Wave of the Future?: Integrating
IR, Outcomes Assessment, Planning, Program Review, and Accreditation

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Despite the requirement of all regional accrediting bodies that higher education institutions develop and sustain a culture of evidence-based decision-making and continuous improvement, very few models exist that can offer guidance for how to do so, and research on the subject is sparse. I contend that an effective means of achieving such a culture is through integrating what I refer to in this paper as the quality functions, i.e., institutional research (IR), outcomes assessment, program review, strategic planning, and accreditation. This integration could be achieved in various ways, such as through committee representation and working groups composed of representatives of offices that comprise each of the quality functions, or through a centralized unit that houses and links these functions, or some combination of these approaches and accompanying formal processes. Institutional culture must be taken into account in determining the structures and processes that will achieve integration.

This study focuses on an organizational model that integrates the quality functions via a centralized unit that brings together institutional research, outcomes assessment, program review, strategic planning, and accreditation under the same umbrella. Whether referred to as Institutional Effectiveness or by a departmental name that reflects some of the functions within it, this integrated model creates a focal point for the institution's commitment to effectiveness and the use of data and research in decision making. As one of the managers in this study said, someone has to take the lead.

This centralized integrated configuration is uncommon. Therefore, this study examines how the model is organized in practice, how such offices were started, why this approach was chosen, and its advantages and challenges. Higher education is under tremendous pressure to demonstrate its value and show improvement at the same time that budgets are declining, competition is increasing, and the demand for greater access is growing. The use of data, research, assessment, and evaluation should be integral to helping institutions navigate these white water rapids. But we need to learn from each other how best to do so. That is my intent in conducting this research. I hope IR and Assessment professionals, the IR

profession, higher education executives, and accreditors will benefit from the findings and that it will prompt others to conduct additional studies and share them.

Method

Because Institutional Effectiveness departments are a relatively new phenomenon on which there has been little formal investigation (Leimer, forthcoming), and the integration of the responsibilities that can be referred to as "quality" functions (i.e., IR, assessment, program review, accreditation, strategic planning) appears to be a new approach, it is unknown how many colleges and universities are developing these types of offices. Therefore, this research is exploratory and descriptive rather than predictive (Marshall & Rossman, 2006). Purposive sampling (Silverman, 2006) was utilized to locate cases that match a specified set of parameters and interview participants were solicited through the principal investigator's professional contacts, e-mail lists established for institutional research professionals, and through the AIR newsletter. Participants are college and university managers of "integrated" offices, those charged with IR, outcomes assessment, program review, planning, and accreditation, or some combination of these activities in more than a research and data provider role. This combination of responsibilities and role are the necessary requirements for cases to be included in this study.

Sample

The purpose of this research is to determine how these "integrated" offices are organized, how and why they started, why this configuration was chosen, and its advantages and challenges. It was assumed that managers of such offices would possess this knowledge. Consequently, they were selected as respondents and were solicited for interviews via the June 2009 issue of the Association for Institutional Research (AIR) electronic newsletter and postings on the Reshaping IR listserv whose subscribers are IR professionals interested in the future of the field. This method resulted in 19 cases that met the sample specifications. The cases are from a range of institutional types, sizes, and geographic locales as identified through IPEDS data (IPEDS Data Center, 2010). Nine are public and ten are private not-for-profit. Based on Fall 2008 headcount, eleven enrolled fewer than 5,000 students, three enrolled 5,000 to 9,999, three enrolled 10,000 to 14,999, and two enrolled more than 15,000 students. By Basic

Carnegie Classification, two are Associate's, four are Baccalaureate, seven are Master's, two are doctoral/research universities, three are research universities, and one is a special focus institution. By accreditation region, one is located in Middle States, one in New England, two in the Northwest, three in the Southern, five in the Western, and seven in North Central, the largest region (Council for Higher Education Accreditation, 2010).

Interview Protocol

An introductory e-mail letter to which participants replied with their agreement served as informed consent. All agreed to the interview being recorded and confirmed by e-mail. Interviews were scheduled for one hour each. They were conducted by telephone from July through September 2009. Twenty seven open-ended questions were asked in semi-structured form. The questions were designed to obtain a description of the office or unit, (e.g., where it is located in the organizational structure, the lead manager's title and reporting line, staff size and qualifications, and primary responsibilities); the longevity of the office or units' current configuration; how it started and why it was needed and its purpose; why an integrated approach was taken; and challenges that exist either as a result of the integrated approach, the way the office/unit is organized, or to achieving its purpose in general. Participants were asked what works well toward achieving the office's purpose, what they would change if anything, and their advice for starting or managing an integrated office. Interviews were recorded and available only to the principal investigator and notes were taken during the interview process.

Analysis

In most qualitative research, coding, categories, patterns, and themes arise from the data rather than having been determined a priori (Creswell, 2009). This study too takes a predominately inductive approach. Rather than verbatim transcription, interviews were paraphrased into written notes which were labeled using the question to which the participant was responding as the primary method of organizing the data for analysis. These notes were then imported into a database and reports were produced in two forms for review: 1) a printout of responses to all questions for each case so that each case could be analyzed independently in its totality, 2) a printout of the response to each question for all cases so that

responses to each question could be compared across cases but independent of the responses to all other questions. This method facilitated multiple reviews of the data in general and in detail.

Some questions, such as those that describe the offices' organizational location and staffing, could be coded simply by counting the frequency of the occurrence of each response. However, when the purpose of a qualitative study is descriptive, frequency is not always the best representation of the data (Marshall & Rossman, 2006; King, 2004a). For example, frequency is important in showing the pervasiveness of certain characteristics of the integrated organizational model, but the number of people who offered particular advice would be less important or informative than the types of advice offered or reporting a specific piece of advice that is highly salient. Only if a particular type of advice was pervasive would its frequency be worth reporting as a study finding. Therefore, this study reports frequencies only as a means of showing the most common characteristics of the integrated office model.

