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ABSTRACT
              Research for administrative decisionmaking,
long-range institutional planning, goal determination, understanding
campus influences upon students, and other aspects of higher
education is of relatively recent origin. This document presents
discussions of the meaning and nature of administrative research; the
administrative research tradition in black colleges and universities;
institutional research needs in black colleges and universities; and
training and research needs of black administrators. Four
recommendations for the future at black colleges and universities
are: (1) those interested or engaged in administration in black
institutions should become acquainted with research reports and
literature dealing with black institutions and black students; (2)
promising young faculty members should be recruited and conditions
should be established under which they can become scientific
revolutionaries; (3) black colleges should establish some kind of
institutional research office or program as soon as possible; and (4)
there should be undertaken a comprehensive improvement program for
black administrators. (HS)

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RESEARCH IN BLACK COLLEGES AND UNIVERSITIES: ADMINISTRATIVE PERSPECTIVES,

PROSPECTIVES AND CHALLENGES ⌊ 1971 ⌉

Long before the introduction into the language of higher education of accountability, relevance, think-tank, micro-teaching, computer technology, systems management, cluster colleges, open university and other new words and phases; long before our almost total occupation with problems of student dissent, defiance, unrest and revolution; long before our over-whelming concern over legislative demands for economy, campus anti-intellectualism and public insistence on quality education; long before the current debates over the proper functions of higher education, disputes about governance and doubts concerning financing; long before the emergence of such societal problems as "drug addiction," poverty and other problems of the innercity there has existed a research tradition in institutions of higher education.

The early years of the twentieth century firmly established research as a major function of agricultural experimental stations, and of research-oriented faculty members. Stimulated by recent national and worldwide developments in such areas as space exploration, military preparedness, environmental pollution, disease prevention and control, computer techonology, transportation and communication and the formulation of governmental social and economic policy, "research" has become one of the most essential activities in industry, in government, and in higher education. However, of relatively recent origin is the notion of

research for purposes of administrative decision-making, for long-range institutional planning, for goal determination, for understanding campus influences upon students and other aspects of higher education.

THE MEANING AND NATURE OF ADMINISTRATIVE RESEARCH

The Concept of Institutional Research

Research for administrative purposes is usually referred to as "institutional research" by Dressel, Stecklein, Russell, Folger, Mayhew and others.[1] "Evaluative research," and "self study" are additional classifications given to research activities in higher education.

The popular labels "basic research," "applied research," and "action research," are not generally used in discussions of institutional research. For that reason many self studies and other investigations do not meet the criteria and test of research.[2]

In considering institutional research, Russell has observed that "it is helpful to use the customary distinction between "basic" and "applied research," pointing out that while institutional research is essentially "applied research" it should possess all the characteristics and certain elements of "basic research."[3]

For many years such institutions as the University of Minnesota, Michigan State University, The University of Colorado and Stephens College carried on research activities and programs that might rightfully be called institutional research. However, it appears that the concept of institutional research as presently conceived, was not formalized until about 1960. Among the first to attempt a formal definition of the

concept was Brumbaugh who defines it as "research designed to improve institutions of higher learning." Stickler, another of the early pioneers in the field of institutional research defines it as follows:

> "Institutional research refers to research which is directed toward providing data useful or necessary in the making of intelligent administrative decisions and/or for the successful operation, maintenance, and/or improvement of a given institution of higher education. It includes the collection and analysis of data used in appraising the environment or "setting" in which the institution operates, in preparing the budget, in planning new buildings, in assigning space in existing buildings, in determining faculty loads, in admitting students in individualizing instruction, in planning the educational program, in keeping abreast of student progress, and the like. It is needed to facilitate efficient operation but it is also needed to promote qualitative improvements.[4]

From what we know about the nature of the kinds of questions to which answers must be found, the kinds of decisions administrators are called upon to make, and the need for better predictive, directive and illuminative information, it may be concluded that "institutional research" is essentially a method of disciplined inquiry.

Institutional research is not the same as the "scientific method." However, it makes use of the deductive-inductive process as much as possible so that obtained results may be dependable and widely applied.

John Dewey has suggested a pattern that is helpful in identifying the elements of a deductive-inductive process:

1. Identification and definition of the problem

2. Formulation of an hypothesis - a hunch, an assumption, or an intelligent guess

3. Collection, organization, and analysis of data

4. Formulation of conclusions

5. Verification, rejection, or modification of the hypothesis by the test of its consequences in a specific situation.[5]

The more characteristics that institutional research possesses such as the above, the more it contributes to the category of research which is called "basic research." While institutional research is essentially "applied research" it uses as far as possible, the methods of science to produce information needed to make improvements in institutional planning, decision-making, in organization and structure, in budget-making, in admissions policies and practices, the application of technology, management systems development, understanding students, curriculum improvement, classroom interaction between students, and testing the feasibility of innovative programs. Institutional research is research for goal determination, and campus improvement for effecting change.

Self-Study as a Form of Institutional Research

On occasion, one is called upon to define or clarify for himself or others a word that has been so basic to his personal understanding and inquiry that to pause and consider the "what" or "why" of it seems at first to be redundant. Such is the case regarding "self-study."

There is not a college or university in the country that has not at some time invested staff time and money in some sort of self-study. If these self-studies have not always been as useful as hoped,

it is partly because the data they have collected are not wholly reliable and do not allow comparisons with similar data from other institutions. Self-studies are usually characterized by lack of over-all design, poor questionnaire construction, and represent only a "self survey" for purposes of making a report.[6]

If properly carried out, a self-study represents a carefully directed, systematic and intense process which is characterized by the scientific gathering of data, and the analysis and interpretation of the data in relation to the objectives of the institution.

Self-study is more than a "self survey," more than the simple gathering of information and concluding something about it. "Self-study" is the total process by which an institution seeks to improve its educational effectiveness by qualitatively reassessing its philosophy, goals and objectives, appraising its educational program, examining critically the structure of its organization, judging the quality and effectiveness of its teaching, evaluating its guidance and counseling services to students, determining the adequacy of its plant and financial resources, examining the preparation of its faculty, ascertaining the appropriateness and quality of its library materials, resources and services, and the extension of its services to the community.

In relating institutional research and self study, Rourke and Brooks have observed that. . ."institutional research is a variegated form of organizational self-study designed to help colleges and universities gather an expanding range of information about their own

internal operations and the effectiveness with which they are using their resources. By collecting such data, institutions hope to make informal judgments instead of guessing or relying on the intuitions of the administrator in framing decisions on university policy."[7]

THE ADMINISTRATIVE RESEARCH TRADITION IN BLACK COLLEGES AND UNIVERSITIES

Contrary to popular opinion, research in Black colleges and universities is part of the heritage of American higher education.

Administrators in black colleges and universities have long been interested in studying their problem. In the 1956 annual meeting of the Commission on Institutions of Higher Education of the Association of Colleges and Secondary School for Negroes decided to undertake a study of the community life of Negro youth. A committee was appointed consisting of Dean H. Liston of Knoxville College as Chairman, Dean A. A. Taylor of Fisk University, Registrar J. P. Whittaker of Atlanta University, and Dr. Charles S. Johnson of Fisk University as research adviser.[8]

The research activities of the Association were broadened during the next three years, as is evidenced by the following excerpts from the Committee's report.

