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ABSTRACT

Institutional research in the junior-community college is discussed as related to the following questions: (1) What is institutional research? (2) Why has there been such an emphasis on it in recent years?; (3) What should be the goals and guiding principles of a community college institutional research operation? (4) Where should the institutional researcher be located in the organizational structure of the community college? (5) How does one evaluate the effectiveness of an institutional research program? and (6) What are some of the major issues or problems confronting the practice of institutional research in today's community college? (DB)

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INSTITUTIONAL RESEARCH

IN THE

COMMUNITY COLLEGE

BY

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INTRODUCTION

"Institutional research" is a phrase that is being heard with increasing frequency in present-day discussions on the topic of higher education. What is institutional research? Is it something new in higher education? One would think not, since W. H. Cowley has been able to trace the development of institutional research in higher education back two and a half centuries. (10, p. 11) This paper will attempt to explore the present-day role of institutional research in one particular area of higher education--namely, the public community college.

Institutional research in the junior-community college is both an old and a new practice. It is an old practice in that a junior college--Stephens College, under the leadership of W. W. Charters--pioneered in the use of continuing research as a basis for program development and improvement. (12, p. 370) However, in recent years, institutional research is being spoken of as if it were a concept totally new to the community college.

In attempting to provide a perspective of community college institutional research, one must consider the following questions:

1. What is institutional research?
2. Why has there been such an emphasis placed upon it in recent years?

3. What should be the goals and guiding principles of a community college institutional research operation?
4. Where should the institutional researcher be located in the organizational structure of the community college?
5. How does one evaluate the effectiveness of an institutional research program?
6. What are some of the major issues or problems confronting the practice of institutional research in today's community college?

This paper will comment briefly on each of the above questions. The answers provided by this paper will not necessarily be definitive or absolute. There is very little written on the topic of institutional research in the community college; and most of what has been written consists of reports and abstracts of actual research projects conducted. Dressel and Pratt, in their recent annotated guide to the major literature in higher education, could only find five references--directly dealing with institutional research at the community college level--worthy of inclusion in the twenty-nine pages they devoted to listing works on the topic of institutional research. (10, p. 10-38) However, by drawing on references dealing with institutional research in general, as well as institutional research as it pertains to the community college in particular, the author believes that he can paint a fairly accurate picture of the

field of community college institutional research. The results of this effort are to be found in the following pages of this paper.

INSTITUTIONAL RESEARCH IN THE COMMUNITY COLLEGE

Probably one of the first characteristics of institutional research to become evident to an individual attempting to research the topic is that every author who has ever written a word on the subject has begun by first stating his own particular definition of institutional research. The following definitions are representative of those to be found in the literature:

Institutional research involves the collection of data or the making of studies useful or necessary in (a) understanding and interpreting the institution; (b) making intelligent decisions about current operations or plans for the future; (c) improving the efficiency and effectiveness of the institution. (8, p. 11)

Institutional research, if it is to be defined, is feedback. (1, p. 29)

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 maintenance, operation, and/or improvement of a given institution of higher education. (21, p. 542)

. . . 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 informed judgments instead of guessing or relying on the intuitions of the administrator in framing decisions on university policy. (19, p. 44)

Institutional research will be regarded as a designation for self-studies conducted by junior colleges. These studies may be concerned with issues which have current application or they may be basic to long-term institutional planning. Any local investigation directed toward providing data in administration, planning, evaluation, or policy formulation is considered institutional research. The most important factor is that it be an analysis conducted by a junior college of one or more aspects of its current or future academic or fiscal operations. In brief, all studies done within the college, involving any phase of the institution, its program or operations, are included in the term, institutional research. (16, pp. 20-21)

Certain descriptive concepts emerge from these various definitions of institutional research. One is that institutional research is purposeful self-study--that is, one part of the educational institution is studying or researching itself or another part of the institution. The object of this self-study is to collect data to aid the institution in making decisions. These decisions are generally concerned with the present or future operations of the institution. Finally, the goal of this process is the betterment of the institution and its operations.