For most aspects of this study, the categories of responses to interview questions emerged through iterative review of the two sets of notes as did the codes for those categories, a process known as "open coding" (Creswell, 2009; Länsisalmi & Kivimäki, 2004). For instance, through repeated review and reflection on responses to questions about the offices' inception, it appears they are being developed in three ways, i.e., intentionally, haphazardly, and evolutionarily. With such findings, if frequencies are shown, they are of less interest than the range or type of responses and are simply included so that information that may be of some value is not lost. In addition, although paraphrasing into notes was the primary form of preparing the interview data for analysis, in instances where specific quotes would help elucidate a finding, the recording was reviewed, transcribed verbatim, and quoted in the results section. In addition, paraphrasing was spot checked throughout the analysis by re-listening to that component of the tape and comparing it to the paraphrased text.

In qualitative research, validity is based on the study's trustworthiness, authenticity, and credibility as perceived by the researcher, participants, and readers and common procedures are used to assure such accuracy (Creswell, 2009). One such technique is to provide aggregated results to the study's participants for comment on accuracy and another is peer debriefing in which someone who was not

associated with the study reviews the findings and asks questions such that the study is interpreted by another person. Both of these techniques have been used in this study. Diversity of cases within the established context also adds to the validity of qualitative studies (King, 2004b) and cases in this study include a wide range of institutional types, sizes and locations. In addition, this paper was presented at the 2010 AIR Forum in draft form in order for the principal investigator to solicit feedback from colleagues that would assist in validating the research.

Limitations

One limitation of this study, its sampling method, is due to the exploratory nature of the research. Without random sampling and knowledge of the size of the population from which the sample is drawn, generalizations to the larger population cannot be made. Given that this study was not intended to generalize but to describe commonalities and differences between instances of a model, the sample is only a limitation in that some inferences cannot be made from a few of the findings. For example, based on these cases the "integrated" model configuration appears to be a relatively new phenomenon. However, it is possible that more established offices of this type exist but managers of those offices did not volunteer to participate in the study. Consequently, an existing model could be proliferating rather than a new model emerging.

The open-ended interview method is an appropriate design for gathering data about a phenomenon whose characteristics are unknown. Attempting to construct a structured questionnaire with established responses would likely miss important information while simultaneously imposing a framework that could distort the actual picture of the entity being investigated. However, it is possible that some questions, such as committee memberships and most common working relationships, include enough breadth and variability that participants may have overlooked some important ones while attempting to recall. This possibility arose during the analysis when the finding emerged that these offices most commonly work with executives and faculty. It is common for IR offices to work extensively with the registrar, admissions office, and IT, yet these offices were infrequently mentioned. Such different working relationships may be a distinctive characteristic of these "integrated" offices, but supplementing

the interview data with a brief structured questionnaire would add validity to the finding or disconfirm it. The finding was confirmed by members of the AIR Forum audience who manage an integrated office.

Another possible limitation is the potential for bias that could be induced when a single researcher analyzes, creates, and codes categories from qualitative data (Länsisalmi & Kivimäki, 2004). As stated in the methods section above, various techniques have been used to attempt to surface and eliminate any such bias in the results.

Results

Primary Responsibilities

The parameters for inclusion in this study are that these offices include some combination of IR, outcomes assessment, accreditation, strategic planning, or program review (Table 1) and in more than a data provider or researcher role. For instance, they may lead, facilitate, coordinate, consult, train, develop programs, advise, educate, evaluate, administer, monitor, or oversee. Consequently, in these integrated offices the responsibilities are broad. All include some typical IR responsibilities (Volkwein, 2008; Lindquist, 1999; Chambers & Gerek, 2007; Knight, 2003) such as generating and disseminating institutional data, enrollment management projections, estimations and tracking, varying degrees of external reporting, accountability reporting, administering and analyzing institutional surveys and disseminating results, providing data for program review and accreditation, data management, tracking institutional performance, and developing performance indicators, benchmarks, and peer comparisons. However, for four of these offices external reporting is minimal or nil. It is being handled instead by a system office, the operational unit that produces the data, the budget office, or, in one case, the marketing department uses the Common Data Set to answer guidebook surveys. Minimizing these offices' role in external reporting allows the staff to focus on more complex projects that contribute to achieving the institution's strategic goals and improvement.

Where these offices are involved in outcomes assessment, strategic planning, accreditation, or program review its role is usually more than providing data for those processes. They may be

coordinating, facilitating, chairing, training, consulting, or advising. In some cases they may have this responsibility for some of the functions but not for all.

Learning Outcomes Assessment & Program Evaluation.

Fifteen offices include responsibility for learning outcomes assessment to varying degrees but there is considerable diversity in the tasks (Table 1). Five managers chair or co-chair an assessment committee. Other aspects of these offices' role includes training faculty on developing assessment plans, writing and measuring outcomes, mapping their curriculum, and making use of the data for program improvement as well as consulting, advising, and assisting with plan development or curriculum mapping. Some offices develop and coordinate the process across all academic units, fund assessment activities, manage the assessment budget, monitor compliance, and manage and maintain annual reports. Some provide leadership for the assessment process and do so at both the academic and administrative program and institutional levels. They may be tasked with incorporating assessment into strategic planning, facilitating discussions and making presentations to help people see how assessment findings are relevant to them, or bringing together assessment being done across the campus for accreditation purposes. In addition to learning outcomes assessment, some of these offices assist with co-curricular assessment and assessment of student support services and student satisfaction. One coordinates a common alumni survey and another chairs an assessment and evaluation committee that recommends related policy. One assures that faculty can attend assessment conferences and off-site training and another, in conjunction with the assessment committee, manages an assessment grant. Another serves on a university level assessment committee that advises on institutional assessment such as the National Survey of Student Engagement, the Collegiate Learning Assessment, and the Voluntary System of Accountability. Another participates on an undergraduate assessment task force that is also considering e-portfolios and one occasionally administers standardized tests. Program evaluation too is considered an assessment activity by at least one office and someone is specifically hired to carry out this responsibility. Seven managers indicate program evaluation as one of their office's tasks.

Accreditation.

