The evaluation of "institutional effectiveness" is required by many accrediting agencies and mandated by some state legislatures. It was hypothesized that the degree to which institutions have mobilized to meet these new accountability demands is related to the existence of a formal institutional research office. To test this hypothesis, institutions that will be reaccredited between 1987 and 1992 by the Southern Association of Colleges and Schools were surveyed. Responses from 67 institutions indicated few relationships between the existence of an institutional research office and the degree to which planning, research and evaluation were carried on as a part of ongoing activities prior to the visit from the accreditation team. The results are seen as raising questions about the role of institutional research in the accreditation process and in the evaluation of institutional effectiveness. Data analyses are appended in five tables. Contains 7 references. (Author/KM)
THE RELATIONSHIP OF INSTITUTIONAL RESEARCH TO THE
ASSESSMENT OF INSTITUTIONAL EFFECTIVENESS

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Teresa Karolewski
Chair and Editor
Forum Publications Editorial Advisory Committee
THE RELATIONSHIP OF INSTITUTIONAL RESEARCH TO THE ASSESSMENT OF INSTITUTIONAL EFFECTIVENESS

ABSTRACT

The evaluation of "institutional effectiveness" is required by many accrediting agencies and mandated by some state legislatures. It is hypothesized that the degree to which institutions have mobilized to meet these new accountability demands is related to the existence of a formal institutional research office. To study this hypothesis, institutions which will be reaccredited between 1987 and 1992 by the Southern Association of Colleges and Schools (SACS) were surveyed. The responses from the 167 institutions indicate that there are few relationships between the existence of an institutional research office and the degree to which planning, research, and evaluation was carried on as a part of the ongoing activities prior to the visit from the accreditation team. The results raise questions about the role of institutional research in the accreditation process and in the evaluation of institutional effectiveness.
THE RELATIONSHIP OF INSTITUTIONAL RESEARCH TO THE
ASSESSMENT OF INSTITUTIONAL EFFECTIVENESS

Institutions of higher education are increasingly called upon to provide evidence that they are accomplishing their goals and objectives. The impetus is coming not only from regional and specialized accrediting agencies but also state legislatures. Indeed in a recent survey by Boyer et al. (1987) reports that two-thirds of all states have formal assessment initiatives for their public institutions of higher education. These initiatives range from encouraging institutional action to statewide monitoring and mandated statewide testing.

In the South the regional accrediting agency has been a major driving force in the assessment of educational outcomes. As one of the first regional associations to adopt an "institutional effectiveness" criteria, the Commission on Colleges for the Southern Association of Colleges and Schools requires that institutions engage in ongoing, campus-wide planning and evaluation for the purpose of improving institutional programs (SACS, 1987, p. 10).

The high level of interest in assessing higher education has prompted a number of national and regional conferences with themes related to this topic. The Third National Conference on Assessment in Higher Education will be held in the summer of 1988. "Assessing the Outcomes of Higher Education," an Educational Testing Service conference, was held in New York in
October 1986; and two conferences were held at the University of Georgia in Athens in 1986 and 1987 on "Assessment, Evaluation, and Accreditation" and "Assessing Institutional Effectiveness."

Clearly accountability in higher education has become a national issue. Secretary William J. Bennett has charged that in the past accrediting agencies have examined only the inputs of higher education--number of faculty, qualifications of faculty, number of library books, etc. Bennett has proposed new regulations for accrediting agencies to correct this weakness, with a focus on both inputs and outputs, defined as "student achievement--what students actually learn" (The Raleigh News and Observer, 1987, p. 22A).

The assessment of institutional effectiveness has become a buzz word among higher education administrators, with much concern about how their respective institutions will demonstrate to external agencies that their goals and objectives are being accomplished. However, it is not clear to what extent campuses currently carry out planning and evaluation processes as a part of their ongoing activities. The field of institutional research, though perhaps not well understood outside of its own professional circles, conducts ongoing case studies of a single institution, with the purpose of providing objective information about the functioning of the institution. Many institutions have formal and centralized institutional research offices, though the names of such offices may vary from "research and evaluation" to "planning and research." Other institutions do not have
institutional research offices, yet it is highly likely that institutional research functions are carried out at some level of the organization. In such institutions the tasks of collecting data about the performance of the institution and about the external environment, analyzing and interpreting the data, and presenting information to assist management in making decisions (as described by Maassen in Muffo, J.A. and McLaughlin, G.W., 1987) may be dispersed among several offices and individuals.