Condensing all the above concepts into one sentence, one arrives at the following definition: institutional research is those self-organized, fact-finding activities whose goal is to improve the institution. As is the case with previous definitions of institutional research, no one will agree with this definition in its entirety. However, this definition should be quite adequate for use in the remainder of this paper.

Rourke and Brooks probably best sum up the attempts that have been made to define institutional research when they state,

Formal definitions of institutional research are breath-takingly eclectic, embracing virtually every problem institutions have faced since the rise of the medieval university.

Given the limitations of time and budgets under which they operate, however, individual offices of institutional research have often tended to specialize. (19, p. 53)

During the first several decades of its existence, the community junior college in America--with but a few exceptions, such as Stephens College--did very little in the way of studying its own operations and problems. As Roueche and Boggs point out,

Institutional research, however, has been recognized only recently as a major need and function in all of American higher education. Most of the institutional research in higher education has occurred during the past decade, although a few institutions have provided for such activities for at least fifty years. (18, p. 1)

Quality has become the key word in all areas of higher education today. The community college of today is faced with two explosions: the explosive increase in the number of students desiring to enter the community college and the explosion of new knowledge. These increases in new knowledge and new students have given raise to new programs and new organizational structures within the community college. How to maintain and improve quality under these changing, and evermore complex, conditions and new stresses is a major issue confronting today's community college. (4, p. 34)

The rapidly changing world is also creating new problems faster than the community college can come to grips with the old ones.

In its attempts to maintain up-to-date, quality programs in the face of raising numbers of students, the community college has turned to the public for more funds. But the taxpayers are beginning to feel that they are being taxed enough. As a result, more and more of the general public--and in turn efficiency-minded legislators--are asking whether the community college is getting the maximum value from the dollars and educational programs it presently has and if it can justify the value of increasing educational revenues and adding new programs. The decade of the 1970's is already being referred to by many writers as the decade of accountability. "What right does an institution have to exist when it no longer gives its best in attempting to cope with the increasing complexity of the society it serves?" (18, p. i)

Cohen and Roueche believe that

It is just possible that communities will not continue to support junior colleges indefinitely without some indication as to the results they are obtaining. The institutional leader could gather evidence of learning and plot it against institutional effort. (7, p. 27)

Hence, Rourke and Brooks contend that

For defensive reasons alone, institutions of higher education will thus be pushed into conducting studies designed to obtain precise data on the efficiency with which they are being managed.

(19, p. 65)

Dwight Ladd, after reviewing the methods under which institutions of higher education change, states that

The ability of our colleges and universities to respond to a need for change--except when faced with severe pressure or the threat of such pressure--is frighteningly limited. (14, p. 9)

However, colleges are adopting modern management techniques and institutional research lies at the heart of the trend toward the use of new management techniques in higher education. (19, p. 14) As Dressel and Pratt point out, "The creation of offices of institutional research emphasizes the need for self-knowledge." (10, p. 9) The community college administrator must develop a systematic procedure for gathering information that is essential if he is to make better informed decisions concerning the present and the future operations of his institution. Out of this need has grown the formalization of institutional research operations on many community college campuses.

The term "formalization" was used in the preceding sentence for a special reason. As was stated in the introduction to this paper, community college institutional research is both a new and an old practice. It is an old practice in that a few junior-community colleges pioneered in the use of what today is called institutional research. It is a new practice in that only recently have there been efforts to formally establish institutional research offices on many community college campuses. Some authors take care to point out that these swelling figures do not reflect so much an increase in the actual number of institutions engaged

in institutional research pursuits as they do a growing tendency of those already performing such data gathering functions to identify themselves with this new role in academic administration. Institutional research functions and procedures, in one form or another, have existed on many community college campuses long before the appearance of institutional research in the organizational tables of the colleges. (19, p. 47)

Brumbaugh does a good job of summarizing the need for a form of institutional research on every college campus when he states that

The key to effective administration is the ability of the president and those who work with him to ask the right questions and then find the right answers. But the right answers to the right questions, whether they are specific in relation to a given institution or whether they are more comprehensive, must take into account all the relevant, factual data--the kind of data that only institutional research can provide. (4, p. 2)

