally, the committee decides which questions will be
included in a particular form of the test. In doing so, it endeavors to make the test
conform as closely as possible to the test design on which it earlier agreed.

-44-
In all these activities, the committee, working within the general framework of policy as determined by the GRE Board (about which more in a moment), has final responsibility for the design and content of the test. It is quite obvious, I think from Professor Booth's paper that no member of the Committee for the Advanced Literature Test is wholly satisfied with it. It is an evolving instrument—it has undergone marked changes during its career thus far and the Committee contemplates further change. It is improving and is therefore, ipso facto, imperfect. The Committee and the ETS staff members who work on the Test are sustained in their efforts by a belief that, even in its present form, the Test can be of genuine though limited use to those charged with selecting students for admission to graduate departments of English. Beyond that belief is the sense that change is being encouraged in the Program and the reasonable hope that, even within the framework of multiple-choice techniques, yet more relevant measurement is possible.

One word, before leaving this discussion of the Committee's work, about the role of ETS in producing the Advanced Literature Test. At the simplest level, it provides the staff support which enables the Committee to carry on its work effectively. In addition, it functions as the executive arm of the GRE Board and in that capacity has the responsibility for communicating to the Committee the policy decisions of the Board which are likely to affect its work. As I indicated earlier, the personnel who deal directly with the test committees have two kinds of professional competence: they are knowledgeable about the psychometric considerations which must be kept in mind in the preparation of satisfactory tests and they are familiar with the field in which the test is being assembled. They are thus in a position to advise the committee on technical matters, particularly as these involve the results of various types of statistical analysis which are carried out during the preparation of a test, and at the same time they are able to participate in discussions of the design and content of the test as it reflects the academic field. On occasion, they may write questions for consideration by the committee.

Having provided some notion of how the Advanced Tests are produced and how they are made available to candidates, I should like now to comment on certain aspects of the control of the program and on the process by which program policy is formulated.

Perhaps the single most important event in the recent history of the program was the founding of the GRE Board. Prior to January 1966, the program was under ETS ownership and control. The views of the graduate school community as to how the program should operate and its advice regarding the handling of particular problems came to ETS through the Committee on Testing of the Association of Graduate Schools, which met at least once annually with ETS staff members who were responsible for the program. In 1964, a group of deans from schools located on the West Coast became interested in the GRE program and, more particularly, in how to provide for more direct and continuing control by graduate schools. They asked the Council of Graduate Schools in the United States to consult ETS about how this might be accomplished. A communication in this vein from CGS to ETS resulted in negotiations involving those two organizations and AGS, with the result that, in January 1966, the GRE Board was set up under the joint sponsorship of the three bodies.

The Board consists of 16 members, most of them deans of graduate schools, four of whom are appointed by CGS and four by AGS; the remaining eight are elected by the Board itself. Members serve four-year terms.

Under the terms of the original agreement, the Board determined policy governing test development and research in the program. During the past year, that power was broadened to cover all aspects of the program. Income from test fees is at the disposal of the Board and is used, first, to support continuing operations associated with providing the necessary tests, administering them, and reporting the scores. Any surplus of
income over expenses resulting from those activities reverts to a reserve fund which is available to the Board for research or for other activities it may choose to support.

I should note here that, during the past year, negotiations were completed whereby the Graduate School Foreign Testing Program was turned over to control of the Board. This is a program which provides tests in the four languages, French, German, Russian, and Spanish, for use in determining whether a student has met the Ph.D. language requirement. Since this program is intended to serve much the same constituency as the GRE program, it seemed appropriate to link them at the policy-making level.

The role of ETS relative to the GRE Board is three-fold. First, it provides staff support for the Board's activities in that it makes arrangements for meetings of the Board and its committees, manages the Board's fiscal affairs, provides position papers and background papers on matters coming before the Board for discussion, prepares project proposals at the Board's direction, or may on occasion present proposals on its own initiative. Second, it provides technical advice on matters having to do with test development, research design, and other matters of a professional nature in the general field of testing. Third, it acts as the executive arm of the Board in that it carries out or arranges to have carried out such projects as the Board decides to embark on.

How do the Board and ETS feel about each other after nearly three years of living together? There is reason to think that the Board started with some initial skepticism regarding the reality of its control over the program. There was perhaps a lingering suspicion that the Board was intended as a figurehead and that the program would undergo little change as the result of anything the Board could do. This has not turned out to be the case. In its relatively brief history the Board has already made its impact felt in far-reaching ways. In one or two instances, it has brought about changes which ETS would probably not have undertaken on its own and about which it had some initial reluctance. The Board is now quite satisfied, I think, that its influence over the GRE program is paramount—that it is, indeed free to shape the program as it will.

ETS, for its part, was, as I have hinted, somewhat unprepared for the radical nature of some of the Board's actions. It has, however, after some initial protest, accepted such actions with good grace and has clearly communicated to the Board its understanding that the Board has ultimate responsibility for shaping the destiny of the program. It has been greatly impressed by the caliber of men who have become members of the Board—they include the president of CGS, a former chairman of CGS, the president of AGS, and the former secretary of AGS. Even more gratifying has been the willingness of busy men such as these to become deeply involved in the concerns of the program, to spend time in the meetings of the Board and its committees, and to think seriously about the problems of the program.

