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# Improving Institutional Effectiveness: Description And Application Of An Implementation Model

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# Improving Institutional Effectiveness

## Description and Application of an Implementation Model

*The authors describe a model of “implementation effectiveness” and a description of how it was applied at the University of New England, building routine practice developmentally by paying attention to implementation climate and “values fit” variables.*

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### Introduction

The topic of institutional effectiveness has received increasing attention in the higher education literature over the past decade. This emphasis has mirrored calls for greater accountability from the public, accreditation agencies, and state governments. The Southern Association of Colleges and Schools promoted the term “institutional effectiveness”; however, the concept is aligned with practices such as Total Quality Management (TQM) and Continuous Quality Improvement (CQI) described in the management literature. Sullivan and Wilds (2001) suggest the primary measure of effectiveness is the cause and effect relationship between the institution and student learning outcomes, while Dugan and Hennon (2002) include the institution's impact on society and research. For the purposes of this article, we define institutional effectiveness as a process by which the institution gathers and analyzes evidence of congruence between its stated mission, purposes, and objectives and the actual outcomes of its programs and activities. This definition embraces the diversity of institutional effectiveness work, including assessment of student learning outcomes, review of programs, and assessment of various performance outcomes (Welsh and Metcalf 2003). This definition is also

consistent with Volkwein (2003) who noted that articulating institutional purpose(s) is a necessary antecedent to organizational effectiveness activities.

Administrators, faculty, and staff engaged in institution-wide assessment recognize the complexity involved in such an endeavor. This complexity is echoed by Serban (2004) who notes that while the "assessment movement" in higher education is now in its third decade, variation remains with respect to implementation success. While there is generally little disagreement about the importance of institutional effectiveness, there are ongoing concerns about the implementation and sustainability of such initiatives within the higher education community.

In this context, this article describes a model of implementation effectiveness and applies it to the implementation of institutional effectiveness activities in higher education. Our intent is to build upon the work of others in providing a bridge from the organizational management literature on institutional effectiveness to the higher education literature on that subject. We offer comments from our experience at the University of New England with implementing an institutional effectiveness initiative.

## **About the University of New England**

We include this brief profile of the University of New England (UNE) to provide a context for interpreting our experiential comments throughout this article. UNE is an independent, coeducational university with four colleges on two distinct campuses in two Maine coastal cities. The College of Arts and Sciences includes degree programs in various liberal arts majors, natural sciences, management, and education. The degree programs in the College of Health Professions include nursing, physical therapy, occupational therapy, physician assistant, nurse anesthesia, dental hygiene, and social work. The university also includes Maine's only medical school, the College of Osteopathic Medicine, which emphasizes the education of primary care physicians. The College of Pharmacy began enrolling pre-pharmacy students in 2007 and will have its first entering class in 2009. Enrollments for the two campuses total 3,921. UNE also has distance learning programs and a satellite nursing program in Israel.

UNE began to address the concept of institution-wide assessment in earnest in 1997 in response to the regional accreditation process. Prior to this, there were isolated

pockets of assessment activity within various academic and administrative units. Today, institutional effectiveness is comprised of two distinct but related processes: outcomes assessment and program review. Both are coordinated by the university's Institutional Assessment Committee (IAC) and involve all academic programs and administrative units. The IAC consists of administrative, faculty, and staff representatives from the entire university community and is chaired by the dean of library services. Broad representation on the IAC has helped to establish a collaborative spirit with respect to institutional assessment. The use of a team like the IAC to coordinate the process has been identified as a critical implementation variable (Teo and Dale 1997). We also believe the institutional effectiveness activities at UNE are congruent with the framework outlined by Jackson and Kile (2004) that links student outcomes and institutional performance outcomes with students as the primary focus.

Outcomes assessment is an annual process. Academic units assess student learning outcomes and administrative units assess performance outcomes. Program review occurs on a seven-year cycle. Academic program review is a process by which the faculty and institution determine whether the program (1) has objectives that are appropriate, feasible, and consistent with the mission and purposes of the university; (2) has the curriculum, faculty, students, and instructional resources adequate to meet its objectives; and (3) is effective in assessing student learning and applying the results of that assessment to the improvement of the program. Administrative unit review is a process by which the staff and institution determine whether the unit (1) has operational goals that are appropriate, feasible, and consistent with the mission and purposes of the university; (2) has the resources adequate to meet its objectives; and (3) is effective in assessing performance outcomes and applying the results of assessment to improve its purposes. The structure of program review at UNE requires that academic programs and administrative units conduct a self-study that includes a review by one or more external reviewers.

