Following the decision to establish a new university at Boca Raton, the Board of Control of Florida's Board of Education appointed a committee to revise, refine and develop plans for the new institution and to make preliminary estimates of space requirements and costs. The plans and proposals in this report represent a thorough study by the committee. Major emphasis is placed on securing an outstanding faculty, on using new instructional techniques, on delegating a large amount of responsibility for their education to the students, and on organizing the educational program to concentrate on the interrelatedness of subject matter fields. The academic program will initially focus on the arts and sciences but institutes for professional education will later be established if warranted by demand and enrollment. Housing arrangements will encourage the intellectual development of students. Faculty members will participate in teaching teams and in counseling students. A Learning Resources Center will house the library, television studios and transmission facilities, audiovisual viewing and listening rooms, a testing and guidance clinic, reading clinic, teaching machines, language labs and other aids to learning. Certain administrative guidelines are included. The new university is designed to complement the state's junior college system by serving upper division and graduate students. (JS)
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The State Board of Education
Tallahassee
Florida

Gentlemen:

Published herewith is the report of Dr. A. J. Brumbaugh, Director of the Planning Commission for the new university at Boca Raton. A copy of the Board of Control resolution adopting the report appears on the following page.

It is my opinion that the guidelines set forth in the report will enable the administration of the new university to implement a forward-looking plan of education smoothly and efficiently into an integral part of the State University System.

Sincerely,

(Signed) J. B. Culpepper

J. Broward Culpepper
Executive Director
A RESOLUTION OF THE BOARD OF CONTROL
APPROVING PLANS FOR THE DEVELOPMENT OF THE PROGRAM
OF THE NEW UNIVERSITY AT BOCA RATON

WHEREAS the Council for the Study of Higher Education in 1956 identified the need for the establishment of two additional degree-granting institutions in the State University System, which need has been confirmed by subsequent studies and events; and

WHEREAS the County of Palm Beach and the City of Boca Raton have been instrumental in providing a suitable site for a new university on the populous lower east coast; and

WHEREAS the State Board of Education on May 10, 1960, approved the recommendations of the Board of Control for the establishment of a degree-granting institution at Boca Raton; and

WHEREAS the Board of Control established a Boca Raton Planning Commission under the direction of Dr. A. J. Brumbaugh to evaluate and to refine the tentative plans provided for the Board by Dr. John E. Ivey, Jr.; and

WHEREAS the preliminary planning for which the Commission was responsible has been completed and its report has been submitted to the Board of Control: Therefore be it

RESOLVED, That:

1. The report of the Boca Raton Planning Commission submitted by Dr. A. J. Brumbaugh under the date of June 1, 1961, be accepted and approved by the Board of Control;

2. The Executive Director and the administration of the institution when it is appointed shall consider the report of the Planning Commission to constitute the guidelines within which the new university will be developed unless modifications in the general plan are approved by the Board of Control; and

3. The State Board of Education be advised of this action and be provided with copies of the report of the Planning Commission.

Adopted July 15, 1961
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INTRODUCTION

The wisdom and foresight of the political and educational leaders in Florida are reflected in the steps that have been taken to anticipate the higher education needs of the State. A significant step was the appointment by the Board of Control in 1954 of the Council for the Study of Higher Education in Florida\(^1\) to make a state-wide study of higher education. Another important step was the decision to put into effect the major recommendations of the Council. Two of these recommendations of far-reaching consequence were: that the system of community junior colleges be expanded and that two additional institutions in the university system be established. In justification of these recommendations it was shown that there would be at least a three-fold increase in college enrollments in the State between 1955 and 1970.\(^2\) More recent studies\(^3\) and the 1960 census report amply confirm the need for these additional facilities.

Inasmuch as the University of South Florida at Tampa has already opened its doors, the new university at Boca Raton represents the next step in the development of the university system in accordance with the Council’s recommendation.

At the request of the Board of Control Dr. John E. Ivey, Jr., with the advice of a number of authorities in higher education, drafted a tentative over-all plan for the new university. This tentative plan was approved by the Board of Control in November, 1959, subject to further refinements and revisions.

When it was determined that Dr. Ivey could not give the time needed for this project, Dr. A. J. Brumbaugh was appointed director of a
planning commission with authorization by the Board of Control further to
revise, refine, and develop the plans as well as to make preliminary esti-
mates of space requirements and costs. An advisory committee of nationally
known educators was appointed to assist the Director of the Planning Com-
mission. A number of resource persons also participated in the planning
sessions of the Advisory Committee. This committee held five two-day ses-

For the purpose of studying intensively specific aspects of the
Boca Raton plans a task force was appointed in each of the following areas:
television and other media, testing, student personnel services, and library.

Conferences were also held to consider such subjects as teacher
education, the organization of the sciences and space requirements, the or-
ganization of the humanities, the organization of the social sciences, and
testing.

Highly competent staff members aided in planning and conducting
these various meetings and conferences. The Architect to the Board of
Control and members of his staff assisted in making estimates of space
requirements and costs. Dr. J. Broward Culpepper, Executive Director of
the Board of Control, served as coordinator of the entire project.