Ten offices take an integral role in accreditation. Five of the managers are the institution's Accreditation Liaison Officer (ALO). One chaired the self-study process and another, whose supervisor is the ALO, handles many of the ALO tasks such as drafting documents and substantive change reports for new programs, planning and organizing site visits, training on the accreditation process and expectations, and providing input to make sure programs have learning outcomes and assessment plans that meet requirements. Personnel in these offices may be members of the accreditation steering committee, evaluate changes in standards and develop processes to meet them, assist academic departments with disciplinary accreditation, write annual accreditation reports, write and proofread accreditation materials, or conduct focus groups as part of the self-study process.

Strategic Planning.

Nine offices facilitate strategic planning to some degree. Seven sit on the strategic planning committee. Three chair or co-chair the committee and another does so in the president's absence. Four are developing the planning process, specifically attempting to link planning and budgeting and sometimes assessment, program review, and the AQIP process as well. Other involvement includes oversight of the process, monitoring and reporting progress, developing implementation plans, working with subcommittees to write measureable objectives and key performance indicators or review annual reports, updating plans, attending Board meetings as the strategic planning representative, even coordinating and implementing some of the plans' strategic initiatives and activities.

Academic Program Review.

Fewer offices participate in the academic program review process (Table 1) in more than a data provider role. In two cases, the manager chairs the program review committee. In one of these, at a two-year college, distinct review processes exist for technical and developmental programs and for academic programs. The manager of this office chairs the former and is not involved in the latter. However, she is an ex-officio member of the curriculum committee. Three of these offices coordinate the program review process, i.e., scheduling, contacting reviewers, sending letters, funding external reviews, writing a final

institutional report, and general oversight. These activities are in addition to providing data for the

reviews.

Table 1

General Description of Integrated Offices			
Functional Responsibilities	**N**		
IR	19		
Learning Outcomes Assessment	15		
Accreditation	10		
Strategic Planning	9		
Program Review	5		
Department Title (duplicated count)	**N**	**Lead Manager Title**	**N**
IR (as part of title)	8	Director	9
Institutional Effectiveness	6	Vice President	2
Assessment (as part of title)	6	Associate Vice President	1
Planning (as part of title)	5	Associate Provost	1
Effectiveness (as part of title)	4	Vice Provost	1
Institutional Research	1	Associate Vice Provost	1
Analysis (as part of title)	1	Assistant to the President	1
Testing (as part of title)	1	Assistant Vice President	1
Research (as part of title)	1	Dean	1
Decision Support (as part of title)	1	Senior Director	1
Reporting Line	**N**	**Staff Size (Headcount)**	**N**
Provost	8	16	1
President	7	10	1
Dual to President and Provost	1	6	3
VP for Technology/CIO	1	5	2
VP for Planning and Development	1	4	1
Vice Provost for Budget and Auxiliaries Management	1	3	4
		2	6
		1	1

Other Responsibilities.

In addition to the committees above, other committees or governance groups in which these

offices participate in varying numbers include enrollment management, information technology,

curriculum committee, student retention and recruitment, Dean's Council, Provost's Management Team

or the equivalent which includes deans and other direct reports, and on the President's Cabinet. At least one office participates in the following committees or task forces: advising, mentoring, first-year experience, scholarships, policy review, change management, master planning, library, budget, general education, marketing, Higher Education Act, Institutional Review Board, academic departmental research that oversees student research and capstone projects, and web advisory.

Several other miscellaneous responsibilities were mentioned. For example, one manager says the office purpose is "institutional repair." "Anything that's not effective gets dumped in my lap so I can make it effective." For now, several student support programs that do not fit the office mission are housed there as the institution transforms itself. In another case the IE unit includes the institution's budget office along with planning and institutional research. Student evaluation of teaching is done in some of these offices and one is revising the course assessment process. One manager is the institution's "business intelligence officer" and advises on the development of new databases. One of the offices includes grant management which involves writing proposals and evaluation plans and evaluating the activities. Another includes market research. State Relations is a component of one of these offices. Another coordinates the online catalog. They may implement software applications that help collect and archive assessment plans and data, or institutional and unit plans and performance reports, or faculty activity and credentials, or space scheduling tools. Retreats are planned. Courses are taught. Some work with students and faculty on their research projects. Some present to the institution's Board.

Integrated Office Configuration

 Department Title.

Titles of these offices include Institutional Effectiveness, Institutional Research, and a variety of combined names that include either of these two terms in conjunction with Assessment or Planning. Less commonly the title includes either Analysis, Testing, Research, or Decision Support (Table 1). Only one office is solely titled Institutional Research; six are solely titled Institutional Effectiveness. In one case, the title was changed to Institutional Effectiveness because, as its manager said, "we could see more was going to be needed with the Higher Learning Commission. Little by little I was being pulled into more

things. We saw an evolution happening. My role was becoming broader and more strategic." Another

manager said the office title changed from Planning, Budgeting and Institutional Research to Institutional

Effectiveness when "the president came back from some national meeting saying IE seems to be the

current term for the kinds of things you're doing and that we want you to do more of so let's title the

office that way when we make you a vice president." Another manager said she wants to change the title

of her office to IE since it is the title that best reflects its role and responsibilities.

One IE manager, in describing the purpose and responsibilities of the three functions in his office

stated, "Let me work bottom up, begin with IR" which he described as producing mandated reports such

as IPEDS, requests for surveys and institutional data, university and college-level scorecards, and

developing measurement systems and providing data for them. "Going up to the higher level part of what

my responsibility is, it's to really facilitate culture change to move the institution more towards a data-

driven type of environment and using evidence to guide planning and decision making and so, as part of

that then, IR is an important resource for doing the research to produce the evidence of what's going on

internally." However, data and research that are used for improvement he attributes to the other functions,

i.e., marketing research and assessment. Another manager, whose office title is IE, distinguished between

IR and IE when she referred to her growing involvement in IE as "tracking activities to see if they're

meeting expectations,… determining factors that would predict future enrollment," and "surveys and data

being used by departments to improve where needed."

Reporting Line.

As is the case with IR offices (Volkwein, 2008), the lead manager in these offices most

commonly reports to the provost/chief academic officer or to a president (Table 1). In one case there is a

dual reporting line. For planning responsibilities the report is to the president; for assessment to the

provost, and for IR to both. This is a long-term configuration and the reporting line has alternated

between those two executive positions over time. In two cases reporting is to a non-academic vice

president, the Vice President for Technology/CIO and the Vice President for Planning and Development.

