Institutional Research: Is It a Fad or Here To Stay?

This paper examines the role of institutional research (IR) in higher education, focusing on past trends and future possibilities for such research. It discusses the origin of IR in the 1950s and 1960s as a force to assist higher education planning and management, as well as the expansion and fragmentation of IR in the 1970s and 1980s due to retrenchment and calls for accountability in higher education. It is argued that future IR must be both centralized and decentralized, as well as more pro-active, in dealing with the challenges faced by higher education institutions. Such IR should be designed to:

(1) inform constituents;
(2) provide a rational approach to decision making;
(3) assist in the formulation of institutional policies;
(4) identify problems and provide alternative means of resolution;
(5) facilitate management and evaluate outcomes;
(6) support resource allocation; and
(7) integrate IR with institutional planning.

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INSTITUTIONAL RESEARCH: IS IT A FAD OR HERE TO STAY?

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Abstract

Institutional research is partly a function of the evolution of that role over the past four decades and partly a function of unique institutional circumstances. It is argued that institutional research is in the period of transition to yet another phase, one which is even more critical than its preceding stages and one which will function better under the constraints of contemporary issues and institutional governance. For institutional research to become an important player, it must embrace elements of centralization and decentralization in its activities.
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Introduction

What is the future role of institutional research in higher education in the 1990s and beyond? Is institutional research a fad or is it here to stay?

First of all, what is "institutional research"? Institutional research, as it has been generally accepted, refers to the management and research functions of providing the "intelligence" for planning and management of colleges and universities. Intelligence relevant to planning can take at least three forms: technical or analytical intelligence, issue-oriented intelligence, and contextual intelligence (Terenzini, 1993). Analytical intelligence deals with factual and analytical information about an institution. Issue-oriented intelligence deals with information focused on major issues or decisions facing an institution. Contextual intelligence, in its ideal form, takes into consideration both internal and external cultures and perspectives (Terenzini, 1993).

While it is preferable for institutional research to operate at the contextual level, the extent to which it is called upon to provide contextual information is dependent on institutional circumstances and the history of that role on each campus. As a result, institutional research has taken on a variety of forms, ranging from a full-blown institutional research office (staffed by many professionals and a host of assistants) to a one-person institutional research office to a totally decentralized function.

In order to get an understanding of the range of institutional research in higher education today, an examination of the history of institutional research over the last four decades could provide a partial answer. According to Peterson (1985), institutional research underwent essentially three major evolutionary stages over the past four decades.

The first stage, which began in the 1950s and 1960s, marked the beginning of institutional research. This was a time when dramatic expansion in higher education necessitated a centralized office to process critical data and information for more effective...
planning and management. Thus the role of institutional research as the provider of technical and analytical intelligence was created. Its functions were very well supported by campus presidents and other executive officers (Peterson, 1985).

The second stage occurred during the 1970s when enrollment was growing only slightly and institutions were forced to accomplish more objectives with less or the same level of financial resources. Public pressures for accountability were also mounting, and institutions implemented a more centralized planning approach to resolving institutional problems. Because of the critical linkage between institutional research and institutional planning, institutional research became highly centralized (Peterson, 1985).

The third evolutionary stage occurred during the 1980s, a period in which higher education itself was marked by fragmentation and uncertainty. Issues related to declining and changing student enrollments, faculty retrenchment and retraining, and continuing financial constraints lingered. As competing units defended themselves from threats of reduction, financial cut-back, or worse retrenchment, planning became fragmented and decentralized. So did the role of institutional research. Departments and offices began to conduct their own institutional research. As planning became separated from institutional research, institutional research began to take a supportive or technical assistance role (Peterson, 1985).

The three evolutionary stages may partly explain the range in scope of institutional research in higher education today. Some campuses have a full-blown institutional research function simply because institutional research has been allowed to grow and evolve with increasing sophistication and need. Yet on other campuses, institutional research has not existed or has not been allowed to evolve. Given current adversities facing higher education, however, it is apparent that the role of institutional research can only become more important.