The plans and proposals that are presented in the following
sections of this report are the product of the procedures that have been
described.
THE PLACE OF BOCA RATON IN THE UNIVERSITY SYSTEM

The university at Boca Raton is designed to complement the other institutions in the university system by providing an educational program of high quality for qualified students of the State who cannot be accommodated within existing facilities, particularly those in the densely populated lower east coast area. It is not necessary that all state institutions conform to a common pattern to comprise a system of higher education. Quite to the contrary, one of the merits of a state system of higher education is the provision of diversified programs and the development of distinctive characteristics in its institutions. In accordance with this concept the plans for the new university embody a number of distinctive features that will contribute to a program of excellence within the financial resources the State can provide. To achieve excellence the major emphasis will be placed on securing a faculty of outstanding competence, the use of some of the newer techniques whereby faculty resources can be used most effectively, the organization of an educational program that will concentrate on essential elements, and the delegation of a large responsibility to students for their education.
UNIVERSITY-COMMUNITY JUNIOR COLLEGE RELATIONSHIPS

The university will look to the community junior colleges of the State, especially to those in the lower east coast area, to provide the basic education of the freshman and sophomore years. In effect, the lower division program of the university will be decentralized and allocated to the junior colleges, while the upper level, the usual junior and senior years, will be concentrated on the university campus. This cooperative arrangement will be a means of using the State’s educational facilities to a maximum advantage and will enable the university to concentrate its resources on upper-level students who have demonstrated both their competence and their continuing interest in higher education.

The junior colleges are planning their programs within the framework of this relationship and are also participating in planning the upper-level program. Provisions for a continuing interchange of ideas and plans among the several faculties and administrative staffs, the cooperative development and use of measures of achievement, and other forms of cooperation will contribute to a coordinated and continuous program of higher education.
PROGRAM

Purposes. The educational program of a university must be designed to achieve clearly defined objectives. The objectives of the university at Boca Raton, like those of any higher institution must be derived from individual and group needs of students and from the needs of the society in which they will live and work as well-educated citizens. Thus conceived the educational objectives of the new university may be briefly stated as follows:

1. To develop as fully as possible the intellectual power of each student. In working with students toward this objective, it will be the purpose of the university to develop:
   (1) intellectual competence in thinking, reasoning, evaluating;
   (2) the abilities to read, write, speak, watch, listen;
   (3) the motivation and skills for independent learning; and
   (4) abilities and interest in creative expression.

2. To aid students to acquire significant knowledge and the ability to relate it to great issues in a rapidly changing world. Here it will be the aim of the program to acquaint the student with:
   (1) the role of human need and cultural values in environmental change;
   (2) the role of leadership in effecting environmental change;
   (3) the arts and humanities as forces in environmental change;
   (4) the value and use of scientific methods in developing the theory and practice of organization and administration;
   (5) research as a
tool of administration; (6) comparative cultural systems and their effect on administrative techniques in business, government, etc.; and (7) the effect of biological, physical and cultural factors on the individual, community, and larger national and international groupings. This list is not intended to prescribe limits, but rather to suggest emphases pertinent to all parts of the total program.

3. To aid students to acquire the ability to pursue intensively a limited area of knowledge. This will require the ability to employ techniques of criticism and research appropriate to the area of concentration. The full achievement of this objective should give the student a sense of being a scholar in his field of special interest.

4. To aid students to acquire knowledge, abilities, and skills that are relevant to their educational interests and goals. The chief emphasis will be placed on principles and their practical application. This approach is based on an assumption that specific techniques can be acquired best in some form of internship experience. Such practical experiences may be combined with the student's program at Boca Raton or may be postponed until later.

5. To aid students to develop individual value patterns that are basic to sound decisions and actions in a free society. One phase of this objective can be achieved by aiding the student to understand his possible role in a changing world so that he may define realistically his own life goals.
Another phase of this objective relates to the acquisition of discriminating value judgments—critical taste—in literature and the arts. There is an almost overwhelming flood of productions of such varying characteristics and quality as to be utterly confusing to the unsophisticated. If higher education can do nothing more than aid the individual to identify qualities in literature and the arts that justify his appreciation of them, it will have gone beyond what most higher education does.

The kind of value pattern that a student acquires has a special relevance in the area of ethics and religion. Studies of the impact of college and university education on the attitudes and value patterns of students indicate that the total effect is limited or negligible. Moral action should find a justification beyond social sanction.

One of the important outcomes of college experience should be an individual's justification of his standard of ethical behavior.

**Organization.** The achievement of these objectives will depend on the kinds of educational experiences that are provided and on the kind of guidance and direction given by faculty members. The educational program in broad outline, conceived in terms of the objectives just stated, will be as follows:

1. The program of study for each student will be so planned that he will achieve both breadth and depth in his intellectual experience.
It will be assumed that at the time of his admission the student will have acquired a good basic or general education. As a means of extending and reinforcing this basic education there will extend through the upper-level program a series of general education projects dealing with such themes as "great issues" or "great ideas."

Depth will be achieved by a more intensive study in limited fields of knowledge. Throughout the program the interrelatedness of subject matter fields will be stressed and departmentalization will be minimized.