There have been two major philosophical positions on what the goals or roles of institutional research should be in an institution of higher education. One position states that institutional research should be concerned with problems of just an operational character. These problems would include the fiscal and managerial operations of the institution. With such a goal, the institutional research office should report directly to the president's office. In such a situation, institutional research would become in effect a form of operations research applied to the

business aspects of campus management. (19, p. 48)

The other philosophical position believes that institutional research should have as its goal the resolution of problems in all areas of the institution. Hence, the office of institutional research could work on problems arising in either the academic or the managerial operations of the college. In such a role, the institutional research office could function more effectively if it was more or less an independent entity in the institution. (11, p. 453)

Rourke and Brooks support this second position by believing that the institutional research agency should not become so extensively involved in studies of costs, space utilization, or other areas of operations not immediately related to the academic programs because it will have little time left for what they consider its primary mission--the study of academic programs and policies. They contend that

An IR office with an academic orientation can focus attention instead on the goals of a university and the need to subordinate all other concerns to the achievement of academic objectives, rather than, as is often the case, fashioning academic goals merely to capitali. on the availability of resources.

(19, p. 66)

However, at the same time, Rourke and Brooks have to admit that

. . . the study of costs and analysis of the use of physical facilities have become major sources of managerial innovation in higher education today. (19, p. 67)

This second philosophical position is becoming the dominant one at the present time. However, the first

position will probably never completely fade away because it is easier to perform institutional research studies of just a business nature due to the (generally) more readily quantifiable data available in this area.

There are two other issues that arise when one discusses the role of institutional research in the community college. One minor issue centers around the question of whether institutional research agencies should do pure (basic) or applied (problem-oriented) research. The general consensus appears to be one of favoring problem-oriented research--research concerned primarily with finding solutions to current or impending problems of the institution. Institutions should also avoid assigning the research officer the responsibility for compiling all statistical reports and answering all questionnaires. Some authors also contend that the institutional research office should consider research on only the major problems of the community college and not get weighted down with reports of a periodic nature. (18, pp. 5-6)

The other argument surrounding the role of the office of institutional research at a community college concerns the question of dissemination of research findings. On the basis of their national study of community college institutional research, Roueche and Boggs believe that no more than five per cent of all institutional studies are being made available for widespread dissemination. (18, p. 52) Arthur Cohen, at the ERIC Clearinghouse for Junior College

Research, also finds this to be the case. He laments this situation by saying, "The field exhibits considerable interest in institutional research but little commitment to it." (5, p. 17) Stickler, writing in the early 1960's, believes that publication is not really the important matter. He feels that if the research is used to improve the institution's own program, it has served its major purpose. (21, p. 546)

Rourke and Brooks, in their 1965 study, found that

. . . only 3 per cent of all the schools surveyed followed a clearly 'open' policy with respect to institutional research, distributing studies freely to either the internal staff or the public at large. All other institutions imposed at least partial restrictions on the circulation of institutional research reports. (19, p. 56)

They state that institutions gave such reasons as the studies require some professional experience and skill to interpret properly and that the goal of many internal studies is to identify weaknesses so that they may be corrected.

This particular argument will probably continue for a long time. Advocates on one side will be calling for more dissemination to avoid having every community college "reinventing the wheel" because of its having no knowledge of the previous research findings of other community colleges. Advocates, in opposition to widespread dissemination of findings, will be arguing that the uniqueness of their institutions necessitates their verifying research results on their own particular "population." As Roueche and Boggs point out,

It takes a brave institution to undertake a continuous and objective self-study of all facets of its operation through properly designed professional institutional research. . . . It takes courage to think aloud regarding institutional weaknesses at a time when everyone is critical of higher education and when many question the extent to which it is fulfilling its role in a modern society. (18, p. i)

Whichever way the above set of issues concerning the role of institutional research in the community college are resolved, the institutional research program that emerges must be based upon certain guiding principles. Although several different sets of principles were set forth in the literature, the community college that is committed to developing an effective program of institutional research on its campus should adhere to many of the following guidelines:

1. Institutional research must be planned.
2. Responsibility for the direction, coordination, and review of institutional research should be centralized.
3. The executive officer of the institutional research agency should report to a major institutional officer, preferably the president.
4. An institution-wide advisory committee should assist the institutional research agency in carrying out its responsibilities.
5. Provision should be made for wide participation by faculty members and administrative offices in planning and conducting institutional research projects.
6. Institutional research must be adequately financed.