Outcomes assessment and program review were not new concepts to the professional programs and the medical school, which must undergo periodic program review as part of the ongoing accreditation process. However, the internal program review process is focused more on the program's relationship to institutional mission and common outcomes. Internal program review also culminates in an

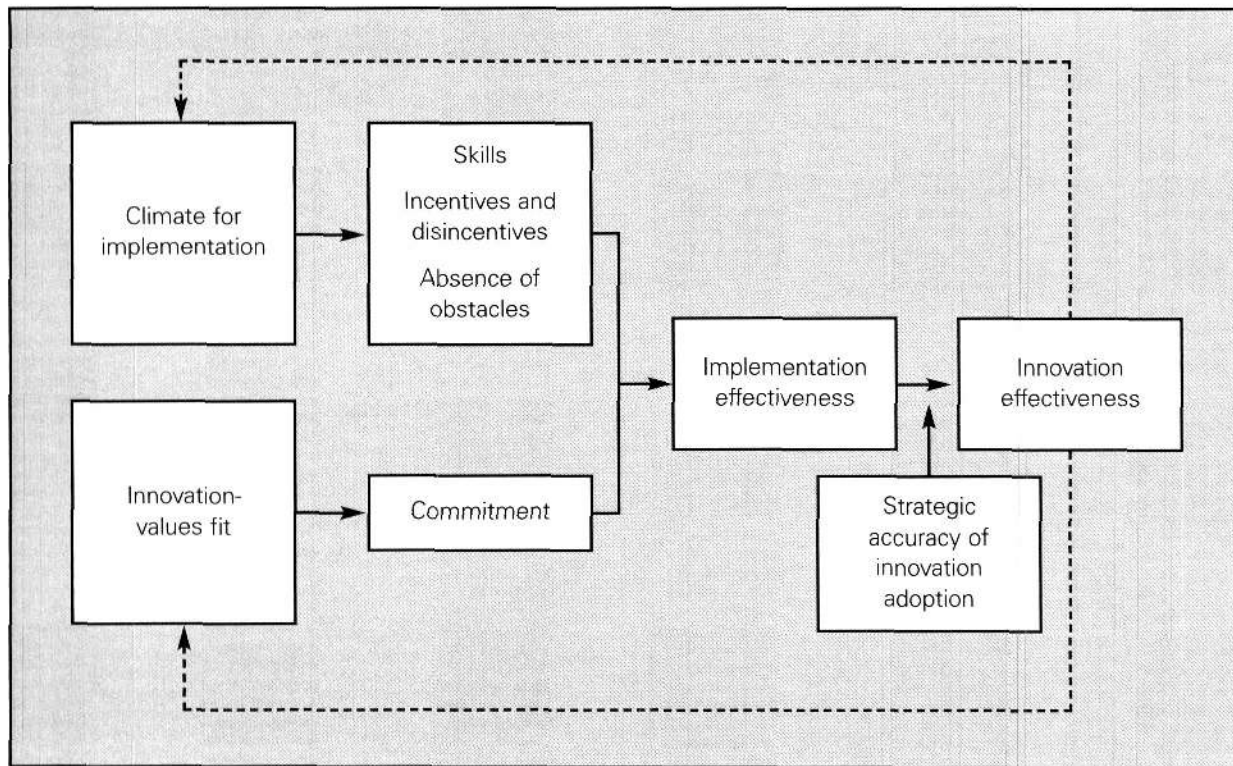
action plan that is developed in consultation with the college dean and is used to inform budgeting, resource allocation, and planning. Therefore, even for these programs, the internal program review has inherent value. Many of the liberal arts programs were familiar with student learning outcomes assessment, although program review was new.

With the exception of reports of some assessment activity in student affairs units (Smith, Szelest, and Downey 2004), assessment in other administrative units (e.g., business office, human resources, university relations) appears to be underreported in the literature. Based on interactions with faculty and administrators at assessment workshops and conferences throughout the Northeast, we believe the involvement of all administrative units throughout the university in outcomes assessment and program review is a unique phenomenon, yet one that is essential to a comprehensive institutional effectiveness initiative.

### The Model of Implementation Effectiveness

As we consider how to successfully implement and sustain institutional effectiveness initiatives in higher education, the model of implementation effectiveness (figure 1) described by Klein and Sorra (1996) is salient. A clear distinction is made between the decision to adopt an innovation, in this case an institutional effectiveness initiative, and the implementation of that innovation or "the transition period during which targeted organizational members ideally become increasingly skillful, consistent, and committed in their use of an innovation" (Klein and Sorra 1996, p. 1057). We believe institutional effectiveness exemplifies an innovative practice as defined by Nord and Tucker (1987): one where the practice is a first-time experience for the user. Klein and Sorra (1996) contend that implementation effectiveness is a

Figure 1 Determinants and Consequences of Implementation Effectiveness



Source: Klein and Sorra 1996, p. 1056.

necessary condition for innovation effectiveness; that is, for the institution to realize benefits from the innovation. An important assumption in the model is the notion that implementation effectiveness is an organizational-level construct in which effectiveness is dependent on the coordinated and collective use of the innovation by institutional members.

## Many innovative processes fail to realize their potential because too little attention is directed at implementation.

Klein and Sorra (1996) suggest that many innovative processes fail to realize their potential, not because the concepts are flawed, but because too little attention is directed at implementation. The model denotes that implementation effectiveness is primarily a function of two variables: implementation climate and innovation-values fit.