> "When we attempt to single out special problems affecting the higher education of Negroes we are over-whelmed with their multiplicity. Many are peculiar to Negro colleges, due to circumstances, which are well known. Each year we hope to pick out a limited number for study and investigation. The findings and recommendations will be presented and discussed as a part of our annual report."[9]

The following problems were to be studied and reported on at the meeting in 1940: (1) A study of the admission policies of Negro colleges, under the direction of Dr. George Adrian Kuyper, School of Education, Hampton Institute; (2) A study of alumni programs to determine what service the college owes to the alumni and to find out what the common practices are in American colleges in general and to offer suggestions as to how Negro colleges may make their alumni programs more effective, under the direction of Mr. A. L. Kidd, Registrar, Florida A & M College; (3) A study of the internal administration of Negro colleges to find out what officials constitute the administrative staff in Negro colleges, the titles given to each, the duties of these officials, the responsibility entrusted to each, and just how they are related one to the other. This study will be headed by Dr. W. T. B. Williams, Vice President, Tuskegee Institute; and (4) A study of budgetary procedure under the direction of Mr. T. E. McKinney, Dean, Johnson C. Smith University. The purpose of this study was to determine what was regarded as the best budgetary procedures with special attention to methods used in the preparation and control of the budget.

The study on admissions was to include an analysis of methods of recruitment of students, the use of entrance and placement examinations, and the development of remedial work on the basis of scores in entrance and placement examinations--that is, a study of admissions and the effect of admission policies upon curricular.[10]

In 1947 the Research Committee of the Association made the following report:

During the year just closed, the Commission on Higher Institutions sponsored a survey of guidance procedures in colleges holding membership in this Association. Dr. A. G. MacKlin, a High School Counselor for the state of Virginia, directed the survey. Twenty-four of 52 colleges responded in time to have results tabulated for this meeting. From these, Dr. MacKlin made a partial report upon the basis of which a panel discussion was conducted, a stenographic account of which appears below:

The Commission recommends the continuation of the study for the following reasons:

1. To allow time for collecting data from colleges that have not responded.

2. To allow time for a fuller summarization of data so as to include in the final write-up some specific proposals and, perhaps, some examples of significant guidance procedures at various colleges.

3. To allow time for securing significant data from psychological and sociological surveys which have value in improving the total college that is a member of the Association may secure one or more copies of it.[11]

It appears that the National Association of Collegiate Deans and Registrars in Negro schools approached its consideration of the problem facing Negro colleges and universities by inviting individuals to make research presentations at their annual meetings.[12]

There is some evidence that the research emphasis of the Association was not acceptable to all of its members. The 1939 Recommendations Committee made the following report:

"We recommend a more practical approach to the problems actually confronted by Deans and Registrars in Negro Schools. . .

The Committee is of the opinion that our programs are too academic in nature; that they emphasize too much questions about which there is a wide divergence of opinion. These arises the danger that the annual meetings of the Association may resolve into debating tournaments where only a few may monopolize the time by putting forward their pet educational theories or ideas. Every dean and registrar has had some course in Education. If not, he certainly has read enough books and continues to read in that field to give him an appreciable knowledge of modern and current trends and practices. We recommend that the annual meetings of the Association shall be built around the clinic idea. The Committee does not wish to be placed on record as favoring the discontinuance of the research effort of members of the Association, who through the years have enriched the programs of the Association.[13]

It appears that this report led to the establishment of a Research Committee in 1940. Subsequent proceedings of the Association indicate that the Committees on Research continued to function and that they sponsored several important investigations.[14]

The adoption of workshop and some type of activities, discussion and forum-question box programs also resulted from this recommendation as the following statement from the foreword of the first workshop report indicates:

"At the annual meeting of the National Association of Deans and Registrars held in Montgomery, Alabama in 1949, F. D. Wilkinson, Registrar of Howard University, by vote of the Association, was requested to conduct a workshop at Howard University for registrars before the next annual meeting of the Association in 1951. Shortly thereafter, the Executive Committee of the Association directed that this Workshop should also include the deans."[15]

The first workshop was held on November 2-3, 1950 with 164 representatives of colleges and universities, industry and U. S. Office of Education in attendance. Commenting on the success of this

initial Workshop effort, Wilkinson states:

> "This first Workshop is the culmination of a dream the National Association of Deans and Registrars have entertained over a period of a quarter of a century. The results therefrom and future workshops should illustrate specifically the historic function of the Association, translated into concrete service it can render to the Office of the dean and registrar, to the end that the schools they represent may be benefited therefrom in a more meaningful manner."[16]

In subsequent years, clinics and workshop sessions were held in connection with the annual meetings.[17]

There is considerable evidence that research activities and programs have been encouraged and supported by the respective administrators at several institutions. Notable examples of West Virginia State College, Atlanta University, Fisk University, Prairie View State College, and Tuskegee Institute.[18] However, since most of this research would not be for institutional or for administrative purposes, I shall leave to my colleagues the treatment of research at these institutions.

INSTITUTIONAL RESEARCH NEEDS IN BLACK COLLEGES AND UNIVERSITIES

Elmer West, Director of Statistical Information and Research of the American Council on Education has observed that "research is needed in practically every area of higher education." The argument of this paper is that the same is true about black colleges and universities. Some of the needs for institutional research in black colleges and universities stems in part from the 142 recommendations found in surveys and other research literature dealing with black colleges and universities.[19]

As to the agenda, the field is wide. Space studies, cost studies,

alumni studies, resume's of grading curves, analyses of test
data, predictive studies, and comparison of student performances
on standardized tests are some which can bear immediate fruit.
Needed also, are investigations of faculty perceptions of their place
and role in administration and governance. But more importantly,
there are other areas and problems to which black institutions through
research should address themselves.

Internal Organization

Several decades of research have revealed serious deficiencies
in the formal and static kinds of obsolete organizational structures
and institutional bureaucracy that for so long have characterized
black colleges and universities.

In view of today's pressures for increase of both quantity and
quality in higher education, there is a growing need for black
institutions to examine critically their present organization for
internal administration. Studies are needed relating to cultural
values, institutional roles, and interpersonal perceptions in
administration. We need to know more about the concept of 'disposable
organizations' as an effective antidote to traditional conformity and
as a means of revitalizing and making more flexible the task of
management. The relationship of administration in black institutions
to political and social pressures should be analyzed. We need to know
what are the most important parameters to be controlled in instituting
changes in internal structure and organization.[20]

Goals and Objectives

Black colleges and universities need clear and explicit goals and objectives and statements to provide necessary focus and direction.

One noticeable trend among researchers looking at institutional goals and objectives over the past two years is the use of the Delphi method as a research technique. Delphi was developed about twenty years ago by the Rand Corporation, and has been used by the National Laboratory for Higher Education, Educational Testing Services and a number of institutions seeking to clarify their goals and to rethink their fundamental purposes.

It is no easy task to reach agreement on institutional goals and the priorities among them. But black colleges and universities undoubtedly would be aided in this task by a lot of research which has yet to be done.

One answer to the problems being experienced by Negro colleges and universities is to develop clearer statements of goals, measurable objectives derived from these goals and an administrative style that emphasizes management to attain these objectives.[21]

Long-Range Planning

Research for long-range planning is crucial for black institutions if they are seriously concerned with establishing priorities and with allocating resources for survival.