One would expect that institutions with established institutional research offices would be better prepared to meet the demands of accountability than those whose institutional research functions are decentralized and not formalized. This expectation is based upon at least three roles of IR offices. First the IR office collects and analyzes information about the institution as a whole rather than its separate units, which is the case when academic departments, for example, carry out their own institutional research activities. Secondly, established IR offices have collected data over a period of years so that trend analysis is possible. In this role the office often serves as the storage site for institutional data, such as state and federal reports. Finally, staff in IR offices usually know the institution's databases and can create extract files and retrieve data from existing computerized files to answer specific questions. Thus, the formal, centralized IR office should be well-prepared to assist in the assessment of institutional effectiveness.
Such a hypothesis is what prompted this study of institutions that will be reaccredited between 1987 and 1992 under the new criteria adopted by the Southern Association of Colleges and Schools. Because the new criteria requiring that institutions demonstrate effectiveness had just come into effect, these institutions had not yet organized for the task. The goal was to survey institutions before they had undergone the reaccreditation process to determine the degree to which planning, evaluation, and institutional research activities required under Criteria III "Institutional Effectiveness" were already a part of the institution's regular, ongoing processes.

In a previous study of these institutions, Gentemann and Rogers (1987) examined the relationship between institutional variables and planning, evaluation, and institutional research activities. This study draws upon the same survey data but specifically examines whether institutions with institutional research offices were more likely to carry out regular planning, evaluation, and research activities prior to their reaccreditation than were institutions without formal institutional research offices. Furthermore, were those offices designated by the chief executive officers as responsible for providing data and analysis to support the reaccreditation process actually engaged in institutional research activities? Did offices designated as providing this support differ in their involvement in traditional institutional research activities, depending upon whether the office was officially called a
research, evaluation and/or planning office or whether it had another title unrelated to institutional research functions?

Another practical concern prompting the study is the adequacy of resources to meet the accountability demands from accrediting agencies and legislatures. Unless evaluation and research activities have already been institutionalized, it is highly unlikely that colleges and universities are prepared to absorb the costs, both in time and money, required for ongoing assessment of not only student outcomes but research and public service missions.

These are the questions which this paper will address.

METHODOLOGY

Specifically this study examines the relationship of the function of the office designated by the chief executive officer as responsible for data and analytical support of the self-study to the level of systematic, campus-wide planning, evaluation, and institutional research activities. Furthermore, the function is examined in relation to the office's involvement in traditional institutional research tasks. In addition to the function of the office, planning, evaluation and institutional research activities are compared for institutions with formal institutional research offices and those without such offices. Responses to items about the adequacy of resources for carrying out both current responsibilities and all processes and tasks required under the institutional effectiveness criteria are also
compared by the function of the respondent's office and by the presence of a formal institutional research office.

The sample selected was all higher education institutions that would be reaccredited by the Southern Association of Colleges and Schools (SACS) between 1987 and 1992. A total of 311 institutions met the selection criteria. The chief executive officer of each institution received the questionnaire with an introductory letter asking that he/she direct the questionnaire to "the person who will provide the data and analysis to support the evaluation process" required for the institution's accreditation. The letter stated, furthermore, that in many cases the person would be the director of institutional research, but that persons with other titles may be assigned this responsibility.

The content of the first 31 items on the questionnaire was drawn from the worksheet of required statements of the Criteria for Accreditation: Commission on Colleges (SACS, 1987). These items describe evaluation, planning, and institutional research activities required to comply with "Section III: Institutional Effectiveness."

In each of these 31 activities, respondents were asked to indicate if it were "performed systematically and campus-wide," "either not systematic or...not campus-wide," "unknown," or "not applicable."

The resources available to the respondent's office were measured by a Likert scale. The respondent assessed the adequacy
of the budget, the size of the staff, and the knowledge, skills and experience of the staff to carry out activities for which their offices were currently responsible. Then they judged the adequacy of resources for carrying out all the evaluation, planning, and research activities required to demonstrate institutional effectiveness.

The final 18 items were drawn from a content analysis of interviews with 12 institutional researchers. Three judges analyzed the interviews and developed statements describing the job tasks of institutional researchers. The survey asked each respondent to indicate if he/she or his/her office performed each of the 18 tasks on a regular basis, at special request, or not at all.

Three experts in institutional research who were knowledgeable of the institutional effectiveness criteria reviewed the instrument, and their suggestions resulted in some changes. The final draft was completed by ten institutional research and planning directors as part of a pretest.