2. For the purpose of stressing the interrelatedness of various subject matter disciplines and reducing the emphasis on departmentalization, related fields of knowledge will be grouped into areas or divisions.

The following scheme of organization is proposed:

(a) Humanities and languages: history, philosophy, classical and modern languages, English, comparative religion, the creative arts—music, drama, art, communication.

(b) Social sciences: sociology and anthropology, political science, psychology, economics, geography.

(c) Natural sciences and mathematics: biology, chemistry, physics, geology, mathematics.

Considerable thought was given to the place of the creative arts. The original tentative plan provided that the creative
arts should be established as a separate division on a par with the humanities and the other divisions. Conferences with authorities on programs of higher education, who have dealt with this problem, have led to the conclusion, however, that a combined humanities--creative arts division is to be preferred. The preponderance of opinion is that if they are separated the humanities tend to become too theoretical and abstract and the creative arts tend to stress techniques to the neglect of general principles and basic background materials.

Communication, as used here, refers to all the methods commonly employed to convey ideas--speaking, listening, writing, and reading. It is not proposed that communication be made a special area of instruction as it commonly is at the lower level but rather that throughout the program all faculty members have a special concern for these several aspects of communications as they are normally involved in discussions, writing papers, attending lectures, and purposeful reading.

The conference groups on both the humanities and the social sciences stressed the importance of giving more emphasis to the cultures and social institutions of the Oriental, African and Latin American peoples. Both groups also considered the possibility of developing a list of basic readings that would indicate the kind of preparation that students should have upon entering the university at Boca Raton.
The conference on the natural sciences and mathematics highly recommended that instruction in the sciences and mathematics be organized and administered as a single program, utilizing common facilities wherever possible, and that no introductory science courses be offered at Boca Raton.

It should be noted that the university at Boca Raton can develop programs which are particularly related to its subtropical climate and its nearness to the hub of Latin American trade and travel.

In general, this plan of organization will provide both for interdisciplinary projects and for specialization. Within each division a number of large problem areas will be identified. A problem area will, in turn, be divided into "work units"—projects designed to aid the student to acquire essential knowledge, understandings, and skills in an area. The work units will be designed to cover the breadth of the student's education but at the same time to develop greater depth than will be characteristic of most lower-level programs.

For the purposes of specialization a student will study a more narrowly defined topic, either interdisciplinary or within a single discipline, which he will pursue intensively, employing appropriate independent study and research techniques.

Arrangements for housing these divisions should (1) facilitate
their functioning as units and (2) make for easy interdisciplinary communication.

As has been indicated by the preceding plan of program organization the primary emphasis will be placed on the arts and sciences. It is recognized, however, that some provision will have to be made for students who have certain clearly defined professional goals or who are planning to enter graduate or professional schools for advanced study. For these students provision will be made for a combination of theory and its application to practical problems. In the initial stages of the university professionally oriented programs will be limited to a few fields in which professional training will be included in the proposed divisional structure. For instance, professional instruction for teachers will be incorporated in the social sciences division at the outset.

Schools in contrast to colleges will emphasize basic knowledge, general principles, and concepts required in designated professional activities with a minimal emphasis on techniques of performance. These institutes will depend on the several subject matter divisions to provide essential basic knowledge and principles. In fact the institutes may become an important means of developing, not only interdisciplinary, but also interdivisional cooperation and coordination. The institutes will supplement the basic divisional subject matter with appropriate professional and practical experience. In some instances students may need more than the usual time to complete degree requirements in these programs.
The great demand for teachers in the Florida schools will justify the establishment of an institute on education or educational development at an early date. Initially this program should be concentrated on the preparation of secondary school teachers. As soon as the staff and resources of the university are adequate the program should be extended to the preparation of elementary teachers. If and when the need is clearly demonstrated, the program should be expanded to include the training of junior college teachers. Other areas which merit consideration may be identified in the Role and Scope Study which is currently being conducted by the staff of the Board of Control in cooperation with the State universities and junior colleges. Among the areas that are likely to be identified for future consideration are governmental development, economic development, and governmental programs. The work units, also organized that a student may progress at a rate consistent with his competence. By means of independent study and comprehensive examinations, he will be able to demonstrate his achievement in fulfillment of degree requirements. Thus some students may complete degree requirements in less than the time generally required while others may need more than the normal time. A student entering the university will participate in an orientation period that may extend over several weeks. During this time he will take predetermined examinations to establish his competencies and his educational status in the university. The examinations will be designed to identify his intellectual interests, his achievements in each of the major
subject matter divisions, his strengths and weaknesses in the basic tools and skills in learning, and other pertinent characteristics. On the basis of his previous record plus the results of these examinations he may find it necessary to improve his educational background or his study skills or he may be certified to have already fulfilled some of the degree requirements.

As a sequel to the orientation activities the student will embark on his program of studies. While there will be no standard and uniform program for all students, the programs of most students will conform in general to the following pattern. Each will belong to three major study groups: one in general education, one in his field of specialization, and one in interdisciplinary work involving special problems and projects. The student will spend not more than ten hours per week in regularly scheduled group sessions, some devoted to lectures and demonstrations, others to discussion. The remainder of his time will be available for independent study, for participation in small informal group meetings for a more intensive discussion of particular problems, and for using aids available in the learning resources center. The success of the student in this type of educational endeavor will depend on the extent to which both students and faculty members understand and accept the responsibilities resting upon them.