The planning process in which Negro institutions should engage can be described as research goal setting, and plan formulation. The

social-economic approach should dominate our considerations of the future. This should involve investigations of manpower needs, occupational changes, population shift, and economic trends and developments.

Long-range planning is uncommon in many black colleges and universities. Few can boast organizations and procedures adequate for the advanced planning of their needs and resources. Many self-studies scarcely mention long-range planning mechanisms.[22]

Decision-Making

For too long black colleges and universities have attempted to answer questions and to find solutions to their problems on the basis of (1) sheer logic from a stated or assumed premise, (2) hunch or insight based upon fugitive information or evidence, (3) through discussions of committees and informal groups, (4) by single officials on the basis of accumulated data, and (5) by faculty groups which in the process of collecting or discussing data reach insights based upon, but transcending data. Based on the author's observations and experience, this observation by Henderson also applies to black colleges and universities. Committees, the primary instrument of faculty participation in decision making are generally ineffective in spite of all we have learned in recent years about group dynamics. He also states that, "Decision-making in colleges and universities is complex and antiquated". . . .Decision-making is antiquated because the men involved have little training for administration and are relatively unacquainted with the advances in administrative science in

other fields. . .The majority of books on college administration
are anecdotal. . .they seldom contain analyses of administrative
organization, processes, and behavior based upon empirical studies. . .
Decision-making in the colleges would benefit from the findings
of research relating to administration and to group behaviors and
processes.[23]

Financial Need Documentation

Public officials and foundations are beginning to ask for
better reasons why continued and growing support should be given to
black colleges and universities.

In the past, documentation of requests for increased support
have been long on the dilemma of segregation, the pathological results
of a caste system, isolation from the mainstream and student problems
and needs resulting from academic underachievement and cultural
deficiencies. For the most part they have been based on a few
statistics or simple institutional studies, but short on unique program
planning, established priorities and realistic goals based on careful
research. Such justifications as used in the past which can be challenged
easily and which do not convince public or foundation officials of
demonstrated and proven need will no longer suffice. This is why, if
we are not extremely carefully, "accountability" and "PPBS" will prove
the un-doing to most black colleges and universities. On the other hand,
PPBS may prove just what black institutions need to achieve a higher
level of planning and decision making.[24]

Black colleges are now more dependent upon corporate and foundation funds than are white colleges.

Just as important as knowing the foundation is the matter of _knowing precisely institutional needs_. Adopting a broader and more carefully articulated set of concerns for institutional research may be the only way that administrators can truly know their institution's precise needs.

Research activities do not now affect in any major direct sense the financing of black colleges and universities. But research can play a powerful role, a dominant one, in financing their activities.

"Research influences the intellectual climate of undergraduate and graduate education, the character of the physical facilities, the size, the composition, and ambitions of the faculty, the nature of instruction, the aspirations of the students; it is critical to the financing of all other educational activities."[25]

Governance and Management

Every major survey has called attention to the need to improve governance and management in black colleges and universities. These survey reports have pointed out that administrative structures and practices of many black institutions need to become more democratic and more efficient; that there must be a broader base for decision-making, improvement of communication within the campus community and that black college presidents need to delegate increasing responsibilities to other administrators, to faculty and to students and to establish systematic procedures for doing so.

We need some very useful new perspectives on information systems and systems analysis on how to apply effectively systems, and concepts

to management problems in black colleges and universities. The
decisional techniques associated with the systems approach should
be implemented to effectively humanize learning and to efficiently
improve educational leadership and management.

The possibility of such experimental models as a systems
approach to full institutional organization have been reasonably
established through research, but research is needed to tell us why
these promising ideas of reform have not been more generally accepted.
Better understanding is needed of the levels of administration, the
interaction between administrators, and of the communication patterns
within a social systems framework. We need to examine the factors
responsible for the ineffective human relations and interpersonal
relations which characterize governance in so many of our black
institutions.

Considerable strengthening of management is needed in black
colleges and universities if they are to develop the capacity to
change to be relevant, purposeful, and meaningful for the academic
community and for society as a whole.

IMPROVEMENT OF SELF-STUDIES

Black colleges and universities need to develop new and broader
concepts of institutional self evaluation. The variety of current
procedures and the inadequacy of many self studies of black institutions
suggest that improvement in general theory, design and methodology
is needed.

The respecification of purposes and goals that many of us have done in self-studies are probably more useful as general background, mental exercise, or institutional introspective tools according to Davis.[26]

Stein has pointed out that the conventional criteria for evaluating colleges and universities which emphasize morphological characteristics, and which rely heavily on statistical appraisals of easily enumerated data on plant, income, faculty degrees, teaching loads, etc. is not enough. He indicates that we need to develop "tools for describing the characteristics of students and college environments in terms of comparable psychological dimensions."[27] Furthermore, there is the possibility that emphasis on such characteristics by use of poorly designed questionnaires sent to improperly selected faculty samples may have resulted in a tendency to confuse quantity with quality.

Research on Students

Black institutions in particular should engage in research to test the basic assumptions, issue and theories concerning "open admissions."

Etzioni has observed that "despite its significance, open admissions and its effects have been little studied; the program itself is poorly understood, and many of the crucial questions about its far reaching implications have not yet been studied."[28]

Further research is needed also on the effectiveness of recruitment procedures, the relationship between recruitment practices and

and admissions policies. Needed also is a more systematic
inquiry into the student selection process itself, and the manner
and means of making policies and decisions regarding admissions.[29]

There is a great need to know more about the literature and
research on predicting college success, compensatory education
programs, specialized personnel and counseling services, and the
survival of disadvantaged students in college. There is need to
study the "rejects", the dismissed, and the dropouts from our
colleges and universities.

In view of the possibility that a slowing or halting of enrollment
growth could adversely affect some black institutions, research is
needed to determine the reasons for the shift of black students to
institutions outside of the South. Estimates compiled by the Southern
Regional Education Board from the U. S. Office for Civil Rights data
revealed that during 1970 forty seven (47) per cent of black under-
graduate students attended colleges and universities in the South,
while 53 per cent went to institutions outside the region.[30]

There is great needs for increased research about the
psychological, sociological, personal, social and academic problems of
black students. So many of our student personnel programs and
counseling center activities are largely of the paper variety, and
are staffed by persons not qualified by experience and training to
deal with the complex problems being experienced by black students.

To effectively counsel black students in these times requires a
great deal of work in psychology coupled with sociology, social work, basic

economic and some growth and development, and what is the nature
and extent of their counseling needs.

In citing the need of institutional research in black colleges
and universities to improve internal organization, management and
governance; long-range planning and decision-making; financial need
documentation; goals and objectives; self-studies, and our knowledge
about students, it is not intended that such a listing should be
considered inclusive of institutional research needs in black
colleges and universities.

This paper on administrative research is not the vehicle for
discussing a number of other important research needs in black
colleges and universities. While certain needs growing out of these
and other areas might properly be considered under the heading of
"institutional research," there also are many other areas to which my
colleagues have, or perhaps shall address themselves. At the risk
of encroaching upon their territory, let me mention some of them.

As operating cost increase, we need to know more about the
ability to pay of the parents of prospective students. It is clear
that such a study can be used to shed light on which students should
or should not be provided financial aid.

We need research on the meaning of quality, and on the matching
of quality in students with quality in departments and institutions.
We need research on the time-centerd concept which seems to equate
four-years of college attendance with education.