In only one case is the reporting line lower than VP and that is to a Vice Provost for Budget and Auxiliaries Management.

Common Working Relationships.

As is the case for most IR offices, these integrated offices work with individuals across the institution to carry out their responsibilities. A few, however, work primarily within the academic division and one primarily with IT and Undergraduate Studies. These offices commonly interact with the executive leadership and with faculty. In addition to the Provost or President, seven work extensively with the other Vice Presidents, five work with admissions and registration, three with information technology, six with academic deans, 14 with faculty, three with enrollment management, three with budget, and four with their institution's board.

Staffing

Lead Manager & Duration of Integrated Configuration.

These integrated offices tend to be led by long-term professionals. Of the 19 offices in this study, 13 of the lead managers have worked in the field of IR, Assessment, or Evaluation at least 10 years; 10 of those have 15 or more years of experience. Of these experienced professionals, 7 have been in their current position at least 10 years. However, only one manages an office whose current configuration has existed for that length of time. All others, including those managers with less than 10 years of experience in the field, are managing offices whose movement toward integrated responsibilities has occurred within the last 9 years, and more commonly (N=16) within the last 6 years.

Managers of these offices are recruited internally and externally. Eight were already employed elsewhere in their institution when they moved into this management position. Eight hired into the position from a different higher education institution. Two are very long-term employees of their institution who have worked there in no other capacity. Only one had no experience in the field or in higher education before accepting the manager position.

These managers are most likely to hold a doctorate (N=13); secondarily a Master's degree (N=5). One has a Bachelor's as the highest degree.

The lead manager's position title is varied. While the most common title is Director (N=9), it is also the lowest title (Table 1). The 10 other titles range from Senior Director to Vice President. In some cases, the manager's title recently moved from Director to a higher level as an indicator of the growing importance of the responsibilities, to recognize that those responsibilities were already being carried out by someone whose existing title did not equivalently reflect it, or because additional responsibilities were added. A Vice President for Institutional Effectiveness who started as Director of IR in 2003 said "the change in title was an effort on the president's part to indicate the degree to which IR has importance to the institution." An Assistant Dean's title was changed to Dean a year ago because "they recognized the responsibilities and changed the job title accordingly." Although she had been doing the work since 1999, the Vice President to whom she reports wants the office to be more visible and is attempting to reposition it "from data pullers into a leadership position for Institutional Effectiveness." In another case where the manager's title changed from Associate Vice President to Vice President, she had been doing IE work all along before it was recognized as such. The title change reflected her evolving role in budgeting, expertise in "what Lumina and SHEEO are doing and what federal organizations are pushing for, and what the national trends are, and the president's need for information to help him assess what other people are telling him in order to make good decisions."

In another case additional responsibilities are being added on an annual basis and the lead manager's title has risen from Director of IR to Assistant Vice President for Institutional Research and Effectiveness. In one case the lead manager's title became Vice Provost at the request of the faculty to ensure that effectiveness issues would be under the oversight of the Provost so that decisions would not be made purely from a financial perspective.

Purpose and Responsibility.

In describing the responsibilities or purpose of their office, 10 of the 19 managers used language that conveyed proactivity such as leading, pushing, driving, or promoting. The purpose of one manager's office is to provide "leadership for a data-driven institution." Another noted seeing people at her institution shifting toward making data-driven decisions and described herself as having "pushed hard for

it." Another said "we take initiative and get involved." Another described the office's purpose as "affecting policy and pushing the institution for improvement." Yet another said one of their roles is to "facilitate culture change and move the institution toward a more data-driven environment." Two others said the purpose of their office is to "proactively provide information that helps drive good decision making" and "promote the continual improvement of the learning environment." Five of these 10 managers specifically defined their role as one of leadership.

Another common way of talking about one's role, responsibilities, or office purpose is as "helping," "supporting," or "service." While in some cases the managers who used proactive language also used some of these terms, six managers solely used language denoting the support role. For instance, "I help the organization improve itself and move forward. I help others do what they need to do. I help bring clarity and focus." Another said, "I'm a service-oriented kind of office, so if something needs to be done." One manager said "The primary purpose is decision support in support of improving the institution." Yet another said "my goal is to get people what they need to do the best job they can for our students."

Most (N=12) of the managers of these offices feel they have a lot of autonomy and latitude to shape the direction of their office and the tasks it takes on. One manager qualified the extent of his control by stating that although the decision making is primarily all his within the current structure, changing the direction or modifying the structure of his office would involve the provost and associate provost. Among the other two "high autonomy" managers who specifically mentioned their influence on direction and structure, collaboration with the president or vice president to whom they report and that person's ultimate approval was noted as well, but in both cases the managers were the initiators. Among this group of 19, only two have little control. In one of these cases where the manager says she has "very little" control, her activities are delegated by the president but she determines how to carry them out. The other case is similar in that the president assigns increasing responsibilities to the office regardless of fit with the manager's vision of its mission.

Staff Size and Type.

In terms of staffing, including the lead manager, these offices tend to be small (Table 1). The two that are large include responsibilities in addition to those specified for the purpose of this study. The largest, with a headcount of 16 and 15.5 FTE, includes the institution's budget office and special projects implementation in addition to strategic planning and IR. Seven people are assigned to the latter three functions and nine to budgeting. It is led by a Vice President. The second largest office, with a total headcount of 10 (8.5 FTE) was recently created by merging existing IR and Decision Support offices and individuals who were conducting IR activities in other units into a centralized unit and hiring for assessment and evaluation expertise. It is led by an Associate Vice Provost. An IR Director and a half-time IR analyst may be added to this unit in the future.

Three offices each employ six people. One of these, in addition to the Vice Provost for Institutional Effectiveness, includes a Director and Associate Director of IR, a Research Assistant, an Associate Director of Assessment, and a Director of Marketing and Enrollment Research. Another, headed by an Associate Vice President for Institutional Effectiveness, includes two employees who are less than half time, one of whom manages grants and another whose responsibility is "quality" training. The four full-time employees in this office are responsible for IR, learning and student development outcomes assessment, strategic planning, and the AQIP accreditation process. The third, headed by the Director of IR and Assessment, includes four full-time and two hourly employees and their responsibilities span IR, outcomes assessment, and coordinating the academic program review process.