With the understanding of the evolution of institutional research, will institutional research in the 1990s and beyond remain fragmented, return to its heyday of centralization,
or go away as a fad whose time and relevance has past? It is my contention that institutional research is not a fad; rather it is in the period of transition to another phase, one which is even more critical than its preceding stages and one which will function better under the constraints of contemporary issues and institutional governance. The facts are clear. Maintaining status quo for many institutions is unrealistic or at least counterproductive considering the reality of adversities and pressures confronting them and the fact that past practices have not brought them to a more favorable position. Institutions may have no choice but to make better decisions and to strengthen themselves for success in the future which will be different than the past. Both planning and institutional research will become more critical. In order for institutional research to achieve its fullest utility, it must become a function embracing the elements of both centralization and fragmentation. It must also be pro-active and comprehensive in its activities.

The Future of Institutional Research

The first half of the 1990s are already proving to be a continuing challenge for higher education. Many uncertainties, predicted by experts a decade ago, have taken a stronghold on institutions. For example, changing student demographics relative to their age, ethnic background, and matriculation behavior have caused institutions to change institutional policies and practices. In addition, financial constraints and problems with resource reallocation have restrained the ability of some institutions from developing new or innovative academic programs necessary for continued competition and improvement (Glenny & Schmidtlein, 1983). Higher unemployment, labor shortages, market conditions, and continuing public pressures of the 1990s have also forced many institutions to develop popular academic or career-oriented curricula at some expense to their existing liberal arts curriculum. Institutions are also having to worry about changing their traditional higher education practices in response to changes in technological advances and imperatives. Faculty issues have also intensified. Discussions have ensued to address problems related to the tension between teaching and research, race and gender salary equity,
undercompensation, under-representation among minority faculty, and the faculty’s role in governance (Jones, 1990). To make matters worse, external control and regulation of institutions by state governments and other related agencies have tightened.

The above are examples of some very formidable adversities. To deal effectively with them, Keller (1983) for years has insisted that the laissez-faire style of planning needs to be replaced by a more pro-active, hands-on form of planning, which he labels “strategic planning.” Whether the actual practice of planning will turn out to be exactly what Keller has envisioned remains yet to be seen. To be sure, planning is a complicated and intricate process. If planning was that easy, institutions would be practicing it rather engage in endless diversions. There are no set rules for effective planning. To make matters worse, as MacKinney (1984) put it “the right way is not always practical.”

Because colleges and universities must learn to appreciate the complexities of strategic planning, institutional research can assist institutions in developing a more effective process of planning. In order for institutional research to become more effective, it must take on a more aggressive role, engaging in decentralized and centralized institutional research activities, taking a more pro-active and comprehensive stance in its activities, and providing a clearer linkage between institutional research and institutional planning.

**Elements of Fragmentation**

The fragmented approach taken by institutional research may become an appropriate strategy in dealing with the complexities of issues facing higher education. Since no two departments or units within the same institution need the assistance of and can benefit from institutional research in the same way, institutional research should necessarily be flexible and fragmented in its services to clients and constituents.

There are many advantages of the fragmented approach. First, the fragmented approach lessens the perceived threat of centralized control among sub-units. Given the dualistic organizational structure of higher education, the second advantage is that the fragmented approach may be the only way to serve sub-units within a large “cybernetic”
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Institution, an environment characterized by semi-autonomous sub-units (Birnbaum, 1988). Institutional research may be one of a few offices on a given campus which can persuade semi-autonomous subunits to work together without causing undue fear of centralized control. The third advantage is that the fragmented approach allows subunits to remain essentially independent while at the same time allows them to take advantage of information from other campus constituents. Finally, the fourth advantage is that institutional research can provide individual sub-units with research and technical expertise needed to complete specialized institutional research projects.

Elements of Centralization

Given the nature of higher education, particularly in a cybernetic-type environment, the merits of the grass roots approach to planning cannot be underestimated. But if institutions are ever going to be successful in adopting the so-called "systems-theory" approach to planning, some elements of centralization are necessary. The concept of systems theory reflects "a set of interrelated parts designed to accomplish a goal or objective with the basic assumption that the total of the parts differs in significant respects from the parts taken separately and that the interaction of the parts is essential to accomplishing the mission" (Winstead & Ruff, 1986, p. 32). In the context of institutional governance, the systems approach will necessarily require all institutional sub-units to view all matters at the institutional level. This is not to say that departmental matters are unimportant. Rather, in a time of economic and institutional uncertainties, it is more helpful for factional constituents to set aside their self-interests and to focus on matters which are in the best interest of the institution as a whole.