(21, pp. 547-548)

Once a community college has committed itself to the formal establishment of an institutional research operation at its campus, it must cope with several questions concerning the organizational nature of institutional research. One of the major questions to be resolved deals with the idea of whether the functions of institutional research should be centralized or decentralized. The answer to this question varies from community college to community college; and, as Brumbaugh points out, "Each college and university must develop its own plan for conducting institutional research. There are no established models." (4, p. 24) However, there does appear to be a recent trend toward the centralization of institutional research functions on many colleges campuses. In such instances, the responsibility for coordinating and supervising the research activities is generally assigned to a full-time or part-time institutional research officer. (4, p. 27)

Other issues that present themselves when an institution attempts to create an institutional research office have to do with the location of the institutional research officer in the organizational structure of the community college. Should he be in a line or a staff position; and to whom should he be reporting? There appears to be a general agreement in the literature concerning the answer to the first of these questions. Dressel was probably quite representative when he states--most forcefully--that institutional research must be a staff function and position.

He contends that the major responsibility of institutional research is to provide relevant data, analysis, and interpretation. The institutional research officer should project alternative courses of action and examine the assumptions and results of each. He should seldom recommend a single course of action and he should not be in the position of making or enforcing decisions for this could make his operation suspect. (8, pp. 11-15)

The question of to whom in the community college should the institutional researcher report has been given considerable thought and discussion by various writers. There appear to be two schools of thought on this issue. These schools of thought seem to evolve out of the perspective one has as to the major role or emphasis (academic or administrative) of institutional research in the community college.

One school has the institutional research agency attached --in a staff relationship--to the community college president's office. The major reason for the association with this office is that

The closer a bureau of institutional research is to the president's office, the more immediate and direct its influence on university policy is likely to be. (19, p. 60)

Stickler also feels that high administrative placement is essential (see his guideline number three on page thirteen of this paper) in order for the institutional research agency to have the status it must have to gain access to the raw material it will need in its research programs.

However, the other school of thought on this subject contends that, if the major goal of institutional research is to study academic programs and policies, then

To the extent that an office of institutional research becomes identified as an arm of administrative authority it loses some of its persuasive capacity with the academic departments. (19, p. 61)

Dressel, a member of this latter school of thought, believes that the director of the institutional research agency of a community college should report--in a staff relationship--to the chief academic officer of the institution. (8, p. 14) In this situation, the institutional research officer is in a position to significantly affect community college policies; and, at the same time, he maintains a closer relationship with his primary concern--the academic programs of the institution.

Although W. Hugh Stickler, writing in 1961, predicted the immediate and rapid growth of institutional research in the community college, the results of studies conducted during the mid and late 1960's do not seem to support his prediction. A national study of community college institutional research programs conducted in 1964 by Swanson found that fewer than twenty per cent of the community colleges surveyed had formally organized programs of institutional research. (cited in 17, p. 34) The results of their study in 1968 (one of which was that the average number of institutional research studies performed per institution per year

is equal to 1.1) lead Roueche and Boggs to conclude that, at the community college level, there is ". . . a noticeable gap between verbal commitment and institutional practice." (18, p. 48)

Cohen, writing in 1969, best summarizes the state of institutional research in the community college when he states

To date, however, institutional research has not been one of the junior college's strong points--not a surprising fact because the college's roots in secondary school systems and its own insistence on being categorized as a 'teaching institution' point away from research as a key function.
(6, p. 102)