More intensive experimental evidence is needed and further
investigation should be made of the impact of all mass media, especially

television on learning and behavior. We do not yet know what
are the time and money saving possibilities of computer assisted
instruction, programmed learning and other forms of educational
technology. It is difficult on the basis of available research
evidence to ascribe a particular effect to a particular type of
multi-media instruction, but there is no question that there is an
effect.[31]

Study should be made to determine the effect as change agents
of continuing education for practicing education, such as
institutes, workshops, conferences and educational clinics; also of
human relations, and sensitivity training; also of Esalen-Type
Encounter and "T" groups.

We are in a primitive stage in creating a body of knowledge
and developing effective basic strategies and procedures for effecting
educational change. Research must attempt not only to identify the
probable major changes in society, but also to develop basic strategies,
procedures and support systems for effecting change.

Additional research is needed to bring about improvement in
measurement and research design and methodology. The problem of
reshaping research skills to achieve better evaluative research, field
testing, and measurement of affective and cognitive goals for pre-school,
compensatory and other programs. Such measurement flaws as experimental
bias Hawthorne and Placebo effects must continued to be studied.

A very critical area in research is the need of better instruments
for measuring achievement motivation. Important as motivational
variables may be are in understanding, predicting and controlling classroom

behavior, there is a paucity of information and theory associated with the motivation and aspiration of black college students.[32] We need to know more about the College Characteristics Index (CCI) and College and University Environment Scales (CUES), the Activities Index (AI) and the College Student Questionnaires (CSQ).

We are a long way from a comprehensive theory of teaching grounded in a clear-cut system of concepts backed up by empirical evidence. Badly needed is a theory capable of differentiating classroom tasks requiring different styles of teacher interaction for optimal student results. Great need exist for a psychological theory which can be used to explain and predict observable teacher behavior and student learning relationships.

Additional research is needed on teachers perceptions and images of students in relation to achievement.

Data are not in yet which will enable definite conclusions about student influence on teacher behavior, or the direct relationship between teacher expectancy and student ability and reasoning.

In our search for understanding of teacher effectiveness, we need answers to such questions as Effective for which objectives, "and For which Students?"[33]

There is need to reexamine the causal factors relating to student unrest in black colleges and universities. While we have some knowledge of the conflicts with and attitudes of activist students toward traditional authority and toward the establishment, we do not know what psychological factors make some students constructive rebels-and others destructive.

The abuse of drugs by young people has become a national concern. Instead of working from the angle of providing information which will supposedly dissuade students from drug abuse, we need research on how to change their attitudes.

In our technological society where each sex is expected to fulfill multiple roles we must have more research studies to assist black colleges and universities in overcoming sex role stereotyping and in developing an environment that will nurture the idea of female equality, and promote the goal of equal rights for the development of strong concepts of self for women.

Research to balance our perspectives regarding the historical and sociological generalizations about the roles of black women, and to chart a bold new course for their education in the future is particularly important for black colleges and universities since they have always enrolled more women than men.[34]

Badly needed is research to change the curriculum to meet new employment opportunities, and research which will enable black institutions to meet the challenges of the real world of accelerating scientific and technological change.[35]

TRAINING AND RESEARCH KNOWLEDGE NEEDS OF BLACK ADMINISTRATORS

More blacks are now engaged in administration than ever before. This is true in institutions attended primarily by white and black students. Some appointments of blacks to administrative positions in white institutions since 1968, are the presidents of Wayne County

Community College (Detroit); New College of the City University

of New York (Brooklyn); Essex County College in New Jersey;

Pennsylvania Valley Community College (Pa.); Hartford Community

College (Connecticut); Bernard M. Barach College of the City

University of New York; Cozenoria College; South Central Community

College (Connecticut); and Olive-Harvey College.

An interesting fact discovered in a recent study currently

underway by the author is that thirty-seven (37) new presidents

have assumed the leadership roles in black colleges and universities

since 1968.   Among these are such well known institutions as Howard,

Southern, Florida A & M, Tennessee State, Dillard, Knoxville, Johnson

C. Smith, Morgan and others.[36]

Growing out of this discovery were a number of questions: Where

did these presidents come from? Where did those go who relinquished

the presidency of black colleges and universities? What administrative

personnel changes if any were made or occurred as the result of new

presidential appointments?

While the study is not yet complete, let me share with you some

tentative findings. Many of those becoming presidents appear to have

travelled the route from professor, to department head, to dean or some

other administrative position to president. On the other hand, this

was not always so, because 5 were professor just prior to becoming

college presidents.

Some of the other positions held at the time of their appointment

as president were: Vice-President for Fiscal Affairs or Business

Manager, 2; Vice-President or Director of College Development, 2; Dean

of Administration, 1; Vice-President for Academic Affairs or Academic

Dean, 3; Criminal Court Judge, 1; Director of Admission, 1; and
Director, Division of Arts and Sciences, 1; Assistant Dean or
Vice-Presidents, 2. Three presidents moved from one position as
president to another. As the study continues, similar data will be
gathered for vice-presidents and other high level administrative
officers.

In terms of who is responsible for, engages in and performs
what duties in the administration of black colleges and universities,
if position titles are any indication of the same, administration in
black colleges and universities is characterized by great diversity.

A study of 90 four-year black institutions indicates that most
of them follow the traditional organizational internal structure
pattern such as President (90); Vice-Presidents for Academic Affairs,
Dean of Faculty, or Dean of Instruction (90); Vice-Presidents for
Student Affairs or Dean of Students (75). Of considerable interest is
the number still retaining the positions of Dean of Men (34) and Dean
of women (56), most in addition to the Vice-President for Student
Affairs or Dean of Students.

Among the newer or more recently established positions are Directors
of Computer Services or Managers of Data Processing in 21 institutions,
Directors of Research or Projects 21; Director of Placement, 50; Directors
of Public Relations, 41; Vice-Presidents or Directors of Development, 37;
Directors of Alumni Affairs or Secretary, 18; Financial Aid Officers, 49;
Vice-President for Business Affairs on Business Manager (86); with a
majority retain the latter; Registrar, (76); and (or Director of Admissions
38) and Director or Head Librarian, 85.

The administration of academic colleges, schools and divisions appear to depend upon the size of the institution and the degree of complexity of the educational programs. For example, there are only 7 Deans of Nursing, 6 Deans of Engineering, 4 Pharmacy Deans, and 10 Directors or Deans of Technology. Quite surprising was the small number of Directors and Deans of Home Economics, Arts and Sciences, 21; Education, 16; and Business and Economics, 7. A surprising fact was the number of Deans or Directors of Graduate Studies, 20.

Where there has occurred some reorganization and some changes in titles at several institutions, such as "Business Manager" to Vice-President for Fiscal Affairs," or Dean of Instruction to "Vice-President for Academic Affairs," there appears not to have been a proliteration in administrative positions out of proposition to growth in enrollment and services performed.

What does occur, on the basis of evidence gathered and analyzed to date, is considerable changes in administrative personnel with the appointment of a new president. At 13 of the colleges and universities new appointments were made in more than half of the top administrative positions. Some examples are 1 out of 10 positions at one institution; 8 out of 12 at another, and 6 out of 9 at still another.

At one instiution, among the major administrative changes since 1968 are the following: the appointment of a new president; three new vice-presidents; five academic deans; seven directors of such administrative units as Director of Libraries, Personnel, etc.; twelve academic department chairmen; and other executives.