In the balance of my paper, I should like to review for you some of the major accomplishments of the GRE Board, partly because of their intrinsic interest, partly because they indicate the extent to which a new wind is blowing in the program.

One of the early decisions of the Board was that the so-called National Program for Graduate School Selection should be separated from the Institutional Testing Program of the GRE. These two programs had existed in a symbiotic relationship, making use of the same set of tests but directed toward different ends and utilizing different administrative arrangements. The National Program was intended to provide information which would assist in making admissions decisions at the graduate level. Through it the tests were made available on fixed dates and at centers established by ETS throughout the world. Candidates registered directly with ETS and scores were reported to graduate schools as directed by the candidates. The Institutional Testing Program was intended for use of undergraduate institutions wishing to test their senior students for purposes
of institutional self-evaluation or as part of the examination structure for determining student competence. The tests were given by the institution, on dates of its own choosing, and under its own administrative arrangements. The Board felt that tests constructed for the rather disparate purposes of the two programs could not be ideally suited to graduate admissions. It therefore decided that the two programs should be split apart, leaving each free to go its own way in pursuit of its own ends. The examination committees for the GRE program have been told that henceforth the Advanced Tests are to be constructed for the sole purpose of serving the graduate admissions function. Another set of tests offered through another program will be offered for the use of undergraduate institutions beginning in the fall of 1969.

What I have described is more than a mere organizational shuffle. It represents a real shift in the philosophy governing the GRE program. It means that the emphasis on command of the content of undergraduate courses, which has hitherto characterized the tests, need not be maintained if, in the judgement of the examination committee, the graduate admissions function could be better served by another kind of test. This is not to say that attention to achievement at the undergraduate level will forthwith disappear. It is quite possible that a given examination committee, after taking soundings in the relevant academic constituency, will decide to maintain this emphasis in its test. But the possibility of change has been opened up and, to the extent that there are factors other than undergraduate achievement which are relevant to graduate performance and to the extent that means of measuring these in a mass testing program can be devised, these factors can be reflected in the tests.

Another major contribution of the Board has been the facilitating of communication between graduate education and the GRE program. Such communication has, of course, been vastly strengthened by the mere existence of the Board itself. Through it the program has achieved contact with more than 20 major graduate institutions and with organizations such as AGS, CGS, and the National Research Council. This has had the dual effect of bringing the program to the attention of potential users of its services and of opening up resources which can be called upon to assist in various projects intended for the improvement of the program.

Under stimulus from the GRE Board, efforts are being made to foster in the academic community a better understanding of what the tests are like, what they are intended to do and, equally important, what they make no pretense of doing. As Professor Booth's paper seeks to make clear, the Advanced Literature Test attempts to measure not only command of the factual background of literature in English but also skill in literary analysis and sensitivity to literary values, and it is probably more successful in this endeavor than most people having only a casual acquaintance with the test give it credit for. On the other hand, a multiple-choice test is incapable of measuring directly the power of self-expression or the ability to produce and organize ideas of one's own. It is limited to the kinds of measurement which can be effected through requiring the candidate to recognize what is true or correct when it is presented to him. As those most closely associated with the GRE program realize—and here I include the ETS staff, the various examination committees, and members of the GRE Board—the test scores do not in themselves provide an adequate basis for making admissions decisions. What they can do, even in their present form, is supplement information derived from undergraduate transcripts, application forms, and the opinions of undergraduate instructors and enhance the soundness of judgments based on these traditional criteria of academic promise.

But, though those who work on the tests are convinced that they are useful in their present form, they are equally aware that improvement is possible, even necessary. And it is our hope in establishing closer contact with the academic community not only to promote understanding of the tests as they are, but to enlist help in making the tests better. To this end, the Board has decided to embark on a program of creating review panels for specified Advanced Tests whose task it will be to consider broadly the
qualities sought by graduate departments in their admitted students, to review admissions practices prevalent in the field, to define an appropriate role for the test scores, and to make recommendations regarding possible revisions in the design of the tests. The panels will be as broadly representative of the field as they can be made without becoming unwieldy and they will include representation from the appropriate examination committee. They will be jointly appointed by the GRE Board and the appropriate professional association and so that they will function not only under the auspices of the GRE program but with the interest and involvement of the profession. Five such panels will be appointed this academic year and, if these are successful, additional panels will be appointed next year. No commitment has been made with respect to a review panel for the Literature Test, but the likelihood is that the MLA will be asked to cooperate in the formation of such a panel next year.