Surveys were mailed to chief executive officers of 311 institutions in January and February of 1987. Included with the survey was a postcard to be returned with the name of the individual who would respond to the questionnaire. A follow-up letter was sent to those who did not return the postcard.

Southern Association of Colleges and Schools provided information about the institutions, including chief executive officer, mailing address, date of reaffirmation, level of
institution (two-year, baccalaureate-granting, comprehensive, and doctoral), student enrollment, and governance (public or private).

The person responding to the survey indicated his/her title and the office’s reporting lines. The directions indicated that organizational charts should be returned with the surveys, and 43% of respondents complied with this request.

Two derived variables are the respondent’s job function and the existence of an institutional research office. The job function was coded based on the respondent’s title, with titles designating responsibilities for research, evaluation, and/or planning constituting one category and all other titles grouped into another category. The existence of an institutional research office was based on analysis of the organizational charts. In the absence of the charts, institutions with office codes of 09 in the HEP 87 Higher Education Directory were coded as having an institutional research office.

Responses to the first 31 items were treated as a dichotomous variable: either the institution was engaging in the process or activity on a systematic, campus-wide basis or they were not. Responses of "unknown" were coded as not complying, for it was judged that the person responsible for the analytical support for the self-study would be aware of planning, research, and evaluation activities on campus. Six items were judged as inappropriate for some institutions, and responses of "not applicable" were deleted from the analysis for those six items.
Otherwise, "not applicable" responses were also coded as not complying with the Criteria.

The sum of all 31 items constituted the total Institutional Effectiveness scale. Three subscales—Planning, Evaluation, and Institutional Research—were developed by summing items categorized under these headings on the SACS worksheet. Further analysis indicated high internal consistency of the Institutional Effectiveness scale and the three subscales (.88, .65, .77, and .74, respectively).

Responses to the Institutional Research Tasks were coded as 3 for "perform on a regular basis," 2 for "perform only at special request," and 1 for "do not perform." The sum of items provides an index of institutional research activity. Total scores range from 18 to 54.

Means of the subscales, the Institutional Effectiveness scale, and the Likert items were compared, with an alpha of .05 established for statistical significance.

RESULTS

Characteristics of Institutions in Sample

A total of 167 institutions contacted returned completed surveys, for a response rate of 54%. These institutions did not differ significantly from those that did not respond when compared by state, governance (public versus private), level (two-year, baccalaureate-degree, comprehensive, doctoral) and enrollment.

The majority of institutions that participated in the study
were public. Approximately half were two-year colleges. Not surprisingly, 61% do not have formal institutional research (IR) offices. Proportionately more of the public institutions have IR offices than do the private institutions. (See Table 1.)

Of the individual's who completed the surveys, only 41% have titles indicating that they are responsible for the functions of institutional research, evaluation or planning. The remaining 59% have titles ranging from a faculty member who is concurrently serving as chair of the self-study to chief executive officer. The variety of titles was extensive, from assistant to the president to registrar.

Summary of Previous Findings

In Gentemann and Rogers (1987), we describe how governance, level of institution, and enrollment size differentiate institutions in their degree of preparation for carrying out studies of institutional effectiveness.

Public and private institutions differed on only three items. Public institutions are more likely to evaluate the effectiveness of their public service mission (with those responding "not applicable" omitted from the analysis), to have a maintenance plan for the upkeep of their property, and to have a facilities plan.

Community, technical, and junior colleges are more likely to carry out evaluations of off-campus programs and to conduct evaluations of part-time faculty. All levels of institutions
were more likely than the doctoral-granting institutions to evaluate full-time faculty on a regular, campus-wide basis.

Larger institutions were more likely to report the establishment of procedures for institutional planning and evaluation, the development of a facilities plan, the ongoing evaluation of institutional research activities, and demonstration of institutional research in support of planning and evaluation.

An analysis of the total Institutional Effectiveness scale and the three subscales yielded some expected results. Of the three subscales, more differences were found on Institutional Research. Public institutions and ones with large enrollments reported more institutional research activity than other types of institutions. Two-year colleges and comprehensive universities engaged in more institutional research activity than baccalaureate-granting colleges.

In response to the questions about resources, Gentemann and Rogers (1987) found that most respondents consider their office resources adequate to conduct current responsibilities but not sufficient to assume responsibility for the assessment of institutional effectiveness. Over three-fourths indicate that their budget is insufficient to assume all planning, evaluation, and research activities mandated by SACS. Further over 80% state that their staff is not large enough to carry out these tasks, and a majority state that their staff does not have the expertise to assume this responsibility. There were not statistically
significant differences on the resource items by governance, level, or student enrollment.