The task which administrators in black institutions must perform demand fuller data and keener insights than have previously been thought necessary to provide the leadership required in their respective roles.

In general, there is wide spread need among the administrative staffs for increased knowledge and understanding of the following: (1) the social context of university organization and administration, with the term "social context" defined as the environments, both external and internal, in which institutional policies are formed and operating decisions are put into effect; (2) administrative roles, role perceptions, and role expectations; (3) the structure and function-ion of the institutions as an educational organization and as a social and cultural system; (4) the nature and extent of change, innovation, and resistance to innovation in higher education; (5) the larger educational system of which the black institution is a unit or segment, and the larger social, political, and geographical environment in which the institution is located and which it serves.

Contributing also to the need for administrative research knowledge and training are the tremendous changes in American society that have important implication for, and which necessitate changes in all higher education. Significant among these are: (1) population trends; (2) the technology of computer and information systems; (3) economic developments; (4) the expanding role of communications; (5) transportation developments; (6) industrial relation system; (7) urbanization and metropolitan developments.

The challenges of these and other social changes are forcing the black college and/or university to create educational organizational patterns and structures and management which are more adaptable to changing conditions, to establish procedures which are more efficient in a highly competitive economy, and to engage in more purposive planning.

While planning for educational change involves people, goals are essential to the survival of black institutions in a matter of planning for administrative and organizational improvement.

Additional administrative knowledge and training needs include increased knowledge and understanding of: (1) decision-making in higher education at local and state levels; (2) community and state support for educational programs; (3) public knowledge of an attitude toward higher education; (4) faculty and student role participation in institutional affairs; (5) the internal organization and functioning of colleges, schools and departments and their relationships to the institution as a whole; the systems concepts and the development of models which define the interrelationships of functions and which serves as a definitive structure for institutional organization and management; (6) procedures for affecting change and how to facilitate communication.

Academic deans and departmental chairmen need help in understanding the needs, characteristics, and problems of black students; effecting a general vitalizing instructional climate; stimulating faculty experimentation with new teaching techniques; evaluating the quality of instruction; facilitating curriculum change; developing a sharper focus

on the learning process; motivating and recognizing excellent teaching; and exercising the art of leadership.

The difficult question is, do we know enough about the skills required of each of the peculiarly academic administrators to be able to say what preparation would be advantageous? Of equal importance is whether there are special insights, visions, and imagination needed by administrators, and can such abilities be acquired? A different but also critical question is whether there are particular types of personality, interests, and taste which fit a person for a particular administrative office. Traditionally, little attention has been paid to questions such as these.

FUTURE PROSPECTS AND RECOMMENDATIONS

What recommendation can we make for the proper conduct, uses and improvement of institutional research in black colleges and universities?

Generalizing on the basis of my own experience in preparing this paper, all of us interested in, or engaged in administration in black institutions, or who occupy administrative positions in white institutions should become well acquainted with the research studies reports and literature dealing with black institutions and black students. This is my first recommendation.

Enough research evidence, although far from conclusive, has accumulated in recent years to suggest certain new directions that

might substantially improve the educational process, governance and management of black colleges and universities.

Among the agencies contributing significantly to the research literature on higher education are the Center for the Study of Higher Education at Berkeley, The Institute of Higher Education at Teachers College, Columbia University, the New England Board of Higher Education, The Western Interstate Commission for Higher Education, and the Southern Regional Education Board.

Unfortunately however, few blacks appear to have been involved in the conferences, research programs and research activities of these groups. In the future, every effort should be put forth to see that blacks are well represented at research conferences, seminars and workshops.

As a beginning, if you have not already done so, let me suggest that we read, The Inventory of Current Research in Higher Education, a joint project of the Carnegie Commission on the Future of Higher Education and the Center for Research and Development in Higher Education at the University of California, Berkeley. This publication contains more than 900 separate research studies and projects completed between 1966 and 1968. The Chronicle of Higher Education describes 108 of these projects and investigations in its issue of December 9, 1968, and 112 in the November 25 issue of the same year.

My second recommendation is that "we should identify and recruit young faculty members who have great promise as fundamental investigators

and should establish the conditions under which they can become
scientific revolutionaries."

Crombach has observed that "the highest priority should be
given to recruiting and training researchers. This calls for
breaking down the barriers that now exist between schools of
education, and other disciplines, particularly departments of
psychology, sociology". . .A person trained in a behavioral
science is not likely to think about education unless he is
recruited into an institution concerned with educational studies.

There is great need for administrative identification,
recruitment, orientation and training. Generalizing again from my
own observations and experiences, we have not done a good job in
the past of identifying and training young men and women to fill
administrative positions in black colleges and universities. We
need to give serious consideration to seeking ways and means of
getting more blacks included in such programs as the American Council
on Education's Internship Program, and the North Central Association's
Leadership Training Project (now called the Associates Program). We
should, in addition, seek foundation support for continuing and
expanding such programs as are being sponsored by the Texas Association
of Developing Colleges, the Alabama Consortium of Higher Education,
The Oak Ridge Workshops for Black Institutions and others.

A third recommendation is that those institutions which have
not done so already, should establish some kind of institutional
research office or program as soon as possible.

How can an institution go about organizing for and promoting
"institutional research?" According to Mayhew, "an institution
which seeks to emphasize institutional research has available a
number of patterns for study and perhaps emulation." One form
is a decentralized one in which each agency generates and uses
its own data. The registrar, business manager, dean of instruction,
librarian, dean of students, alumnae director, and director of
counseling each assumes research as one of his functions and
accumulates the information he needs. A second pattern is the
creation of a research office, with a small staff as an adjunct
to the president's office, charged with the responsibility of
combining data to help the president with his decisions and public
utterances. The creation of an office of institutional research
to conduct inquiries for the administration and for various faculty
groups, a third approach that might be used; a fourth is the
appointment of a part-time director of research who conducts a few
studies each year in which the institution is interested, serves as
consultant to the president and faculty, helps the institution keep
abreast of research findings from other sources, offers technical
advice on research questions and research design and who stimulates
and aids faculty members in conducting research.[38]

Russell has identified four basic patterns in the organization
and conduct of institutional research:

1. The comprehensive institutional self-study or survey,
usually "one time" or at long intervals.

2. A diffused assignment of small responsibilities for research studies to some of the regular staff members of the institution.

3. The faculty committee on institutional research.

4. The office institutional research as a part of the central administrative structure of the college or university.

According to Russell, the four kinds of organization are not mutually exclusive, but may exist in various combinations.[39]

In general, before any decisions are made serious considerations should be carefully pondered by an institution desiring to engage in institutional research.

1. Are the administration and faculty ready to assume the critical problems and to accept fact even if counter to prevailing beliefs.

2. Is the institution prepared to finance research efforts? Research involving human beings is among the most expensive which can be attempted.

3. Are competent research workers, available? All too often there is a lack of sophisticated technical workers, and much research produced is open to serious question by personnel in such related disciplines as psychology, sociology and statistics.

4. Is the administration willing to give strong support to research? Is it willing to place the director or coordinator of research reasonably high in the administrative structure?[40]

My final recommendation is that through this Congress or some other medium, there be undertaken a comprehensive improvement program for black administrators.