Two offices each employ five personnel, both with 4.5 FTE. In addition to the lead manager who is an Assistant Vice President, one of these offices includes a Research Coordinator, a Coordinator of Technology whose tasks are those of a research analyst, a secretary, and a part-time faculty Assessment Director. Approval has been given to hire a Coordinator of Effectiveness. The other 4.5 FTE office consists of two three-quarter time researchers, an Assessment Coordinator, a Research Information Clerk and the lead manager is a Director.

One office is comprised of four full-time staff. Its lead manager is Assistant to the President and the unit he heads includes more than planning, IR, assessment, accreditation, and program review but the other three employees are specifically assigned to these functions. They include an Assessment Director, a Software Applications Analyst who is the web developer, and an Institutional Research Analyst who handles IR and coordinates the program review process. Planning and accreditation are the responsibility of the lead manager.

Four offices employ three staff each, with an FTE of approximately 2.5 each. One includes the Vice President and two part-time research associates. Another is headed by a Director and includes an Assistant Director and a part-time Research Assistant/Secretary. Staffing in this department is planned to grow with the addition of a part-time graduate student next year and an Assistant Director of Assessment the following year. Eventually both Assistant Directors will be Directors and the current Directors' title will move up. Another of these offices is led by a Senior Director with an Assistant Director and a part time administrative assistant. The other includes a part-time Assessment Coordinator who will become full-time next year, an Administrative Specialist, and the Director as lead.

Six offices employ two people; two with 1.5 FTE, the lead manager and either an institutional researcher or administrative assistant. One of these is a distributed model that expands the capacity of the office through collaborations with other managers and their analyst staff. Only one of these offices is a single person department. It is in a specialized educational institution of approximately 1,100 students.

Capacity and Skills.

As is the case with IR offices in general, staffing is a challenge (Knight & Leimer, 2009; Leimer & Terkla, 2009; Morest & Jenkins, 2007; Huntington & Claggett, 1991) that 14 managers cite as necessary to make their operation run smoother or to achieve its purpose. In nearly all of these cases, the issue is inadequate staffing. In almost every case, one more full-time person is needed. One manager is attempting to reinstate two positions that were lost in budget cuts and another needs a half-time employee. In one case the desire is for a single, permanent full-time position rather than multiple part-time positions even though those part-time allocations add up to more than one FTE. This would allow for consistency,

easier prioritization of projects, and greater efficiency as the permanent person learns the position and the need to annually train new people is eliminated.

In another instance, the issue is balancing staff skills, assuring that enough people with the right skill sets exist to cover the responsibilities of the office. Similarly, for another manager who was hired to develop an integrated office, adequate positions were allocated but recruiting and hiring for such a wide range of skills has taken nearly two years and consequently slowed progress and required the manager to cover the responsibilities in the interim. Three managers mentioned a shortage of experienced professionals as detrimental to hiring. "When I look at job postings nationwide for IR people, there's a national shortage and lack of qualified people," said one manager. Another is hindered by the lack of "a true assessment expert" and yet another says "you have to grow assessment expertise, you can't hire it." High staff turnover was another staffing issue cited by one manager and she too stated that it is delaying achieving her goals.

Three managers suggested that better access to data and more efficiently structured databases would ease some of their staffing stress. Another suggested modernizing an outdated course evaluation process so that it requires less staff time to implement. Yet another suggested reducing the number of surveys the office is required to complete. One manager said both the technical and administrative workload is increasing and four said they need time to plan, prioritize, communicate, establish relationships, align functions and processes, strategize, envision, initiate, and take leadership in order to achieve the purpose of their office. Additional staffing would be needed to allow this to happen.

Developing the Configuration

It appears that this model of organizationally integrating the quality functions is a relatively new phenomenon. Only one of the offices in this study has been in place in its current configuration for 15 years. Another has existed for nine years, one for eight years, one for seven years, two for six years, and all others for five years or less.

Why Integrated Offices Began.

In 10 of the 19 cases, the impetus for developing the office was accreditation. It may have been in preparation for the self-study, as a result of a recommendation from the site team, or because of institutional constituencies' awareness of changing accreditation standards. In seven of the other nine cases, it was determined by the president, often a president who was new to the institution. It is difficult to distinguish from the data whether the president's decision was in light of accreditation standards or based on his or her own vision or preference for the use of information. In one case, the manager said a visionary, data-driven president, not accreditation, was the influencing factor. However, moving to the AQIP process was a driving force as well. In another case, the president changed the office name to Institutional Effectiveness, elevated the director's title to associate vice president, and made it a direct report. "The president just called me in one day and said she was changing my reporting to her because the area's become too important and there's too much need. She wanted to put more focus on it. There was increasing demand for everything I did. That's the reason for the new reporting line, title and configuration."

In yet another case, developing the office was initiated by a former president but the manager is uncertain how much of the approach can be attributed to that president and how much to the strategic planning process. One of its goals is to create a culture of quality with a process of continuous improvement and the ability to measure success. To achieve that goal, structures needed to be put in place to support it and someone needed to be charged with the responsibility. Even in this case, accreditation requirements appear to play a role in that the outcomes this specific planning goal is designed to achieve are expected by accreditation standards.

Why Take An Integrated Approach?

Overall the purpose of these offices is to achieve data-driven decision making and a culture of evidence and continuous improvement. While some of these managers noted that they see this change taking place, presumably it can be achieved through other organizational models. However, those institutions in this study that are intentionally planning and designing an integrated office are doing so

because the functions seem to fit naturally together and offer the possibility for efficiency, high quality, and focus that will bring greater value to the institution when united than each can do separately.