Inherent in this plan are several provisions that call for special emphasis. First, as will be noted again later, much of the group instruction will be done by television. It is anticipated that tapes of the lectures will be available to students for re-runs, under specified conditions, either for purposes of review or to facilitate the progress of students who are able to proceed faster than the normally scheduled rate of lectures.

Second, much of the instruction, both lecture and discussion, will be planned and conducted by teaching teams. In many instances the membership
of the teams will be drawn from several disciplines. Not only will it be interdisciplinary within a division, but, not infrequently, it will be interdivisional as well.

Third, a system of comprehensive examinations will be employed to measure student progress and achievement. Experts will cooperate with the faculty to identify the areas to be measured and to construct appropriate measures of achievement. In order that the examination system may operate effectively, the educational objectives of the subject matter areas to be covered must be clearly defined. Furthermore, these objectives must be consonant with the general purposes of the university. In determining the content and scope of the comprehensive examinations consideration will be given to such elements as principles to be mastered; understandings to be achieved; attitudes and value patterns to be acquired; skills to be achieved; and applications to be demonstrated.
STUDENTS

Projected Enrollment. Reliable projections indicate that the university at Boca Raton will enroll 2,000 students when it opens in 1964 and 4,000 in the following year. Assuming that present trends in the growth of Florida's population will continue, the enrollment at Boca Raton will reach 10,000 by 1970 or shortly thereafter.

While the university will be a part of the State system of higher education and may, therefore, be expected to serve a State-wide constituency, by far the largest number of its students, initially at least, will come from the lower east coast area.

Admission. Requirements for admission to the university will include evidence of ability to do upper-level undergraduate university work indicated by an acceptable academic record in a junior college or in the freshman-sophomore years of a degree-granting institution and by the results of general ability and achievement examinations.

Student Life. It is of the utmost importance that the intellectual purposes of the institution permeate the life and atmosphere of the campus. There will be provisions for student government and various kinds of student organizations and activities, but these should reinforce rather than compete with or detract from the primary purpose of educational achievement.

The Task Force on Student Life urged that there be no major inter-institutional athletic competition and that there be no fraternities or sororities. It was pointed out that upper-level students are not greatly interested in the social life characteristic of Greek letter organizations.
On the other hand, they do need small social groups and extra-classroom activities centered in career concerns and intellectual interests. Students should be allowed, however, to decide what organizations and activities they want. This permissive policy is likely to result in the establishment of, as well as the disintegration of, groups with considerable frequency, while there must be clearly defined limits as to what students can do in their extra-class life, within those limits students should be allowed great freedom to form their own groups and to select their leaders.

Of special importance in this connection is the observation of the task force concerning physical education. It proposed that there should be no formal requirement in physical education but that a varied program of out-of-door physical recreational activities should be available, and all students should be encouraged to participate in them so that by the time they have completed degree requirements they will also have acquired recreational skills of continuing utility. Though it was not mentioned by the task force, physical education might be closely coordinated with a health program.

Because a minority of the students in this institution will live in student residences, special consideration must be given to ways of tying commuting students into the sociological structure and the academic life of the university.

The residential student usually has an advantage over the day student in that living in student housing provides continuous association with fellow students and in that he has larger opportunities for participation in informal discussion and for ready access to the library and other learning facilities. Among several measures proposed to equalize these advantages is the provision that private study space, comparable to the private rooms of residential students be available for a substantial part of each day for all
commuting students. These study rooms would be so located that there would be a constant free mingling of residential and commuting students. The location of faculty offices in proximity to these study rooms will encourage a close association of faculty and students. By this means, plus the continuous association of all students in the learning resources center, in student organizations, and in lecture and discussion groups it is hoped to tie commuting students into the life of the university.
FACULTY

Role. The excellence of the educational program at Boca Raton, like that of any university, will depend above all else on the quality of the faculty. The key positions in the faculty must, therefore, be filled by men and women of outstanding competence. To attract this type of person in a highly competitive market both salaries and working conditions must be favorable. The faculty members must be freed from time-consuming details so that they can focus their energy on teaching and creative scholarship. Moreover, the university environment must provide incentives, tools, and time for continuous growth of the faculty. To that end the university will provide the most modern teaching aids and facilities for continuing research by faculty members.

Appointment Policies. The permanent teaching staff will be limited to the number necessary to develop an educational program of the high quality envisioned and to provide for essential continuity. In making permanent appointments care should be taken to insure that they be given to those who will be adaptable to new approaches and sympathetic with the basic philosophy of the program.

Boca Raton is fortunate, however, in that its favorable location will make it attractive to many of the nation's outstanding scholars. Some of these at the peak of their career will welcome the opportunity to spend a period of several months or a year in Florida as visiting professors or lecturers; others, still vigorous but approaching retirement, will likewise be interested in devoting a few years to an institution like the one at Boca Raton. A stimulating academic environment coupled with attractive living
conditions should enable the university to have a constant flow of scholars and public leaders into the faculty year after year.