The Role of Institutional Research

We expected to find major differences in institutions' preparedness for assessment based on the presence of an institutional research office. We had assumed that the surveys would be directed to offices responsible for institutional research, since the directions clearly indicated that the person responsible for analytical support of the self-study in many cases would be the director of institutional research. However, as previously reported, only 41% of the respondents had titles designating responsibility for institutional research, planning, and/or evaluation. As might be expected, those respondents who were responsible for institutional research, planning, and/or evaluation were more likely to work at institutions that had formal institutional research offices. However, at least eleven of the respondents whose institutions did have institutional research offices were not involved in research, planning and/or evaluation. Of these eleven, seven had titles indicating responsibility for academic affairs, such as dean of instruction; one worked in admissions; another, in registration and records; one, in administrative services; and the last one worked in management support.

Respondents from colleges and universities without formal institutional research offices were most likely to have responsibility for academic affairs. Other titles indicated
responsibility for planning, development, research, student services, public relations, admissions, administrative services, computer services, finance and business, faculty chair of the self-study, and personnel.

Since the presence of an IR office did not ensure that the survey was completed by the IR director, we created two separate, though related, variables: the existence of a formal institutional research office and the functions for which the respondent was responsible. These two variables are examined in relation to the survey responses.

Not surprisingly, institutions with institutional research offices were more likely to report systematic, campus-wide activity in evaluating institutional research activities and to demonstrate that institutional research supports planning. However, to our surprise, having a formal institutional research office did not relate significantly to any of the other 29 items.

If the function of the respondent was research, planning, and/or evaluation, then the institution was more likely to be involved in the following four activities: the establishment of procedures for institutional planning and evaluation; the evaluation of institutional research activities; the demonstration that institutional research supports planning and evaluation; and research on institutional purposes, policies, procedures, and programs.

The IR tasks identified through a content analysis of institutional research jobs were analyzed only by the function of
the respondent. The reason is that the directions ask "if you or your office performs this task," not whether the task is performed on campus. Those with research, planning, and/or evaluation responsibilities had a significantly higher activity level in ten of the eighteen items. Those activities included data collection; preparation of institutional research reports and factbooks; preparing information to support planning; conducting faculty evaluations, faculty studies, and student outcomes research; and reconciling data inconsistencies. (See Table 3.)

Differences on individual items help us to understand the specific activities that research, planning, and evaluation offices are carrying out. However, the scale scores are more reliable measures and allow comparisons of means. The means on the scales are compared for institutions with and without IR offices as well as for responses from persons with research, planning, and/or evaluation responsibilities versus those with other responsibilities. (See Table 4 for means.)

The mean score on the Evaluation scale was lower (not higher, as expected) for institutions with formal IR offices than those without IR offices. The items included in this scale cover evaluations of curricula, instruction, admissions, continuing education and off-campus programs, faculty and graduate teaching assistants, library, administrators, student services, safety plan, student outcomes, and the effectiveness of the research and public service missions. There were no other
statistically significant differences. Contrary to the original hypothesis, institutions with IR offices did not have higher means on Planning, Institutional Research, nor the total Institutional Effectiveness scale than those without formal IR offices.

Means on the Institutional Research scale were significantly higher for respondents with research, planning, and/or evaluation responsibilities than those with other responsibilities. The responsibilities of the respondent did not relate, however, to the scores on Planning, Institutional Research, nor the overall Institutional Effectiveness scale.

Means on the IR Tasks scale were significantly higher for respondents who had responsibility for research, planning, and/or evaluation than those with other responsibilities. Thus, these individuals were, in fact, carrying out more of the traditional institutional research tasks than those respondents with other titles. This finding supports the validity of the IR Task scale, for we would expect that those with titles relating to IR functions--research, planning, and evaluation--would be engaged in IR tasks.

Resources

Interestingly, only one item related to office resources distinguished institutions with IR offices from those without IR offices. It also distinguished respondents with research, planning, and/or evaluation responsibilities from those with other functions. This item related to the size of the
respondent's staff for carrying out all institutional effectiveness activities. In both cases, the mean responses were lower, indicating that existing staff is not large enough to assume the responsibility for evaluating institutional effectiveness. (See Table 5.)