One manager said, "The connection between information and effectiveness is so strong in an integrated office." Two managers noted that organizing these functions in this manner helps bring the pieces together into a coherent whole. Another cited reduced workload, more interesting and higher quality products, synergies, and people learning from each other as benefits of an integrated office in which professionals with different expertise collaborate. One manager said it is the "best way to make the institution data-driven. With the AQIP process, someone needs to head the effort and take the lead and the logical fit is with IR and Assessment." Another manager is adamant that an integrated approach must happen for an institution to succeed in higher education's changing climate.

Implementation.

Most of these offices are in flux, working out the operational aspects of the direction that has been established and/or still feeling their way toward defining a new direction. For example, at one institution where the office is located in the Planning and Development division, the direction is to move more into academics and to change the campus perception of the office from that of "data pullers" to one of visible leadership for institutional effectiveness. In some cases there are concrete plans for adding staff or other responsibilities and upgrading the managers' title. In one case the current set of functions may be merged with another set from which it had been removed five years ago. In another, some intended responsibilities are on hold until the institution's new executive leadership is hired. In another, the office is developing a special projects person who will take on implementing strategic initiatives, developing the necessary infrastructure, processes, and relationships from the ground up, and then turning the new programs over to line managers.

At some institutions, these changes are intentionally planned. At others, it is evolving organically. For others, the changes are apparently haphazard. In most cases (N=10), these offices are planned or intentionally designed to integrate multiple functions. They may have been moving in this direction almost evolutionarily but someone took the initiative to recognize and formalize the structure and

responsibilities. Usually that person was a president. In one case, a new president arrived at the institution with a vision for a data-driven office. Almost simultaneously, a new provost was hired who helped bring the existing office into decision making venues. Then the institution adopted AQIP and the IR Director wrote a proposal describing her vision for a data-driven institution that was discussed, negotiated, and finally accepted and supported by the president. That plan is being systematically implemented with staffing and additional responsibilities added each year. This Director, whose title will eventually be Vice President or a similar position, credited "AQIP and new leadership that took a collaborative approach to developing the plan and gave me the freedom to envision and discuss it back and forth really developed it."

Five of these offices are taking on their shape haphazardly or on the fly. Functions that are added are not always complementary and may seem more like dumping. According to one manager, "Assessment moved into this office because it didn't have any place else to go." Another said, "When something new comes up, it falls to this office seemingly by default. It's the stuff no one else wants to do. I don't think there's any rhyme or reason." One manager calls her office "a morphing unit." It's changing a lot with new things being added. I have a plan and I have a vision and approach, but mine is for IR, accreditation, assessment, and effectiveness, those things. The other items are support items that I'm doing because nobody else can or will. The IE and planning bucket, it's planned by me. We've plotted out our approach. The other stuff is line of sight scheduling."

Development of the other four offices is evolutionary, in that they have built over time with relevant functions added as need arose. For example, when the need for linkages and better coordination between IR, planning, and assessment became evident during the accreditation self-study, assessment was added into the existing office that was responsible for planning and IR. "I was doing a large part of it already so it just made sense," said the manager. "It had been discussed on and off but it just sort of came about and happened. It's been an organic, evolutionary process." Another manager who was initially hired to establish an IR office but whose responsibilities have expanded said "There's been no conscious decision to set up the office in a certain way. I make it up as I go along. It's more of an organic thing

based on what seemed to be required for university level information." Another manager said, "It started evolutionarily. A person was put into the position with little in terms of function or structure and pretty much created it from the ground up."

How These Offices Are Developed.

The way these offices are being developed varies widely. In some cases (N=2), the manager had been doing the job so the change was primarily one of being recognized for the work and its relevance to today's requirements so that it is given more attention and visibility through changes in the department's and/or manager's title or reporting.

Some offices (N=4) were formed by bringing together existing staff from various units into a centralized unit. This may involve individuals within a larger operational unit such as a college or registrar's office. Usually there is a separate IR or Assessment office that serves as the nucleus for uniting these disparate individuals and activities into a cohesive whole. In one case, this restructuring involved adding Decision Support staff and individuals conducting IR in the registrar's office and financial aid to the central IR office then hiring a program evaluation and learning assessment staff member. This configuration was brought together within a year.

Some offices (N=6) started brand new or were revived after being defunct for a few years. Five of these cases began with a single individual, an IR Director, and are still very small, i.e., no more than approximately 2.5 FTE. Two of these offices are no more than two years old. The other three, however, after four years for one, almost six years for another, and seven years for the other, still consist of only two employees.

Another development method (N=6) is beefing up an existing office of IR or Assessment, adding staff and responsibilities primarily through hiring. In some instances, part-time employees became full-time. In one instance, responsibilities have been added without adding staff. However, in most cases, full-time managers and staff were hired along with the assignment of the new responsibility. It is feasible that some of these methods could be combined. One case in particular reflects the merging and beefing up approaches. At this institution, independent offices located in different divisions were joined within a

single division and additional managers and staff were recruited externally. After the lead manager was hired, it took 22 months to hire a new team of five people.

Advantages and Challenges of Integrating Quality Functions

One aspect of these integrated offices is that the lead manager's role requires spending considerable time on administrative, management, and leadership activities. The nature of the role is less technical and more oriented toward determining how to get data and research used, how to make sense of it, and how to communicate it to diverse audiences. They must think strategically about organizing the office, be able to see the big picture, find ways to link the functions and activities, and develop synergies that produce efficiencies and high-quality value for the institution. Their responsibility includes developing relationships that facilitate not only the work of the office staff but that prompts others to ask questions about their programs and be willing to determine its effectiveness. In addition, they must make the office visible and demonstrate its worth. In essence, their responsibility is to change the organizational culture to incorporate evidence-based decision making and continuous improvement. Those managers who are still doing hands-on technical work are feeling the stress and recognizing the need for staff to take on those tasks.

One manager cautions that integrating these responsibilities into a single office is not a less expensive approach. Bringing together these functions has advantages, including increased efficiencies, but needing fewer staff likely is not one of them. IR, learning outcomes assessment, and strategic planning require disparate skill sets that are difficult to find in a single individual. By bringing together the functions, however, individuals' skill sets become complementary, expertise is shared, and people learn from each other. It can also allow work to be more equitably distributed and to better match employees' strengths. For instance, an IR analyst working alone must extract data and manage databases in order to do analysis. In an integrated office that includes programmers, they can manage the data thereby freeing the analyst to use research design and statistical skills to conduct more sophisticated projects. In addition, higher quality work can be expected when people can bring their area of expertise to projects and receive input and feedback from colleagues' with different training.