In addition to the permanent staff four kinds of arrangements may be envisioned: (1) contracts with those who will agree to accept appointments for a trimester each year for an indefinite period; (2) contracts of from one to five years with those who would like to retire early from other positions; (3) year-to-year contracts with individuals who have retired but are able and willing to continue their work; (4) agreements to come to the university campus for special lectures or performances during a specified period of time. Whenever feasible, lectures and performances can be recorded on video tape for future use. Under the foregoing provisions the university can pursue a policy of building a substantial portion of its faculty on a part-time or temporary basis.

A further proposal relating to policies affecting faculty appointments is that all faculty appointments be made without the usual differentiation as to rank. All permanent faculty members will be designated "professors"; those who are on probationary appointments with the possibility of being given permanent status after a trial period of perhaps three years will be designated "instructors." Faculty members on temporary appointments will be designated "visiting professor" or "visiting lecturer" or "artist in residence" as may be appropriate in each case. The reasons for this suggestion are: (1) it disassociates salary from rank, and encourages the administration to fix salaries on the basis of meritorious services; (2) it encourages the prompt recognition of faculty achievement by an increase in salary, rather than by a frequently delayed and purely formal recognition by advancement in rank; (3) it permits greater flexibility in the appointment of the faculty and the assignment of duties; (4) it decreases jealousies due to difference in rank.
Organization. Final responsibility for the development of a plan of faculty organization must be assumed by the administration of the university. The proposed plan of organization of the educational program, however, carries certain implications for the organization of the faculty. For example, the grouping of related disciplines into divisions for the purpose of stressing the interdisciplinary relationships of subject matter suggests that there should be a head, possibly a dean, of each division and that faculty appointments should be by divisions instead of departments. Within a division and even among divisions committees may then be appointed to consider common subject matter interests.

The faculty organization in the institutes is somewhat more problematical. The director of an institute should be responsible to the chief academic administrator of the institution. He will be responsible for determining, with appropriate consultation, the nature of the educational program and also the nature of and provisions for practical experience. Much of the instruction in the institute should be given by faculty members in the several divisions, and all faculty members who teach in the institutes should be given divisional appointments. Under this plan the director of an institute will initiate the appointment of faculty members whose primary function will be to give professional instruction, but the appointment will be made in the appropriate division with the concurrence of the dean of that division.

A distinctive feature of the faculty organization will be teaching teams. Each team will be composed of faculty members—professors, visiting professors or lecturers, and instructors—who are involved in the preparation and presentation of a particular "block" or area of subject matter. Each team will deal with the selection of subject matter, methods of presenting it, the organization of work units, and the general line of discussion that should be
encouraged in the study groups. In the performance of these functions the team will work as a unit. In addition each member of the team will possess special competencies which will qualify him for a particular part in the instructional process. For instance, one may be especially competent as a lecturer, another in the construction of examinations, and another in the organization and conduct of discussion groups. These complementary qualifications will give strength to the teaching team.

Each team will meet frequently for reporting and evaluating, as well as for further planning.

Functions. Some of the functions of the faculty have been implied in the preceding discussion. Briefly stated they are planning, teaching, counseling, evaluating, and engaging in research.

Inasmuch as extensive use will be made of instruction by television, by programmed learning, and other forms of mechanical aids, planning will be a most important function. Instructional materials to be presented by television will have to be selected, organized, and in some instances taped in advance. Likewise, materials for programmed learning must be selected, organized, and put into final form for use in teaching machines. Uppermost in the minds of the faculty engaged in planning must be the objectives to be attained, for it is in terms of objectives that the achievements of students will be measured.

Teaching is inseparably linked with planning. It will involve conducting discussion groups, conducting seminars, lecturing either by television transmission to large groups or directly to smaller groups, and conferring with students engaged in independent study.

Both as an integral part of teaching and as a broader function in his relationship to students the faculty member will assume certain counseling
functions. These will relate primarily to academic difficulties, but they may cover a broad range of questions depending on the student-faculty relationships that are developed.

Two kinds of evaluation functions will be performed by faculty members. One will be the continuing appraisal of the appropriateness of teaching materials and methods; the other will be the measurement of student achievement. The latter function will be performed primarily by the examination system in which faculty members will be actively involved, but other forms of judging achievement may also be developed.

Inherent in the evaluation of the program and of student achievement will be the design and conduct of various kinds of research. It is assumed that there will be an office of institutional research in which will be located primary responsibility for institutional self-studies, but faculty members should also be involved in planning, conducting, and interpreting research that is related to their instructional responsibilities. But beyond this, each faculty member will be encouraged to carry on research in his own field of special interest, and time and facilities will be provided for this purpose. While the primary emphasis of this program will be on high quality teaching, the provision for continuing research activities by faculty members is important both because it contributes to their recognized status as scholars and because it adds to the intellectual atmosphere of the campus. Research productivity should not, however, become the primary criterion for recognition of merit as is so commonly true in higher institutions.