The proposed administrative improvement programs in its entirety should consist of the development and operation of five separate but related and mutually supportive projects:

1. A program of intensive seminars for all administrative personnel,

2. A series of "In House" seminars during the academic year,

3. *Administrative Workshops in the Analysis and Evaluation of Learning and Teaching.*

4. *A series of academic year specialized seminars, educational travel, and study of innovative programs and activities; and,*

5. *Summer Administrative-Faculty-Student Evaluation and Future Planning Workshops.*

The administrative improvement components should involve members of the governing Boards, or Board of Regents, key members of state Legislatures, and all members of the administrative staff.

Consultants should include individuals of national stature, both those who are presently in positions of major administrative responsibility and management organization, and research specialists.

Outstanding psychoanalysts, psychologists, and creative specialists in teacher performance, curriculum structure, student relations and minority problems will be teamed up to present a balance and up-to-date interdisciplinary perspective on institutional change and reform.

Intensive Two-Week Seminars

The purpose of the program of intensive seminars should be to provide all administrators with the background information, understanding and perspectives required to plan and effect needed changes and to design a future program for the colleges and universities.

The aim should be to counteract those forces which impede innovative changes and development by providing programs and activities whereby all persons concerned with administration work toward the achievement of institutional objectives.

The seminars should include a description of changes in society by 1980 and an examination of the structure of higher education in the United States. Consideration should be given to newer developments in higher education; to problems of internal organization, management and functioning of the college or university as an institution of higher education and relationships within the institution. The seminar should examine also such problems as those related to faculty governance, student protests, the economics of Black institution survival, and outmoded unconventional concepts in university teaching, curricula and student improvement and participation. Consideration should be given to the campus environment structure, and the degree of congruity between student characteristics on the one hand and institutional environmental characteristics on the other.

"In-House" Seminars

During the academic year, a comprehensive program of administrative improvement should be implemented through "In-House Seminars." These should be especially designed seminars for such groups as: Academic Department Chairmen, Student Personnel, Career Services Personnel, and Library Personnel under the direction of their respective vice presidents.

The "In-House" Seminars should be tailored especially to the peculiar problems and need of the respective areas. Each area should hold a seminar each quarter or semester.

Consultants would be recruited from such agencies as: The Advanced Education Institute, Union for Research and Experimentation in Higher

Education, Center for the Study of Higher Education, National Training Laboratory and the Government Management Institute.

Summer Administrative Workshops in the Analysis and Evaluation of Learning and Teaching

These Workshops should focus on such topics as learning theories, analysis of learning potential, the motivation to learn, setting developmental goals, the influences of learning climate on individuals, and individual learning styles. Included also should be a synthesis of recent research on characteristics of students, including academic characteristics, socioeconomic background, finances, self-concepts, interests and personality, reasons for attending college, choice of vocation and major field of study, and educational and occupational aspirations.

Consideration should be given to such newer instructional innovations as interaction analysis, nonverbal communication, micro teaching, simulation, the use of technology, heuristic teaching, the case study, individualized instruction and special methods of teaching the disadvantaged.

Attention should be devoted also to an analysis of ways in which innovative undergraduate programs are attempting to meet some major educational problems such as depersonalization, fragmentation of knowledge, curricular isolation from "real" issues, obsolete conceptions of the learning process, and the abuses of the grade-credit system.

Academic Year Specialized Seminars Program, Educational Travel and Innovative Program Study Activities

During the academic year, selected members of the administrative

staff should attend seminars, institutes, workshops and
conferences sponsored by such organizations and agencies as:
(1) The United States Department of Agricultural Seminars
in Executive Development, (2) The School of Executives of the
American Association of Colleges for Teacher Education, (3)
Government Institute Development Programs, (4) The Center for the
Advanced Study of Educational Administration, (5) The center for
the Study of Higher Education, (6) The EPIC - Evaluation Center
Workshops, (7) The Center,for the Study of Evaluation of Instructional
Programs, (8) The Center for Teacher Education, and (9) The Center
for research and Development in Teaching.

A special feature of the year's activities should be visitation
by administrative personnel to selected institutions for study of
their innovative compensatory programs for disadvantaged students.

Specialized seminars should be planned around such topics as:
(1) Advanced Planning, Programming, Budgeting Systems for Educational
Institutions, (2) Program Evaluation and Review Techniques, (3)
Vehicle Fleet Maintenance and Management, (4) Computer-Assisted
Instruction, (5) Data Processing for Higher Education, (6) Management
Skills Development, (7) Information Systems Technology, and (8) Human
Relations in Administration.

The Summer Administrative-Faculty-Student Workshops

These Workshops should undertake a comprehensive evaluation
of curricula, examine general education and major degree programs,
and the content of individual courses, with the aim of tailoring
programs to student interests, abilities, needs and opportunities.

A second feature of the workshops should be an assessment
of effective use of resources, and an examination of the part
different campus groups can play in developing a desirable
learning-living climate. Participants should be organized into
teams composed of an administrators, faculty members, counselor-
advisor and student. Teams should have an opportunity to consult
with other teams during the workshop.

These workshops should also be designed to explore ways to
link the living environment with the learning environment. They
should be climate centered rather than a problem centered program.
The aim should be to learn how to create and maintain climates
conducive to learning and personal development.

CONCLUSION

The basis on which all educational efforts must rest-namely
research-has been fragmentary in the case of the various branches
of and problems connected with administration.

In black colleges and universities, Can it be that they were
caught unaware of the changing nature and role of institutional
research? Is it possible that the pressing problems resulting
from state governmental reorganization, changes in governing board
policies, institutional reorganization and management, student unrest,
and the economics of survival have not enable administrative personnel
to devote sufficient time and attention to shaping the future role of
the black institutions and considering steps needed to bring about
major institutional reform? If so, now that many of the external

pressures are subsiding and the prospect of survival brighter
the time has come for black institutions to engage in some "soul
searching" about the nature of the challenges, and the complexity
as well as the urgency of the problems facing them.

In the past most black institutions have restricted their roles
to classroom instruction, thus overlooking the role which research
could play in improving the image of both the instructor and
the institution.

The attitudes of some regents, trustees and presidents robbed
some black institutions of the opportunities to conduct research by
recognizing financial considerations regarding plant maintenance,
building construction, and increased enrollment as the art of leader-
ship.

Black administrators have not always had a close relationship
to advocates of research and have not appreciated the significance
of research and its implications for decision-making, long-range
planning, goal and objectives determination, curriculum reform and
understanding student problems and needs. But now that black
institutions are no longer accorded the protection of a segregated
society, and are facing problems similar to all institutions of higher
education, more and more they are turning to institutional research.

According to the U. S. Office of Education 1970-71 Directory of
Higher Education, some fifteen or more black colleges and universities
have established formal offices or programs for the conduct and
promotion of institutional research. There is growing recognition that

many of the urgent ecnomic, social and political problems of
the black institutions which have grown up with our changes in
ideals, values and concepts of "equality of opportunity" are
in need of research.

Research no longer has to fight for recognition in black
colleges and universities. There is an increasing awareness of
the fact that questions are being asked to which we do not know
the answers, that we "research" anything but our own efforts, and
that it is apt to become embarrassing to us if we do not learn
more about what we do, how we do it and with what results.

In general, institutional research in black institutions is
moving rapidly. But to achieve a genuine impact of the problems of
black colleges and universities, the time has come to establish a
focus for institutional research and experimentation.