To take advantage of this dynamic and to help develop his staff into a team, one manager has implemented a project-based approach rather than a functional one. While each staff member is primarily associated with a single function, when projects come up, either the manager assigns individuals cross-functionally or asks them who would like to work on it so they develop their own cross-functional groups that shift depending on the project. One person takes the lead on each project so that everyone has the opportunity to do so over time and different resources and perspectives are brought to bear on each project.

"The highest value to the institution is in the more sophisticated work," said one manager, "but you need the data infrastructure or you can't do it." One manager in this study still must rely on data to be provided to her, rather than being able to access it directly, in order to produce her work. In some offices, the external reporting requirement is minimal or nonexistent. It is handled by a system office, the operational unit that collects the data, or the budget office. This too frees the staff to do more complex work.

For those whose offices are developed through merging existing offices or individual staff from other units, facilitating a smooth transition, building the group of individuals into a team, and assuring that managers who lost a staff person continue to get their needs met are critical to making this approach work. In this and so many other ways, support from executive leadership is imperative in developing these offices and achieving their purpose. Managers noted the need to be included in institutional governance bodies and processes through which decisions are made in order to bring the resources of their office to bear and to understand how those resources can be used to help the institution. This does not happen unless the president, provost, or other vice presidents assure that the manager has a seat at those tables. However, the manager too must advocate for their presence in such venues and make their case for the value it will add to the institution. Said one manager, "The biggest complaint I've heard among institutional researchers over time is that they do the work and nobody looks at the data and nothing happens with it. When you get the kind of job I have you can make sure that people do look at the data and you can make sure it's used appropriately and interpreted correctly."

In fact, the responsibility to do so falls to these offices. And it is another reason why support from the top is so important. Responsibility without authority is a challenge for managers of offices charged with facilitating culture change. At one institution, implementing learning outcomes assessment was a frustrating experience and the assessment group perceived their advisory capacity as a weakness since they had no authority to enforce compliance, until they realized the power inherent in being a helper, supporter, and friend. Doing so, however, and making progress toward the overall goal requires strong leadership from deans and executives. It also requires strong communication skills and diplomacy on the part of the manager. Another manager said, "You have to tread very carefully when you're the campus effectiveness person. You have to break down barriers. You have to play in somebody else's sandbox and they don't like that. Building bridges is the most difficult job I have." Clear communication is important too when the office facilitates and coordinates processes over which it has no direct authority and in which there are many parties such as program review. Who is responsible for each part of the process must be clearly and deliberately established and support at the vice president level is essential to assure cooperation when needed.

Another challenge can be unclear expectations for the office. Because establishing such an office is a new direction for the institution, unless the executive has his or her own vision for its shape and outcomes, clarity about how the manager is to proceed will be lacking. Some managers find freedom in this circumstance and have the autonomy, drive, and vision to make changes according to their own plan and the demands that come their way. But when the institution invests resources in such an office, executives' desire to see benefit that did not exist before can be strong. One manager said, "The Provost who put this together has very high expectations. He can't really define what those are but he wants to see something that's greater than the sum of its parts. I want to use our technical tools and expertise to take some of the burden off of staff, but those are behind-the-scenes benefits that people don't really see. I need to show people what they've gained as a result of the synergies that have been created."

Managers' Advice for Developing an Integrated Office

The following paraphrasings demonstrate the range of issues managers believe should be taken into account to develop an integrated office and achieve its purpose. Some also commented on the current climate for IR and its potential role and influence.

If your IR office wants to play a wider role, it has to look for structures and mechanisms that allow the IR voice to get into the major discussions. Having the information is very powerful, even if it's not used as the basis for decisions. There are always going to be politics involved. So just because the data indicates one thing, they may still do something else. It can be hard to stomach. I think being able to take a lighter perspective is really important. Understand the political environment that higher education is involved with and then you can evolve the structure that works, but you have to have the interest in doing that.

There are a couple of critical factors in developing such a unit. Can you get the support of those above you—the provost and president? That's vital. Develop and understand your vision. Understand what you really want to accomplish and if it fits into the grand scheme of things they'll want you to do it (short of budget constraints). IR is at a moment where we can really change the course of IR.

Think about the consequences of sending out any piece of data. Build relationships. Think strategically about organizing your office so that you're not duplicating effort and activities. See the high altitude path, how the pieces fit together.

It's all about relationships. Spend time to build them and you'll make everything work. We must function in our job like we're teachers. Treat faculty like students. Show that we

care. Help them do what they do, rather than being confrontational or combative. Laugh and have fun. Understand that we're all in this together.

It seems like what happens is when you understand more than data, when you understand what data does and what it's used for and begin to work in areas where you make use of data instead of just popping out data, it really changes the way people see institutional research. Instead of coming to you to say 'how many of x do we have,' they come to you and say, 'well gee, we're developing these new programs so can you tell us what the other programs look like and how we might structure it, how might we make it effective.' So you end up being sort of in the center of much of what goes on and then it really changes the conversation. My advice is to move to making use of data. Proactively offer people context even if they don't ask for it. Look for opportunities to give people more than they ask for. Work with colleagues to do different kinds of things than the office previously did. Look for opportunities to become involved with academic people who may not know about your office or the resources that are available and collaborate.

IR must be able to explain things, look for patterns and try to explain them and show people how data and information can be used. Devise ways to explain information. Create the mindset of what the office does and that it has value. Now I'm hearing around the institution 'we can't do that until we do a survey,' and I'm beginning to hear 'we have to have a deadline for that." I established both of those practices and now I hear people saying them so it seems to have got into the psyche of the institution. The idea of use of evidence is sinking in.

In espousing her view of the importance of higher education and the need for it to change, a manager contends that research, creative thinking, having the facts, and understanding the possibilities are

essential to fostering such change. "To me, IR, assessment and effectiveness—that should be, has to be, the foundation for the future of higher education in America—it's got to be."