It is obvious that much long-range planning and preparation will be required prior to the opening of the university. Moreover, because of the marked departure of this program from the conventional pattern a period of thorough orientation of faculty members will be necessary. For this reason
the Advisory Committee recommended that the president of the new university and his key personnel be named at the earliest possible date. Only if this is done can a highly competent faculty be appointed soon enough to permit essential orientation and advance planning.
Basic to the operation of the university program will be the learning resources center. Located in this center will be the library, television studios and transmission facilities, audio-visual viewing and listening rooms, a testing and guidance clinic, a reading clinic, teaching machines, language laboratories, and other aids to learning. The function of the learning resources center will be to put at the disposal of students all of the materials and aids to learning that will enable them to achieve maximal results with minimal requirements of faculty direction and supervision. The learning resources center may also be used to supplement the resources of the cooperating junior colleges.

The library collection, which will really be the heart of the learning resources center, must be built up by a process of careful selection of books and materials of high quality, appropriate to the objectives of the educational program, and of current usefulness. The core collection of books selected on the bases of these criteria should have 20,000-25,000 volumes by 1964 and should be built up at the rate of 20,000-25,000 volumes annually until the total collection reaches about 150,000 volumes. At that time further determination should be made of the necessary size of the collection. Once the optimum size and variety are reached unused materials should be replaced or exchanged at about the same rate as that of acquisition of new, current, and appropriate materials.

The task force on the library proposed the establishment of a central depository of rarely used library materials for all institutions of
higher learning in Florida together with an inter-library exchange and loan system.

Evaluation of all aspects of the university program will be one important responsibility of the learning resources center. The evaluation of student progress and student achievement in relation to indices of ability will be a major contribution to the educational development of students. It will also throw light on the effectiveness of teaching processes and of independent learning.

Reference has already been made to the functions of faculty members as counselors to students. Their competence in this respect can be greatly enhanced through the facilities of the learning resources center. The faculty can be informed about the data available on each student and on the uses that may be made of the data. They can participate in clinical discussion of the learning and adjustment problems of students, and by this process they can learn to identify those students whose needs for counsel go beyond their own competencies as counselors.

It seems quite clear that the emphasis that will be placed on independent study, on televised lectures, and on the use by students of various aids to learning will give rise to the need for more than the usual amount of counsel and guidance. The counsel that faculty members will normally give will have to be supplemented by more professional assistance provided in the learning resources center. This will be especially true during the initial stages of the student's work in the university, when he may be experiencing "transfer shock." The professional counselors should be broad enough in training and perspective to deal with students having diverse interests and problems. They should not be expected to give highly specialized services such as those provided by psychiatry or medicine, but they should be able to
recognize the need for such services and to arrange for students to utilize
them.

As a means of conserving the time of faculty and professional
counselors, much of the routine kind of counseling involved in planning stu-
dent programs and even in aiding students in making career choices should be
done by machines. For example, student test scores, previous records, and
other data can be coded and related to the educational programs so that pro-
grams for most students can be determined with a minimum of counseling ser-
vices. Likewise, by automation students with little or no aid from counselors
should be able to use their profile data to check the consistency of their
abilities and achievements with their educational and career choices.

These procedures supplemented by group counseling should enable the
university to provide high quality personnel services with a limited, but
highly competent professional staff.

In order to understand as fully as possible the type of student who
is likely to enroll in the university at Boca Raton, a special study of the
characteristics of students in the junior colleges and of their future educa-
tional plans is currently under way. The data derived from this study will
reveal student interests and goals which will have implications for program
planning and for the counseling services; it will give an idea of the finan-
cial status of students and of the probable need for various kinds of finan-
cial aid; and it will indicate the number and type of students who may be
expected to request dormitory space.
SPACE NEEDS AND DESIGN

Estimates of space requirements for the various functions of the university to accommodate an enrollment of 4,000 students in the second year of operation and 10,000 by 1970 were made by the staff of the Planning Commission with the assistance of consultants and task forces.

The architects on the staff of the Board of Control developed land-use plans for the 1,000-acre site at Boca Raton; translated the estimated space requirements into plans for buildings and facilities; and from the plans prepared cost estimates for the Board of Control. These plans have been reviewed by the Advisory Committee and by specialists and consultants in the specific functional fields these buildings are designed to serve.

The plans in detail are available in a brochure that has been published by the Architect to the Board of Control in cooperation with the Planning Commission.
ORGANIZATION

At this point it is premature to undertake to outline in detail a plan of administrative organization for the university. It may be relevant, however, to suggest certain principles and guidelines to be observed in evolving an administrative structure.

The administrative organization must be derived from the program rather than controlling the program pattern. Therefore, the administrative structure must be flexible so the program may be responsive to changes indicated by experience within the institution or by the demands of a changing world.

Administrative functions must be clearly defined and definitely allocated to designated administrative officers or to the faculty.

Responsibility and authority must go hand in hand. Accordingly, requisite authority should accompany functions allocated to administrative officers.

One of the greatest barriers to effective administration is the lack of established channels of communication both within the institution and in its external relationships. Within the institution there should be well-defined provisions for communication among administrative officers, among faculty members, and for communication of administrators with faculty and students or vice versa. The administrative organization of divisions and institutes should provide free and easy interchange among these educational sectors thereby making for mutual understanding and for institutional unity. Likewise, there should be maintained a well-defined avenue of communication.
between the institution and the Board of Control just as there should be be-
tween the Board of Control and the Board of Education and the State Legisla-
ture.