DISCUSSION AND IMPLICATIONS

These results do not identify major systematic differences across types of institutions in the assessment of institutional effectiveness. With few exceptions, neither size, nor level, nor governance distinguishes those institutions who are currently engaged in more assessment activities from those who have hardly begun mobilizing for the assessment of institutional effectiveness.

The positive finding is that institutions that have assigned the responsibility of providing data and analytical support for the self-study process to offices of research, planning, and/or evaluation are, in fact, engaging in more traditional institutional research tasks. Completion of these tasks, we would expect, will make the job of institutional assessment more manageable. What is not clear is why offices that are carrying out more of the traditional IR tasks do not report that their institutions are further along in the planning and evaluation activities required for the assessment of institutional effectiveness. At best, institutions with formal IR offices are engaged in only a little over half of the required activities.
All respondents are aware of the limitations of staff size and budget for carrying out the assessment activities. Those with IR responsibilities are especially concerned with the need for a sufficient staff to assume added responsibilities. Whether or not institutions are likely to increase IR staff in the face of requirements to demonstrate effectiveness remains to be seen.

Finally, institutions with institutional research offices or offices which function in this capacity are not any more likely to be engaged in planning or the multitude of evaluation studies required, such as conducting evaluations of administrators, demonstrating that educational planning guides budget preparation, documenting that evaluations are used to improve teaching, etc. Perhaps it should not be surprising that there is not a relationship between the existence of an IR office and planning activities. After all, until recently, planning has not been a mainstream activity for institutional researchers. Further, research on institutional effectiveness is a new activity on most campuses. Thus, it may be understandable why the presence of an IR office has little effect on whether evaluation and planning activities have been undertaken prior to institutions going through the accreditation process under the new criteria.

A review of any recent AIR Forum program is evidence of the broad range of interests of institutional researchers. Institutional effectiveness is gaining ground as a topic of considerable interest among institutional researchers, but it
competes with a multitude of other demands. As Pace (1979) so aptly described over a decade ago, traditional institutional research offices may be weighed down with accounting needs that do not allow for thoughtful evaluations of institutional effectiveness:

One might suppose that the institutional research office within the college would be the natural locus for the ongoing institutional case study. But it might not be. Most such offices are beset by deadlines and heavily involved in basic accounting activities related to budget making, cost analysis, and similar matters, all of which orient the staff and its activities to serve administration and management. A case study needs data, in large amounts, but it also requires time for exploration, for reflection, and for thoughtful evaluation. Some institutional research offices have the capacity for educational evaluation as well as institutional accounting. Some do not (Pace, 1979, p. 124).

That we found a difference on the IR Task scale for offices who have research, planning, and/or evaluation responsibilities may indicate the fact that IR offices are overburdened with reporting and data collecting. Thus, the mere presence of an IR office is not enough to ensure that evaluation is occurring. A tentative conclusion is that IR offices are engaged in many activities which support assessment, but their involvement in the routine IR activities may prevent them from being more active in the assessment of institutional effectiveness.

As institutional researchers, we need to ask ourselves what role IR should be expected to play in the assessment of institutional effectiveness. When we proposed this paper to AIR, one reviewer said that the study looked like a "full-employment
for institutional researchers' paper. Perhaps. Institutional research is clearly needed to support outcomes assessment. However, we must reassess office priorities and determine if the evaluation of institutional effectiveness should become a top priority for the IR office.

Perhaps the most important question is this: If institutional researchers do not become more actively involved in the assessment movement on our campuses, then who will assume this role? Is anyone or any office better equipped to address the issues of institutional assessment? Who else but the institutional researcher has the broad view of the institution, based on a wealth of historical information about its functioning? It may be that we will need a further refinement of the definition of an effective institutional research office now that we are confronted with these new demands for accountability and outcomes assessment.
REFERENCES


The Raleigh News and Observer (September 6, 1987). Bennett wants college accreditation linked to what students learn, p. 22A.