We must create the setting and the atmosphere in which the
crucial and delicate work of institutional research can thrive, funded
generously, isolated from political and administrative whim, and
dedicated to one purpose alone-the discovery and application of new
alternatives, new problem solutions and new techniques for survival.

In the future, our research should be applied to questions that
must be answered and to problems that must be solved if black
institutions are to survive. The big question is can we find the
resources, the right kind of people to do the kind of research we need
so badly?

No one knows for certain what the future will bring, but it can
be harmful to the total direction and over-all effectiveness of all
our efforts to strengthen black institutions for survival if we fail
to recognize the importance of "institutional research." It is my
sincere hope that this conference is the beginning of such an effort.

FOOTNOTE REFERENCES

[1]*This observation is based on the writings of these authors in Research in Higher Education: Guide to Institutional Decisions. (New York: College Entrance Examination Board 1964);College Self-Study: Lectures on Institutional Research (Denver: Western Interstate Commission for Higher Education, 1956); Current Issues In Higher Education, 1961, pp. 236-37; 1962, pp. 249-52; 1958, pp. 51-59; 1970, pp. 150-52 and others.*

[2]*For a description of basic, applied and action research see Carter V. Good, Introduction to Educational Research. (New York: Appleton-Century-Crotts, 1963) pp. 9-11 and 322-27.*

[3]*See John W. Best, Research in Education. (Englewoods Cliff, N. J: Prentice-Hall, 1970) pp. 9-11.*

[4]*W. H. Stickler, "The Role of Institutional Research in the Managerial Revolution in Higher Education," Introductory Papers on Institutional Research. (Atlanta: Southern Regional Educational Board, 1968) p. 3.*

[5]*Best, op. cit., p. 4.*

[6]*See C. Robert Pace, "How Does an Institution Organize and Conduct an Effective Self-Evaluation." Current Issues in Higher Education, 1954, pp. 251-258; Paul L. Dressel and John E. Dietrich, "Departmental Review and Self-Study," The Journal of Higher Education, XXXVIII, January, 1967, pp. 25-37; Sister M. Digna, "Institutional Self-Studies," Current Issues in Higher Education, 1959, p. 238.*

[7]*Francis E. Rourke and Glen E. Brooks, The Managerial Revolution in Higher Education. (Baltimore, Md.: The John Hopkins Press, 1966).*

[8]*Proceedings of the Sixth Annual Meeting of the Association of Colleges and Secondary Schools for Negroes. (Meeting held at North Carolina College for Negroes, Durham, North Carolina, Dec. 7 & 8, 1939), pp. 33-34.*

[9]*Ibid.*

[10]*For a complete discussion of plans and proposals for the study see "Report of the Study Committee of the Commission on Institutions of Higher Education of the Association of Colleges and Seconary Schools for Negroes," The Quarterly Review of Higher Education Among Negroes, October 1937, pp. 207-209.*

[11]*Significant Issues in Education Today*: *Proceedings of the Fourteenth Annual Meeting of the Association of Colleges and Secondary Schools* (Meeting held at Prairie View Agricultural and Mechanical College, December 3, 4, and 5, 1949), p. 40.

[12]See the following addresses in *Proceedings of the Fourth Annual Conference of the National Association of Collegiate Deans and Registrars in Negro Schools*, (March 7 to 9, 1929); T. P. Brawley, "Tendencies in College and Professional Education," pp. 59-69: John H. Alston, "Orientation of College Students," John P. Whittaker, "A Cooperative Testing Program," pp. 22-35; and T. E. McKinney, "Information that Should be Available in Registrars Offices, pp. 36-45.

[13]*Proceedings of the Thirteenth Annual Session of the National Association of Collegiate Deans and Registrars in Negro Schools*, (March, 1939), pp. 56-57.

[14]See the following proceedings of the Association of Collegiate Deans and Registrars in Negro Schools: Fourteenth (1940) p. 79; Fifteenth (1941) p. 79: Nineteenth (1945) p. 39; Twenty-Fourth (1950) p. 152; Twenty-Fifth (1955) p. 112; Thirty-Third (1949) p. 85; Thirty-Fifth (1961) pp. 44-75; Thirty-Eight (1964) pp. 82-83.

[15]F. D. Wilkinson, *Workshop for Deans and Registrars*. (Washington, D. C., Howard University, November 1950), p. 1.

[16]*Ibid*.

[17]See: Proceedings for the 37th Annual Meeting; (1963) pp. 49-52; also, Thirty-Eighth, (1964) pp. 26-52; 70-72; 78-81.

[18]W. E. B. DuBois, "Some Activities of Negro Land Grant Colleges in Social Research," *Report of the First Conference of Negro Land-Grant Colleges for Co-ordinating a Program of Cooperative Social*. (Atlanta, Georgia, 1943), pp. 52-55; also Proceedings of the National Association of Collegiate Deans and Registrars in Negro Schools, 1929, pp. 14-15; and Harry W. Greene, *Two Decades of Research and Creative Writings at West Virginia State College*. West Virginia State College Bulletin, Series 26, No. 4, August-November, 1939.

[19]Reference is made here to the following: U. S. Bureau of Education Department of the Interior, *Negro Education: A Study of the Private and Higher Schools for Colored People in the United States*, Bulletin, 1916, No. 38; *Survey of Negro Colleges and Universities*, Bulletin, 1928, No. 7. See also U. S. Office of Education, *National Survey of the Higher Education for Negroes: A Summary*, Ambrose

Caliver (Editor), IV, 1943; Earl J. McGrath, _The Predominantly_
Negro College in Transition. (New York: Bureau of Publication,
Teachers College, Columbia University, 1965); _The Negro and_
Higher Education in the South. (Atlanta Southern Regional
Education Board, 1967); Two of the most recent contributions to
the increasing volume of literature on predominantly Negro
colleges and universities are those sponsored by The Carnegie
Commission on Higher Education. _Between Two Worlds: A Profile_
of Negro Higher Education by Frank Bowles and Frank A. DeCosta
(1971); and _From Isolation to Mainstream: Problems of the Colleges_
Founded for Negroes (February 1971).

[20]_U. S. Office of Education, Internal Structure: Organization_
and Administration of Institutions of Higher Education, Bulletin
1962, No. 9. (Washington, U. S. Government Printing Office, 1962)
p. iii.

[21]For a description of the Delphi technique see: Frederick
R. Cyphert and Walter L. Gant, "The Delphi Technique: A Case
Study," _Phi Delta Kappan_, LII (January, 1971) 272-273; Rubert C.
Judd, "Delphi Method: Computerized 'Oracle' Accelerates Consensus
Formation," _College and University Business_, XLIX (September, 1970)
30-34; Philip C. Winstead and Edward N. Hobson, "Institutional
Goals: Where to from Here? _Journal of Higher Education_, XLII
(November, 1971), 669-670.