A careful analysis of the multiple administrative responsibilities
involved in getting the university under way by 1964 indicates that during the
1961-63 biennium a number of key staff and faculty appointments must be made.
These appointments are:

President
Dean of the University
Interinstitutional Coordinator
Business Manager
Librarian
Director of Admissions and Student Records
Director of the Learning Resources Center
Director of Television Facilities
Director of Testing and Evaluation
Director of Physical Facilities
Head of the Humanities Division
Head of the Social Sciences Division
Head of the Natural Sciences Division
Two faculty members in each division
Technical, secretarial, and clerical personnel

It is recognized that varying amounts of time will be required to
find qualified personnel for these positions and to negotiate contracts with
them. Unless most, if not all, of these appointments are made by the end of
the next fiscal biennium (1961-62) it will be difficult indeed to launch the
program in 1964.

It seems essential that one of the first officials to be appointed
by the president at the Boca Raton institution should be the interinstitu-
tional coordinator, who will be concerned with interinstitutional relation-
ships, especially with the cooperating junior colleges. He should have
responsibility and status at least comparable to the dean of a college in
the usual university context. While his primary relationships may be with
the junior colleges, the uniqueness of this institution may also require him
to be responsible for maintaining liaison with other institutions, especially schools in which the graduates of Boca Raton might wish to continue their education.

It also seems desirable that there be a junior college liaison council composed of representatives of the junior colleges in this immediate area and of the university.

Likewise, there should be an arrangement to facilitate joint planning among high schools, junior colleges, and the university. The uniqueness of the program planned at Boca Raton makes such an arrangement essential. A close-working, cooperative relationship with junior colleges and with high schools is important if students are to come to the university with the preparation and attitudes necessary for a maximum achievement in the university program.

In developing these relationships, special consideration should be given to the joint utilization of the learning resources center, television production center, and television courses; to testing and guidance; to the matter of accommodating gifted students; to providing by examination for fulfillment of or exemption from certain requirements; and to the development and evaluation of general matters of articulation, including a workable method of faculty exchange.

General Observations. There is no question about the merits of the Boca Raton program in the minds of those who have been most directly involved in developing it. But, no matter how meritorious the program, it cannot be expected to succeed merely on the basis of its merits. Because of its departure from the conventional, strong leadership and a dedicated staff will be required to assure its success. This means, first of all, that the president of the university and his chief administrative officers must be whole-
heartedly in sympathy with the philosophy and character of the program that has been developed. Otherwise, the administration may reshape the plans of the institution thereby negating many of the most important ideas embodied in these plans.

A second important consideration will be the competence and attitude of the faculty. No graduate school in the nation prepares the kind of college teachers that this program demands. It will be necessary, therefore, for the administration to find open-minded, imaginative faculty personnel who are sympathetic to new ideas and who are venturesome enough to dedicate their professional future to putting new ideas into effect. It may be necessary for the administration to provide a program of orientation and preparation for participation in the program which in a condensed form will repeat the experiences of those who developed the plan.

The new university at Boca Raton is committed to the full use of television for instructional purposes. In order for this procedure to be effective the full and enthusiastic cooperation of the faculty will be required. It must be noted, however, that instruction by television is not always an inexpensive operation. Experience in one institution where it is employed indicates that classes must have an enrollment of at least 200 before the average cost per student drops below corresponding costs by conventional methods of teaching. Therefore, it appears that any savings that may be effected will depend on the size of the television lecture groups.

These factors suggest that planning by the administration and faculty must begin far enough in advance to be certain that the program and procedures are fully developed when students are admitted.

It will also be important, in fact urgent, that other higher institutions, the junior colleges on the one hand and degree-granting colleges and
universities on the other hand, be fully informed about the program and that their cooperation in supporting it be enlisted. The junior colleges in the lower east coast area are currently most cooperative, even excited, about this venture and their part in it. Plans have already been suggested for continuing relationships that will perpetuate this cooperative spirit.

The relationship of the new university to other institutions in the university system and other degree-granting colleges and universities may involve problems of quite a different nature. These will be of minor consequence within the university system because of the fact that representatives of the University of Florida, the Florida State University, and the University of South Florida have had an active part in drafting the plans for the new university. It is more likely that problems will arise when graduates transfer to colleges and universities which are outside of the university system and which have not been directly involved in the development of the Boca Raton plans. Some of these problems may well be anticipated by conferences with administrative and key faculty personnel of the institutions directly concerned and by the maintenance of a close continuing liaison with them.

Another situation to be anticipated is the "shock effect" that students will experience on coming into this program. Even though they will have had the equivalent of two years of previous college experience many of them still will not be prepared for the degree of independent responsibility they will be expected to assume. The suggested liaison with the junior colleges may open the way to minimizing this experience for junior college transfers, but it should be reemphasized that it will be necessary to provide for thorough orientation and adequate counseling of entering students, especially those coming from institutions other than the cooperating junior colleges.