In some institutions, the systems approach may be difficult to employ due to problems associated with strong political interest groups, fluid participation among campus constituents, or what Birnbaum (1988) calls the "loose-coupling" effects of sub-subsystems within an institution. The concept of "loose-coupling" as explained by Birnbaum (1988, p. 38) refers to the "connection between organizational subsystems that
may be infrequent, circumscribed, weak in their mutual effects, unimportant, or slow to respond.” In a loosely-coupled campus, subsystems are usually autonomous units which are capable of detecting and responding to changes in the external environment without centralized coordination. The challenge for institutional research is to persuade loosely-coupled subsystems to work together and to adopt a common goal reality which works toward the benefit of the whole institution.

The ability to implement centralized institutional research activities is partly dependent on the history of the function of institutional research and the location of the office of institutional research on the governance structure on a given campus. If an office of institutional research has been working persistently with campus constituents in decentralized projects, the tasks of persuading constituents to take part in centralized institutional research projects may become more manageable.

In terms of the organizational location of the office of institutional research, it is desirable, although not critical, for the office be placed very high up in the organizational structure. This can solve some problems associated with the propriety of institutional research. For example, it is not uncommon to find institutional research reporting to the academic vice president, creating the perception that institutional research belongs to and will spend most of its attention in the academic affairs area. A successful institutional research function must be involved with all areas of the institution—finance, student affairs, and administration, and other existing functional divisions—and the less people think that institutional research belong in the academic affairs area, the more efficient the office can be. Of course, this is not an absolute requirement that the office of institutional research be placed directly under the president as long as campus constituents understand that the office belongs to and serves all of the campus. The better the understanding of this, the better and more efficient institutional research can serve the entire campus community.
Pro-Active and Comprehensive

In addition to embracing elements of centralization and decentralization, institutional research must be more pro-active in its activities as opposed to being mostly reactive. An institutional research process that is pro-active anticipates events, problems, and issues facing an institution and provides the leadership for the institution to respond to them while still possible. A pro-active approach can dissuade institutions from relying on bottom-line approaches to decision making, such as the use of student enrollment, student aptitude test scores, endowment, faculty headcounts, or a yearly financial summary. Bottom-line approaches are at best temporary and sometimes superficial and do not deal adequately with the complexities of serious problems facing higher education.

Institutional research also must be comprehensive in its approach to its activities, engaging or assisting in appropriate environmental scanning, futures research, institutional assessment, and specialized research studies.

An important activity of institutional research is environmental scanning. The environment is comprised of elements outside an institution which can have direct or indirect effects on the institution. Environmental scanning is thus a process of detecting and analyzing the potential impacts of these elements. The intent of environmental scanning, as appropriately explained by Peterson (1986, p. 145) is “not to make plans or set goals but to provide a realistic picture of the external environment with which strategic planning takes place.”

Futures research is a discussion of a future direction of an institution. To manage the future competently, institutional research must provide institutional planners and decision makers with valuable environmental and evaluation information, to assist administrators in choosing a preferred future state by reconciling both internal and external environmental factors, and to assist in the formulation of appropriate strategies to achieve some desired future state. Quite clearly, any type of future planning will be short-sighted if institutional research is not used.
Assessment is yet another area in which institutional research must play a critical role. Assessment, similar to strategic planning, is an elusive concept; yet, if it is done correctly, it can reveal critical information for planning and management purposes. Institutional research can assist the institution and its various departments in understanding the purposes of assessment, in defining the context of assessment, and in increasing the likelihood that generated assessment information will serve as valid and reliable bases for planning, management, and self-improvements.

Finally, for institutional research to assist sub-units in specialized institutional research studies, it must work closely with many campus constituents, understand their unique problems and circumstances, and assist in the conceptualization of studies which can yield important findings for planning and management purposes.