Roueche contends, however, that the community college has very little documentation for its claim of being a teaching institution. He believes that "It is now necessary that the junior college assume a research function (at the institutional level) if it is to substantiate its claim of superior teaching." (17, p. 34)

The community college is not alone in its previous lack of implementation and development of institutional research. Cohen and Roueche point out that

It is an unfortunate truism that higher education in general has effectively resisted efforts to utilize institutional research as the primary tool for the development, improvement, and evaluation of its programs and its products, the students.
(7, p. i)

Dwight Ladd, writing on the impact that institutional self studies have had on the educational policies of selected four-year colleges and universities, comes to the same conclusion--that there have been very few significant changes

made. (14, pp. 212-213)

This discussion brings one to the very important question of how does one in community college institutional research evaluate the effectiveness and success of his program. Swanson found that very few of the colleges that he surveyed had any plans for evaluating their research programs.

(Cited in 18, p. 37) Writers on this issue of evaluation put forth two methods by which an institutional researcher, or anyone else, can evaluate the success of an institutional research operation.

The first way to evaluate the success of institutional research operations is to look at the budget of the institutional research office. It is often said that one can determine the true commitment and emphasis placed on a function by considering, not the verbal comments on it, but the budgetary support it receives. One of the guidelines stated above for the implementation of an institutional research operation at a community college is that it be adequately financed. If the institutional researchers ". . . do their work well, adequate financial support is justified and should be forthcoming." (21, p. 548) Unfortunately, the definition of "adequate" is not provided in the literature and hence probably depends upon the environment existing at the particular community college in question.

The other method of determining the effectiveness of the institutional research operation at a community college

is to consider the effect it has had on institutional policies and practices. Roueche and Boggs believe that institutional research may be called successful if it has had some effect on the practices of the community college. "Research that does not change institutional practice is ineffective and fails." (18, p. 49)

This concept of successful institutional research affecting practice raises probably the most fundamental issue currently confronting institutional research in the community college. In order for institutional research to have an impact upon practice, there must first exist support of--and a definite commitment to the findings of--institutional research in the community college. As Dressel and Pratt indicate, ". . . in many cases, it is difficult to trace the connection between the research and the actions taken." (10, p. 8) There are many ways in which research may die. The easiest of which is to just ignore the findings of the research when making decisions. This view is supported by Cohen when he asserts that

Research in all areas of the junior college operation suffers not as much from the lack of money or trained people as from the lack of interest in using research to change practices in the institution.
(6, p. 104)

If commitment to the findings of institutional research is the essential ingredient in making community college institutional research effective, the institutional researcher must find ways of obtaining and promoting this

commitment. Two methods are suggested by the readings: upgrading the quality of institutional research studies that are conducted and increasing the involvement of administrators, but especially of faculty members, in the planning and conducting of institutional research activities. These two methods of obtaining more support for community college institutional research activities are not mutually exclusive. In fact, the accomplishment of either may increase the chances of accomplishing the other.

There are several ways in which one may improve the quality of institutional research. One way would be to change the nature of research and writing that is being done in the community college. Cohen contends that

As a glance at the literature of the field will show, internal criticism is one of the scarcest commodities in American education. The junior college segment of the field suffers particularly from this lack: instead of genuine self-appraisal, most of its writings contain a curious mixture of defensiveness and self-congratulation. (6, pp. vii-viii)

He goes on to state that much of the institutional research conducted by community colleges is also defensive in nature and is apparently pointed mainly in the direction of public relations. (6, p. 103) Rourke and Brooks support this perspective by concluding that

Hence many of the studies undertaken in the name of institutional research today are not much designed to answer questions as they are to win support for findings which administrators know about from reports published by other schools and which they hope to see applied to their own campuses. (19, p. 62)

The quality of community college institutional research

may also be improved in other ways. After presenting some of the best examples of institutional research conducted by present-day community colleges that they could obtain, Roueche and Boggs must admit that

The studies reported . . . are not representative of junior college institutional research. For every institutional research study received and processed by the ERIC Clearinghouse for Junior College Information, six others are discarded because of faulty design, poor methodology, ungeneralizable findings, or just poor quality of reproduction. (18, p. 35)