Discussion and Implications

Although these offices' configurations are clearly new and changing, it cannot be determined through this study how widespread the existence of integrated offices is at colleges and universities or the extent to which the model is being considered at other institutions. However, this research demonstrates that integrated models exist and that their purpose is largely to take the lead, or serve as the focal point, in developing a culture of evidence-based decision making and continuous improvement.

Most of these offices are planned, or intentionally designed, to integrate functions that are viewed as a natural fit that produces synergies and efficiencies. Those that are evolving into integrated offices tend to be IR or assessment offices that serve as an existing nucleus to which related functions are added. Creating such offices, however, requires that they include diverse skill sets and tends to change the lead manager's role from one of technical oversight to one of administration, strategy, and leadership. Such change reflects Swing's (2009) contention that IR is "evolving toward a unique blend of data skills, strategic planning, outcomes assessment, and advocacy for improvement" (pg. 5), that institutional researchers will actively manage and lead institutional change, and that the future of the field is evident at institutions where an "institutional researcher is a full member of the president's cabinet as a senior campus leader or a senior staff member in a system office."

Swing's description of the new IR does seem to characterize the direction and activities of these integrated offices, and the lead manager tends to be a long-term IR or Assessment professional; however, some findings lead to questions as to whether IR itself is evolving or whether a new field is being born. In those offices in which the staff size is large enough to allow for functional specialization, IR appears to be assigned the data provision role rather than the evaluation, improvement, or leadership responsibilities. Even in one small office, the manager distinguished IR from IE as IR providing data and IE using data. Also, only one of these integrated offices is solely titled IR while six are solely titled IE, and some managers said that the term IE better reflects their activity than does IR or that their title was elevated and

changed to IE to reflect their broader responsibilities. A study of the activities of solely-named IR offices would help determine if the IR field is evolving or if some of its professionals are merging multiple fields into a new interdisciplinary mix that reflects the broader scope and executive responsibilities of Swing's vision, or both. Understanding these changes is important because the perception of a field affects the opportunities and career path of professionals in that field as well as the field's influence and status.

In this study, about half of the lead managers are Directors. The others hold higher titles, from Senior Director to Vice President and some titles either have changed upward or are expected to do so. In a comparison of IR and IE offices (Leimer, forthcoming), both were most commonly led by a Director. However, more titles at or above Assistant Vice President existed in IE offices than in IR offices. In conjunction with the changes in staffing and responsibilities evident in most of the offices in this study, these variations in titles reflect a field in flux that is being defined on an institution-by-institution basis. While in many cases titles are being given to reflect higher and broader responsibilities, it appears that Directors are often assuming such responsibilities without a corresponding title change. To the extent that this is true, more common job descriptions and expectations and lobbying by AIR may help extend the career ladder and elevate these managers into the senior ranks.

One consequence of integrated offices is that, in them, IR is no longer a free-standing office. Instead it is part of a structure that includes multiple functions that contribute to a culture of evidence-based decision making and improvement. It is also likely that, in offices that are large enough to support mid-level managers, the IR manager will not report directly to a provost or president but to the IE manager or executive. With higher level positions, the institution seems to be attributing greater import to evidence-based decision making and most of the managers in this study indicated that they have considerable autonomy and influence. Therefore, being part of such a configuration may be beneficial to IR's ability to secure a seat at decision making tables. It may lead to more interesting, challenging, and sophisticated projects as well as professionals with different disciplinary backgrounds and institutional responsibilities routinely collaborating to understand institutional issues and problems and bring their work to bear on decisions. It may also bring IR into more working relationships with faculty. Generally

this group is not a common IR customer, but these integrated offices frequently work with faculty and with executives. An issue of which the lead manager of such an office must remain cognizant would be his or her role as a conduit between the strategic discussions in which he or she participates and the day-to-day work of the IR office so that IR is able to make substantial contributions.

One question raised by a reviewer of the findings of this study is whether these offices are emerging as compliance offices or whether they are truly evaluating programs and initiatives. This is a question that is difficult to answer from the data. While the specific responsibilities and tasks are an area that would be better clarified by following up with a structured questionnaire, seven managers in this study specifically named program and/or service evaluation as one of their major responsibilities or tasks. The others could be conducting some degree of evaluation but did not mention it, or they may not be carrying out evaluation activities at all. However, the tension between accountability and improvement is inherent in today's climate of external demands and internal needs. Therefore, it is reasonable to assume that these offices, as well as free-standing offices responsible for a single quality function, could become compliance-oriented to the exclusion of internal improvement. The balance between these two needs should be consciously considered and decided upon by executives and the lead manager and boundaries should be established and decisions made that reflect and facilitate the preferred orientation and purpose.

In addition to the risk of becoming compliance monitoring departments, these offices also may be vulnerable to attracting responsibilities or tasks that seem to have no natural home. A few examples of this exist in this study among those offices that are being integrated on-the-fly without a clear purpose and plan. Again, this is an issue executives and lead managers should discuss in order to make the best use of staff skills and the institution's investment in the office. While I am not generally inclined toward standardization, under the current circumstances in which IR is evolving or a new field is emerging, some consensus regarding position descriptions, titles, salaries, and responsibilities could be more beneficial than detrimental.

So is this "integrated" model the wave of the future? If IR skills are to be used most effectively in major change, this is a way to assure that they are brought to bear on the issues and institutional goals.

Integrating the "quality" functions is likely to result in the greatest value to an institution and have the greatest impact on decision making. However, the manner in which the "quality" functions are integrated must fit with an institution's culture. Consequently, a structurally centralized model is unlikely to be the most effective means at all colleges and universities. In the current climate, with so few models on which to draw to determine the best fit and most effective means of developing a culture of evidence and improvement, this is the time for IR professionals to be proactive and shape the course. By developing and sharing models, and assessing their effectiveness, we provide options that executives and managers can use and modify as needed to fit their culture. Such an approach would save institutions time and resources invested in experimentation and false starts. The benefits for professionals could be a longer career ladder, more interesting and challenging work, and greater influence on the academy and the course of higher education.

<div style="text-align:center">**References**</div>

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