Another area in which the GRE Board has been active is in the provision of better interpretive aids for the test scores. Considered in isolation the scores are virtually meaningless. They take on significance only as means are provided for using them in making comparisons among the individuals taking the test. One way of doing this is to provide norms tables showing the percentage of a defined group of candidates scoring below various points on the score scale. Prior to this year, the comparison group consisted of seniors of undergraduate colleges who took the tests in the early 1950's. A problem was that the ability level of these relatively unselected seniors was lower than that for the more select group who characteristically apply to graduate schools. For this reason, the norms tables provided very little discrimination among applicants to some graduate departments, all of whom tended to have scores at the upper end of the score range. The Board decided that, beginning last year, norms would be based on the candidates taking the tests over the previous three years. As a result, although a given test score continues to represent the same level of competence, it will correspond to a different percentage point in the norms table. For example, a score of 700 on the Advanced Literature Test will continue to represent about the same level of preparation as has been true in the past. However, it will correspond to a percent of 89 in the current norms table, as opposed to a percent of 93 on the 1952 norms. Our belief is that comparisons made possible by the current norms based on recent candidate groups will provide a more realistic basis for evaluating scores than did the older norms.

The Board has also expressed its concern about providing evidence of the validity of the tests as predictors of graduate success. A series of studies has just been reported which indicate that, although none of the quantifiable information available at the point of admission does a particularly good job of predicting success, the test scores perform creditably in comparison with the undergraduate record. There is good reason to believe that the failure of any of the predictors used in these studies to display substantial validity as measured by statistical means is attributable to the great difficulty of obtaining satisfactory measures of student performance at the graduate level. This round of validity studies included students in only six subjects and we hope to extend our efforts into additional fields. We hope also to be able to effectuate methodological improvements based on our recent experience which will enhance the significance of the results we obtain in future studies.

Finally, in this rehearsal of major accomplishments of the GRE Board, let me mention its interest in research. As a matter of long range investigation, the Board has identified as one of its major concerns the development of some means to measure potential productivity and originality. One study in this area is already in progress. It involves an attempt to devise a method of taking an inventory of a student's previous accomplishments which were to a large extent self-initiated and were carried on outside the requirements of his academic experience, which displayed some measure of originality, and for which some degree of public recognition has been achieved. The attributes which we are attempting to observe and study are, of course, highly resistant to objective description and measurement. They are, however, of overriding importance in the estimation of those responsible for the admission and instruction of graduate students and the
Board feels obligated to take the first steps along a path which will perhaps lead to a better understanding of these qualities.

I think it is evident from what I have said that, brief though its history has been, the interests of the Board have undergone a remarkable process of expansion and proliferation. In many instances, the projects it has set in motion have been clear-cut as to purpose and method—for example, the provision of three-year rolling norms. In two areas of interest, however, it is venturing into territories for which no charts exist. I am thinking of its concern with revising the Advanced Tests—a process which must be preceded by a prolonged effort to find out what is needed and wanted by the graduate schools—and of its desire to investigate in pioneer fashion the possibility of measuring attributes which are not now touched on by the Graduate Record Examinations nor by other instruments suitable for operational use in making critical decisions. In order to provide direction and continuity to its efforts along these lines, the Board decided at its last meeting to establish a Test Development and Research Committee. It will be the general responsibility of the Committee to effectuate the policies of the Board as these have implications for test development and research. Exactly how it will set about doing this remains to be seen since the Committee has yet to meet for the first time. However, it is very probable that it will find itself trying to make some systematic investigation of the needs of graduate education in the matter of admissions, to determine how the tests should be reshaped to meet these needs, and to recommend to the Board specific projects of a developmental or exploratory nature. At any rate, it is a certainty that the new Committee will become a major vehicle through which the forces for change which are at work in the program will find expression.

In concluding this paper, let me briefly summarize what I conceive to be the situation of the GRE program at this point in time. Looking ahead, one can foresee the strong possibility that the Graduate Record Examinations will play an increasingly important role in graduate admissions. For one thing, the pressure of numbers is likely to become greater and graduate departments will be seeking help in making admissions wherever they can find it. Again, some of the traditional admissions criteria are likely to become less useful. As the number of applicants to a given graduate department multiplies, the range of their undergraduate origins will expand, and letters of recommendation from instructors familiar to the admitting department will not always be available. Furthermore, if present portents have any validity, the undergraduate record will become a less usable criterion as more and more undergraduate institutions resort to reporting only in pass-fail categories. As numbers of applicants increase and as discriminations among them become more difficult, one consequence is likely to be increased reliance on the test scores.

The Graduate Record Examinations are made available through a mass testing program—in excess of 200,000 candidates are tested per year and scores go to more than 600 institutions. This situation brings with it its administrative exigencies. There are certain examination techniques available to the teacher responsible for fifty students which are out of the question when numbers of candidates are measured in thousands. Nevertheless, despite certain rigidities which are inherent in the situation within which they function, the tests are capable, even as they stand, of providing useful information to those seeking to select students having a reasonable chance of success in graduate study. But beyond that, as I have tried to point out, the program is genuinely open to change. We are engaged in a serious effort to find out what the graduate departments demand of their admissions procedures and how the tests can be modified to play a more significant part in admissions decisions. We recognize that, as a means of stimulating change and of ensuring that changes will be meaningful, we must enlist the interest and assistance of graduate school faculties and administrations. My hope is that I have done some small service to that cause on this occasion.

-49-