_Suggested Roles of Institutional Research in the 1990s and Beyond_

Recognizing that institutional research must be pro-active and comprehensive in its activities and have elements of fragmentation and centralization, I maintain that the functions of institutional research in the remainder of the 1990s and beyond should encompass at least the following functions in order for it to serve a viable purpose in institutional governance:

1. To inform one's constituents;
2. To provide a more rational approach to decision making;
3. To assist in the formulation of institutional policies;
4. To identify problems and provide alternative means of resolution;
5. To facilitate management and to evaluate outcomes;
6. To support resource allocation; and
7. To integrate institutional research with institutional planning.
Informing One's Constituents

Even though offices of institutional research do not and should not engage in direct collection and entry of institutional data, their roles as comprehensive centers of information often serve to legitimize the role of institutional research at least initially. Of course, institutional research must go beyond that by providing issue-oriented and contextual intelligence for campus constituents to know and use. The challenge for institutional research is to be sensitive to departmental nuances and concerns yet at the same time take into consideration how decentralized information can be used for effective institutional planning.

Providing a More Rational Approach to Decision Making

Higher education is not known for its experience in managing reduction. Given prevailing budgetary, political, and social adversities facing higher education, perhaps a systems theory approach may be the only effective way to handle all institutional adversities. Institutional research of course can play a critical role in assisting institutions toward this goal.

Whether the existence of rational information can actually dissuade institutions from relying too much on political influences and personal management styles remains yet to be seen. To be sure, maintaining status quo is unrealistic or at least counterproductive given current adversities and pressures confronting institutions and the fact that past practices have not brought them to a more competitive position.

Assisting in the Formulation of Institutional Policies

By providing timely and relevant information to campus constituents, institutional research can assist in the development of information-based institutional policies. Because institutional research usually has some experience working with campus constituents in decentralized and centralized projects, institutional research can become a crucial linking pin for an institution. More important, institutional research may be in the best position to
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Institutional research is a method used to develop a perspective of the strengths and weaknesses of the entire institution and to understand the subtle nuances and uniqueness of each department or office; yet it can provide an institutional scenario without causing widespread discontent, panic, or fear.

Identifying Problems and Providing Alternative Means of Resolution

Because of departmental self-interest and other characteristics associated with organizational dualism, often departments do not spend the time identifying potential problems facing them let alone researching possible resolutions to these problems. Institutional research can help identify global and special problems for the institution; can assist individual departments in decentralized environmental scanning; and can research and recommend possible resolutions of problems.

As a side benefit, institutional research can look at and summarize all problems and solutions at the institutional level. In addition, institutional research can play a key role in persuading campus constituents to work together for the common good of the organization.

Evaluating Outcomes and Facilitating Management

Assessment is a complicated matter. Because it is complicated, constituents are necessarily apprehensive about its process and usefulness. Perhaps the best way to introduce assessment to campus constituents is for institutional research to work with each individual campus constituent. Institutional research can serve as an important source of information about how to begin an assessment project, to resolve many of its complications, and to link assessment information to self-improvement, management, and planning.

Supporting Resource Allocation

This is a very tricky function for institutional research. On the one hand, institutional research can provide valuable information to each department in its quest to justify or expand its budget, but on the other hand, it can assist central administration in its centralized responsibility of interpreting each department's budget at the institutional level.
The challenge for institutional research is to be able to do both without jeopardizing the confidence of both parties.

**Integrating Institutional Research with Institutional Planning**

Perhaps the most useful service institutional research can provide is the linkage of information to institutional planning. Information may be enlightening but hardly useful if they are not incorporated into the decision making and planning process. To assist institutions in achieving this goal, institutional research must not only be centers of information but also centers of issue-oriented and contextual information. Of course, institutional research, even if used properly, cannot guarantee sound decision. As Saupe (1981, 1990) has correctly pointed out, the collective wisdom and participation of the campus are the major determinants of sound decisions. What institutional research can do is to provide the necessary data and information and to persuade major decision makers to look at the information as bases for making better decisions.

**Concluding Remarks**

Given the critical importance of the functions of institutional research, I contend that institutional research is here to stay. It is not a fad but a function which will continue to change and grow as colleges and universities do likewise.

Maintaining status quo is not a solution; neither is more reliance on bottom-line approaches to planning. Institutional research must play a more active role in devising a mechanism whereby information can be put to better use in the planning and management process. The role of institutional research is a challenging one since it must embrace elements of centralization and fragmentation, but if properly operationalized, it can serve a critical function in institutional governance.
References