[22]See _Planning and Effecting Needed Changes in Education_, Edited
by Edgar L. Morphet and Charles O. Ryan An Eight State Project
(Denver, Colorado 1967); Also _Designing Education for the Future and_
Prospective Changes in Society by the same authors. See also _Toward_
the Year 2000. Daedulus, (Summer, 1967); Ronald Lippitt, "Planning
as a Continuing Leadership Process." _In Search of Leaders_, (Washington,
D. C., American Association for Higher Education, 1967), pp. 96-100;
H. Lawrence Wilsey, "Institutional Long-range Planning: A. Formulation
of Procedures." _Current Issues in Higher Education_, 1959, pp. 73-75;
Daniel U. Levine, "Setting Priorities for the University," _Educational_
Record, XLIX (Fall, 1968); John K. Folger, "How Can Institutional
Research Facilitate Continuous Planning and Progressive Change Required
for our Colleges: _Current Issues in Higher Education_, 1960 (Washington:
Association for Higher Education, 1960) pp. 150-152.

[23]Lewis B. Mayhew, "Educational Research, Its Capabilities and
Limitations," _Research in Higher Education_. (New York: College
Entrance Examination Board 1964) pp. 1-2; Algo D. Henderson,
"Improving Decision Making through Research," _Current Issues in Higher_
Education, 1963, pp. 153; Kurt M. Hertzfeld, "Decision Making in the
Internal Operation of an Institution," _Current Issues in Higher Education_,
1963, p. 167.

[24]For further discussion of PPBS, budget making and the role of research in financial need documentation consult the following: What is PPBS? _State Local Finances Project_, George Washington University, p. 1; Robinson G. Hollister, Jr., "A Decision-Making Budget." _The Educational Record_, (Fall, 1966), 490-497. Also, "Program Budgeting in the University Setting." 474-489, by Frank B. Dilley; Herbert H. Rosenberg, "Research and the Financing of Higher Education," _Higher Education_, XVIII, (October-November, 1961), p. 3; Charles B. Nett, "Planning and Governance." _The Journal of Higher Education_, XLII, (February, 1971), pp. 116; Marvin W. Peterson, "The Potential Impact of PPBS on Colleges and Universities," _Journal of Higher Education_, XLII, (January, 1971); James L. Miller, Jr. "An Introduction to Budgetary Analysis," _Introductory Papers on Institutional Research_, (Atlanta, Southern Regional Education Board, 1968), pp. 100-133.

[25]This analysis of governance and management needs is based on Lewis B. Mayhew, "Emerging Concepts of the Presidency," _Journal of Higher Education_, XLII, pp. 353-367; Harold L. Hodgkinson, "A Response to Emerging Concepts of the Presidency;" Algo D. Henderson, "Effective Models of University Governance," _In Search of Leaders_. (Washington-Association of Higher Education, 1967), pp. 78-82; Earl C. Bolten and Fredric H. Genck, "Universities and Management," _Journal of Higher Education_, XLII, (April, 1971) pp. 279-291; George Allan, "Twixt Terror and Thermidor: Reflections on Campus Governance," XLII, (April, 1971), pp. 292-308; See also: "Student Participation in Academic Governance," by W. Donald Bowles, _Educational Record_, XLIX, (Summer, 1968) pp. 259-62; For a good discussion of Management Information Systems see Leo L. Kornfeld and John O. Tood, Jr., "Information Systems: Keeping Managements Eye on College Operations." _College University Business_ 45: No. 5, (November, 1968) pp. 57-61. "First Comprehensive Report on the State of the Act in Higher Education," _Educational Technology: College Management_, (October, 1968), pp. 17-52, by six experts in the field; _Computers on Campus: A Special College Management Report_. Part I College Management, II, (March 1967), pp. 54-75; also Part II, The April Issue; See also, "What Computers Are Doing in Our Colleges, " A 21 page report on how computers are being used in college administration, registration, job placement, research and teaching. _College and University Business_, XXXIX, (October, 1965), pp. 51-73.

[26]Junius H. Davis, "The Criterion Problem in College Admissions Research." _Research in Higher Education_, (New York:College Entrance Board, 1964) p. 32.

[27]George G. Stern, "Student Ecology and the College Environment," <u>Research in Higher Education: Guide to Institutional Decisions,</u> (New York: College Entrance Examination Board, 1964) pp. 35-52.

[28]Amitai Etzioni, "The Policy of Open Admission," <u>New Teaching New Learning: Current Issues in Higher Education,</u> 1971, pp. 110; also, Alexander W. Astin, "College Admissions: A Systems Perspective," pp. 91-109; <u>Open Admissions and Equal Access</u> by Philip R. Rever, American College Testing Program, (January, 1971); You might also be interested in <u>College Student Profiles</u> by ACT, "Open Admissions and Programs for the Disadvantaged," by Alexander W. Astin, Director of the Office of Research of the American Council on Education," (November, 1971), pp. 629-647; Research of College Admissions," (Kenneth M. Wilson, Editor). (Atlanta: Southern Regional Educational Board, 1963); T. C. Stanley, "Predicting College Success of the Educationally Disadvantaged, <u>Science,</u> 1971, p. 171; 640-647; Donald P. Hoyt, "Forecasting Academic Success in Specific Colleges," Research Report No. 27. (Iowa City, Iowa: American College Testing Program), (August 1968); Fred F. Havelevoad, "Disadvantaged Students and Survival in College," <u>New Teaching New Learning: Current Issues in Higher Education,</u> 1971, pp. 138-148.

[29]Cameron Fincher, "Needed Research in College Admissions," <u>Introductory Papers on Institutional Research.</u> (Atlanta, Southern Regional Education Board 1968), pp. 84-991; W. Hugh Stickler, "Student Studies in the Institutional Research Program," <u>Introductory Papers on Institutional Research.</u> (Atlanta, Southern Regional Education Board, 1968) pp. 16-35.

[30]<u>Chronicle of Higher Education,</u> March 29, 1971 and October 4, 1971.

[31]James W. Thornton and James W. Brown, <u>New Media and College Teaching,</u> (Washington: American Association for Higher Education, 1968); also <u>Innovations in Higher Education,</u> Kenneth J. Hallum (Ed.) (Baltimore, Md., Towson State College, 1966).

[32]Patricia Garia and Donnel Katz, <u>Motivation and Aspiration in the Negro College,</u>Institute for Social Research; (University of Michigan, Ann Arbor, 1966).

[33]Lewis B. Mayhew, <u>Contemporary College Students and the Curriculum;</u> Southern Regional Education Board, Monograph No. 14 (Atlanta, 1969) p. 5.

[34]See: Ruth M. Oltman, "Women in College," *New Teaching New Learning: Current Issues in Higher Education,* (1971) pp. 129; Janie L. Trecker, "Woman's Place Is in the Curriculum." *Saturday Review* (October 16,1971) pp. 83-92; Elizabeth L. Cless, "A Modest Proposal for the Educating of Women," *The American Scholar,* (Autumn, 1969), pp. 618-627.

[35]Jerome H. Holland, "The Negro and Higher Education." *NEA Journal,* LIV (March, 1965), p. 24.

[36]Data for this study were gathered from the *Chronicle of Higher Education,* 1968 through 1971.

[37]Lee J. Crombach, "The Role of the University in Improving Education," *Phi Delta Kappan,* XLVII, (June 1966) p. 544.

[38]Lewis B. Mayhew, "Educational Research, Its Capabilities and Limitations," *Research in Higher Education: Guide to Institutional Decision,* College Entrance Examination Board (New York) 1964.

[39]John Dale Russell, "The Purpose and Organization of Institutional Research." *College Self-Study: Lectures on Institutional Research,* Western Interstate Commission for Higher Education, 1960, p. 18.

[40]*Ibid.*