Because of the special characteristics of this institution it will
be necessary to develop a widespread public understanding of its program. High school principals and high school counselors should be briefed on the program through conferences on the campus and in the high schools. Parents of students or of potential students and citizens generally should be given full and accurate information through the media of public information and community or campus meetings. The programs and functions of the Boca Raton institution, along with those of the other State universities should be considered from time to time by State officials and members of the Legislature in conferences and workshops held periodically under the auspices of the Board of Control.
A MORE EFFECTIVE PROGRAM FOR THE MONEY SPENT

The impact of the plan envisioned in this report should be to provide a more effective academic program for the money spent. As compared with conventional programs, it will reduce:

(a) the number of subject matter units in the university curriculum,
(b) the emphasis on highly specialized vocational preparation,
(c) the number of hours students spend in formal class contact with the faculty,
(d) the time required by students to get a degree, especially the exceptionally able students,
(e) the time required of the faculty for repetitious lecturing and demonstration,
(f) the time spent by faculty members on tedious nonacademic duties,
(g) the emphasis on faculty rank,
(h) the rivalries and jealousies among faculty members that arise from strong departmental loyalties.

Compared with conventional programs, it will increase:

(a) the initial time faculty members will devote to development of educational objectives, subject matter blocks, and learning aids,
(b) the time faculty members will give to evaluation of student progress,
(c) the objectivity and validity of measures of achievement,
(d) the time that faculty members may devote to their own research,
(e) the facilities and time required for student counseling and
guidance,
(f) the facilities and personnel required to help the students improve their learning skills,
(g) the range of information available about each student,
(h) the university investment in the development of learning aids and in their operation in the academic program,
(i) the number of students per faculty member,
(j) the annual output of graduates,
(k) the utilization of space for instruction, study, and research,
(l) the continuous evaluation of the effectiveness of the educational program,
(m) the sense of unity in the student body through provisions for continuous contacts between commuting and residential students,
(n) the emphasis on articulation between the university and the junior colleges and secondary schools of the area.
FOOTNOTES

1 John E. Ivey, Jr., Chairman, A. J. Brumbaugh, Earl J. McGrath, Floyd W. Reeves, John Dale Russell.


4 Advisory Committee:

Gordon W. Blackwell, President, Florida State University, (served prior to his election as president of Florida State University)

Doak S. Campbell, President Emeritus, Florida State University

C. Ray Carpenter, Director, Division of Academic Research and Services, Pennsylvania State University

Henry Chauncey, President, Educational Testing Service

John E. Ivey, Jr., President, Midwest Program on Airborne Television Instruction

Howard Phillips, President, Alabama College

O. Meredith Wilson, President, University of Minnesota

Resource Persons:

Kenneth Christiansen, Consultant, Florida ETV Curricula Task Force, and Director, Educational TV, University of Florida

John K. Folger, Associate Director, Southern Regional Education Board

Donald J. Hart, Dean, College of Business Administration, University of Florida

Lewis B. Mayhew, Director, Evaluation and Institutional Research, University of South Florida

W. Hugh Stickler, Director, Institutional Research and Service, Florida State University

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James L. Wattenbarger, Director, Division of Community Junior Colleges, State Department of Education (Florida)

Kenneth R. Williams, President, Florida Association of Public Junior Colleges, and President, Dade County Junior College

Task Force on Television and Other Media:

C. Ray Carpenter, Chairman

John Brugger, Chief Engineer, Washington County Closed-Circuit Television, Hagerstown (Maryland) Board of Education

Kenneth Christiansen

Task Force on Testing:

Henry Chauncey, Chairman

Russell P. Kropp, Associate Professor, School of Education, Florida State University

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John V. McQuitty, University Examiner, University of Florida

Task Force on Student Personnel Services:

Lewis B. Mayhew, Chairman

Lucille Allen, Educational Consultant, Austin College

Paul Anderson, Vice President, Temple University

Daniel D. Feder, Dean of Students, University of Denver

Melvene Hardee, Professor, Higher Education, Florida State University

George Stern, Associate Professor of Psychology, Syracuse University

Kenneth Wilson, Research Associate, Southern Regional Education Board

Task Force on the Library

C. Ray Carpenter, Chairman

Kenneth Christiansen

Elliott Hardaway, Director of Libraries, University of South Florida

William G. Harkins, Associate Director, University Libraries, University of Florida
N. Orwin Rush, Director of Libraries, Florida State University

Seymour Smith, President, Stephens College

Reports of meetings of the task forces and conference groups are on file in the office of the Board of Control.

Mrs. Marion F. Buford, Research Assistant

Lee G. Henderson, Associate Director (part-time) Assistant Director, Division of Community Junior Colleges, State Department of Education (Florida)

Eugene S. Lawler, Associate Director (temporary, part-time) Professor of Education, Florida State University

Charles J. Turck, Associate Director (temporary) President Emeritus, Macalester College

Myron R. Blea, Educational and Research Officer, Board of Control, served in a liaison capacity.

Forrest M. Kelley, Jr., Architect; Edward M. Fearney, Assistant Architect; Robert P. Owens, Administrative Assistant; R. W. Munson, Jr.

Pennsylvania State University had this experience. See Teaching by Television, A Report from the Ford Foundation and the Fund for the Advancement of Education, May 1959, p. 27.