Contradictory or inconclusive findings are frequently found; and they are generally caused by ill-defined or inconsistent methodology and poor research designs. (6, p. 104) Also, much of the institutional research conducted is illuminative and is not oriented to bringing about action. Institutional researchers must improve their selection and use of research techniques. They must also establish a system of priorities in order to conduct research in those problem areas that exhibit the most pressing need and in which the results of research will have the most impact. (12, p. 376) For example, Dressel and others believe that institutional research involvement in long range planning is a necessity but that institutional research involvement in troubleshooting and repetitive projects is a waste of resources. (5, p. 14)

The research studies conducted by an office of institutional research must be of the highest professional quality before administrators and faculty will begin to realize its value and the impact it could have on the life of the

community college. If the quality of the research activity is high, the best way to get support for the findings of such research is to involve those individuals most likely to be affected by the outcomes of the research in the planning and the conducting stages of the research. Roueche and Boggs believe that the participation and support of the community college president is the primary requirement for a successful institutional research operation. (18, p. 53) Other writers stress the necessity of faculty involvement in, and commitment to, any research practices. (14, pp. 212-213) Most authors would agree with Brumbaugh when he warns against the institutional researcher making decisions in a vacuum. As he states,

On the other hand, a director of institutional research must guard against the separation of his functions from the mainstream of intellectual activity on the campus: he must involve faculty members and administrative officers jointly in planning, conducting, and interpreting research projects. (4, p. 28)

The favored approach to obtaining the necessary involvement of all concerned groups is the formal establishment of institution-wide advisory committees--made up of both faculty members and administrators--on institutional research. (4, p. 27)

High quality research programs and faculty and administrative involvement--although both essential ingredients--will not necessarily insure the success of an institutional research operation. There are areas of the institution's

operation where thorough and thoughtful evaluation, although necessary, has not been welcomed. One of these areas has been the academic program. However, there have been a few institutions at which the institutional research offices have attempted, with limited success, to give assistance to faculty members who were studying problems at the core of the academic process. The institutional researchers at most institutions have carefully steered away from topics that might cause much controversy. (19, p. 50) The community college institutional research officer has a tremendous task ahead of him. He must remember that what he is doing, or wanting to do, is--in many cases--as threatening as hell to many of his colleagues within the community college. He must calm these individuals' fears and convince them of the fact that institutional research is needed and is beneficial, both to the community college and to themselves.

What type of individual does the position of director of institutional research in a community college require? Very few authors have attempted to address this particular question. Yet one can easily infer from the discussion above and throughout this paper that the personality and actions of the institutional research officer will have a great effect upon how institutional research is conceived, perceived, and received at his particular institution. Paul Dressel addressed himself to this particular question of competencies in a speech he gave, entitled "The Nature

of Institutional Research." The following are some of his comments:

"I think an institutional research director should be too honest and forthright to be a college president, and he should be too much interested in the improvement of higher education to waste time being a dean. He should be more interested in focusing attention on problems and getting people to come to grips with them than in being loved. He should see himself more as a faculty member than an administrator, but be willing to recognize that faculty members will regard him as an administrator and the administrators will see him as just a little bit too much oriented to the faculty point of view . . .

"An institutional researcher ought to be an A-1 statistician, a CPA, A budget analyst, a specialist in data systems and computer utilization. . . .

"Beyond this, an institutional researcher should really want to make a difference in higher education and, therefore, be willing to select from among research projects those which are most likely to have an impact and to carry them on in such a way as to maximize that possible impact. . . ."

(8, pp. 17-18)

SUMMARY

Institutional research is an illusive and controversial concept. It is hard to define and yet many people know what it basically is. Institutional research is a new name for a multitude of old activities combined with some new ideas and techniques. The nature of the activities that are performed under the title of institutional research vary tremendously from community college to community college--depending upon the particular institution's philosophy and needs.