Table 1
Characteristics of Participating Institutions

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>IR OFFICE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>GOVERNANCE</td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>65</td>
</tr>
<tr>
<td>II</td>
<td>83%</td>
</tr>
<tr>
<td>III</td>
<td>73%</td>
</tr>
<tr>
<td>IV</td>
<td>69%</td>
</tr>
<tr>
<td>Private</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>13</td>
</tr>
<tr>
<td>II</td>
<td>17%</td>
</tr>
<tr>
<td>III</td>
<td>27%</td>
</tr>
<tr>
<td>IV</td>
<td>31%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>47%</td>
</tr>
<tr>
<td></td>
<td>13%</td>
</tr>
</tbody>
</table>

LEVELS
I = Community, technical or junior college
II = Baccalaureate degrees offered
III = Comprehensive university
IV = Doctoral-granting university

NOTE: Missing data for presence of institutional research office for two institutions.
Table 2

Evaluation, Planning, and Institutional Research Items
Significantly Different Proportions by Presence of IR Office and Function of Office

<table>
<thead>
<tr>
<th>Items</th>
<th>IR Office</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Research</td>
</tr>
<tr>
<td>Establishment of procedures for institutional planning</td>
<td>45%</td>
<td>52%</td>
</tr>
<tr>
<td>Evaluate institutional research activities</td>
<td>25%</td>
<td>21%</td>
</tr>
<tr>
<td>Demonstrate institutional research supports planning</td>
<td>45%</td>
<td>53%</td>
</tr>
<tr>
<td>Research on institutional purposes, policies, etc.</td>
<td>27%</td>
<td>21%</td>
</tr>
</tbody>
</table>

* Statistically different proportions at p<=.01 significance level.
<table>
<thead>
<tr>
<th>Task</th>
<th>Research Offices</th>
<th>Non-Research Offices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collect data</td>
<td>2.94</td>
<td>2.75</td>
</tr>
<tr>
<td>Produce recurring reports for external governing bodies</td>
<td>2.88</td>
<td>2.55</td>
</tr>
<tr>
<td>Provide information to support institutional planning</td>
<td>2.83</td>
<td>2.53</td>
</tr>
<tr>
<td>Produce one-time reports for external governing bodies</td>
<td>2.72</td>
<td>2.47</td>
</tr>
<tr>
<td>Conduct faculty evaluations</td>
<td>2.01</td>
<td>1.57</td>
</tr>
<tr>
<td>Conduct faculty studies</td>
<td>2.48</td>
<td>2.01</td>
</tr>
<tr>
<td>Conduct student outcomes research</td>
<td>2.52</td>
<td>2.01</td>
</tr>
<tr>
<td>Produce factbooks</td>
<td>2.58</td>
<td>1.93</td>
</tr>
<tr>
<td>Produce brief institutional research reports</td>
<td>2.48</td>
<td>2.04</td>
</tr>
<tr>
<td>Reconcile data inconsistencies</td>
<td>2.65</td>
<td>2.18</td>
</tr>
</tbody>
</table>

Means are significantly different at the .05 level.
<table>
<thead>
<tr>
<th>Scales</th>
<th>Function</th>
<th>Other</th>
<th>IR Office</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Research</td>
<td>Other</td>
<td>Yes</td>
</tr>
<tr>
<td>Evaluation</td>
<td>18.83</td>
<td>19.35</td>
<td>18.08</td>
</tr>
<tr>
<td>Planning</td>
<td>6.23</td>
<td>5.76</td>
<td>6.03</td>
</tr>
<tr>
<td>Institutional Research</td>
<td>12.27</td>
<td>11.00</td>
<td>11.76</td>
</tr>
<tr>
<td>TOTAL INSTITUTIONAL EFFECTIVENESS</td>
<td>37.19</td>
<td>36.07</td>
<td>35.85</td>
</tr>
<tr>
<td>IR Tasks</td>
<td>40.15</td>
<td>36.54</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: End-points of brackets indicate means that are statistically significant at the .05 level.
Table 5

AVAILABILITY OF RESOURCES

<table>
<thead>
<tr>
<th>Office’s Function</th>
<th>Presence of IR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Research</td>
</tr>
<tr>
<td>The budget for my office is adequate to carry out activities for which my office is responsible.</td>
<td>3.14</td>
</tr>
<tr>
<td>My staff is large enough to carry out the activities for which my office is responsible.</td>
<td>2.66</td>
</tr>
<tr>
<td>My staff has the knowledge, skills, and experience to carry out the activities for which my office is responsible.</td>
<td>3.72</td>
</tr>
<tr>
<td>The budget for my office is adequate to carry out all activities listed.</td>
<td>1.85</td>
</tr>
<tr>
<td>My staff is large enough to carry out all activities listed.</td>
<td>1.66</td>
</tr>
<tr>
<td>My staff has the knowledge, skills, and experience to carry out all the activities listed.</td>
<td>2.76</td>
</tr>
</tbody>
</table>

= Strongly disagree  
= Disagree  
= Undecided  
= Agree  
= Strongly agree

NOTE: End-points of brackets indicate means that differ statistically at the .05 probability level.