The community college, and higher education in general, is beginning to be asked to justify its demands on society, its programs, and its very existence. The tool that is being used by many community colleges to accomplish this task is institutional research. Institution research is a response to a need--a need for organized self-study and evaluation.

Institutional research at the community college level is a fascinating field. It is a growing field. As with any developing entity, it is confronted with problems requiring resolution. Its past development has been uneven, as will probably be its future growth. Very few things about its future are clear or certain at this time. But

one observation appears to be justified. Very soon, the office of institutional research--or its equivalent--will become an essential part of any community college that is truly concerned with efficiency and effectiveness in education.

SELECTED BIBLIOGRAPHY

1. Birch, Anthony. "Institutional Research Is Feedback Link Between Administration and Management." College and University Business, Vol. 49, No. 5 (November, 1970), pp. 28-30.
2. Blai, Boris, Jr. "Institutional Research--A Junior College Management Tool." The Journal of the College and University Personnel Association, Vol. 20, No. 1 (November, 1968), pp. 58-64.
3. Blocker, Clyde E. Plummer, Robert H. and Richardson, Richard C., Jr. The Two-Year College: A Social Synthesis. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1965.
4. Brumbaugh, A. J. Research Designed To Improve Institutions of Higher Learning. Washington, D. C.: American Council on Education, n. d.
5. Cohen, Arthur M. "Changing Emphasis in the ERIC Clearinghouse." Junior College Journal, Vol. 41, No. 1 (August-September, 1970), pp. 16-18.
6. Dateline '79: Heretical Concepts for the Community College. Beverly Hills, Calif.: Glencoe Press, 1969.
7. Cohen, Arthur M. and Roueche, John E. Institutional Administrator or Educational Leader? The Junior College President. Washington, D. C.: American Association of Junior Colleges, 1969.

8. Dressel, Paul L. "The Nature of Institutional Research." Understanding Institutional Research. Papers from the Seventh Annual Community College Presidents' Institute. Edited by Eileen Herridge. Ann Arbor: The Midwest Community College Leadership Council, 1967.
9. Dressel, Paul L. and Associates. Evaluation in Higher Education. Boston: Houghton Mifflin Co., 1961.
10. Dressel, Paul L. and Pratt, Sally B. The World of Higher Education. San Francisco: Jossey-Bass Inc., 1971.
11. Dyer, Henry S. "Can Institutional Research Lead to a Science of Institutions?" The Educational Record, Vol. 47, No. 4 (Fall, 1966), pp. 452-466.
12. Johnson, B. Lamar. "Institutional Research in Western Junior Colleges." Junior College Journal, Vol. XXXII, No. 7 (March, 1962), pp. 370-379.
13. Koch, Moses S., Jr. and LaVire, Willis A. "Institutional Research for Decision-Makers." Junior College Journal, Vol. 37, No. 8 (May, 1967), pp. 13-16.
14. Ladd, Dwight R. Change in Educational Policy. New York: McGraw-Hill Book Co., 1970.
15. Lins, L. J. (Editor) "Basis For Decision." Journal of Experimental Education, Vol. 31, No. 2 (December, 1962).
16. Roueche, John E. "Gaps and Overlaps in Institutional Research." Junior College Journal, Vol. 38, No. 3 (November), pp. 20-23.
17. _____ "Superior Teaching in Junior Colleges: Research Needed." Improving College and University Teaching, Vol. XVI, No. 1 (Winter, 1968), pp. 33-35.

18. Roueche, John E. and Boggs, John R. Junior College Institutional Research: The State of the Art. Washington, D. C.: American Association of Junior Colleges, 1968.
19. Rourke, Francis E. and Brooks, Glenn E. The Managerial Revolution in Higher Education. Baltimore: The John Hopkins Press, 1966.
20. Saupe, Joe L. Memo to a Newcomer to the Field of Institutional Research. A Review Prepared for The Association for Institutional Research. 1967.
21. Stickler, W. Hugh. "The Expanding Role of Institutional Research in American Junior Colleges." Junior College Journal, Vol. XXXI, No. 9 (May, 1961), pp. 542-548.

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