**Implementation climate.** Implementation climate is the shared perception of “the extent to which their use of a specific innovation is rewarded, supported, and expected within their organization” (Klein and Sorra 1996, p. 1060). It includes the organizational policies, procedures, and practices related to the use of the innovation. Klein and Sorra (1996) identified the following supportive institutional climate variables based on their review of the literature, and we provide examples from our experience that support these best practices.

- *Timely and readily accessible training.* The IAC developed and annually updates a comprehensive user’s workbook, an orientation manual that includes a glossary of key terminology and detailed instructions for completing the annual student learning outcomes and performance outcomes assessment forms, and guidelines for program review. (Interested readers may contact any of the authors for more detailed information about this workbook.) Very early in this process the IAC realized that it needed to develop a working terminology because there were clear misunderstandings within the university community about issues such as the elements of a mission statement and the differences between student learning outcomes and program goals. Our experience supports the contentions of Hossler, Kuh, and Olsen (2001a, 2001b) and Williford (1997) that efforts “to get everyone on the same page” by establishing common working terminology can positively influence the buy-in of faculty, staff, and administrators.
- *Additional assistance following initial training.* At UNE, each academic program and administrative unit is assigned a liaison from the IAC who is available throughout the academic year to provide consultation and assistance with the completion of the student learning and performance outcomes forms. Liaisons from the IAC are also assigned to each program or unit undergoing program review. This supportive infrastructure was established because we realized that new and updated processes and the tools associated with institutional effectiveness activities may require ongoing training (Klein and Knight 2005).
- *Adequate time to learn and practice.* The IAC has a process-oriented focus that allows an incremental

working terminology can positively influence the buy-in of faculty, staff, and administrators.

A formal campus-wide orientation dinner meeting is hosted by the IAC early in the academic year with representatives from each academic program and administrative unit, including college deans, vice presidents, the president, and representatives from the Board of Trustees. The primary purpose of this meeting is to distribute, review, and discuss the most recent IAC workbook. An equally important purpose is to demonstrate support and commitment to institutional assessment from all operational sectors of the university community, including the leadership. These meetings have served to solidify a rapidly growing institutional culture of assessment at UNE. This observation agrees with those of assessment experts who suggest that the sustainability of institutional assessment over the long run depends on establishing this type of organizational culture (Banta et al. 1996; Maki 2004). For those programs undergoing program review, an additional orientation meeting is hosted by the IAC to review the specific guidelines for this activity.

Allocation of financial resources is another sign of support for institutional effectiveness work. However, Serban (2004) observes that most institutions do not adequately support these initiatives. An important “take home message” is that costs associated with institutional effectiveness work must be anticipated in terms of time, personnel, and direct finances. Our experience supports this observation. The committee has a discretionary operating budget to support activities such as training and using external evaluators.

- *Additional assistance following initial training.* At UNE, each academic program and administrative unit is assigned a liaison from the IAC who is available throughout the academic year to provide consultation and assistance with the completion of the student learning and performance outcomes forms. Liaisons from the IAC are also assigned to each program or unit undergoing program review. This supportive infrastructure was established because we realized that new and updated processes and the tools associated with institutional effectiveness activities may require ongoing training (Klein and Knight 2005).
- *Adequate time to learn and practice.* The IAC has a process-oriented focus that allows an incremental

approach to the development of unit assessment plans. Because assessment instruments and processes that require the development of new technical skills or knowledge can be a disincentive to their use, specific measures are left to the units with the assumption that they know best how to assess their identified outcomes (Dodeen 2004; Klein and Knight 2005). There is a critical balance between getting started on a small scale and realizing the assessment process has limitations versus inaction due to frustration with the inability to create the perfect assessment tool.

- *Responsiveness to user complaints and concerns.* The IAC solicits feedback from the orientation meetings and annually reviews comments about the institutional effectiveness process. Changes to the processes to date include streamlining reporting forms and clarifying terms and guidelines. These changes have been directed at reducing barriers to participation and increasing the efficiency of the process.
- *Readily accessible resources related to the assessment initiative.* The IAC workbook and reporting forms are accessible in an electronic folder on a shared university drive. Administrators, faculty, and staff responsible for assessment also frequently access and value the feedback and assistance from the IAC liaison network.

### If individuals believe the institution takes the initiative seriously, they are more likely to support it.

- *Praise and recognition from supervisors.* The traditional management literature has long acknowledged the necessity of praise and recognition; however, it is our experience that these practices are too often overlooked. We believe explicit and high-profile recognition encourages ongoing commitment to implementation efforts. At UNE, the president and provost publicly acknowledge the efforts of the IAC and recognize the university community for its institutional effectiveness work.

These implementation climate variables exemplify and reinforce the institution's commitment to the institutional effectiveness initiative. The strength of this commitment has been identified as critical to successful implementation; that is, if individuals believe the institution takes the initiative seriously, they are more likely to support it (Welsh, Petrosko, and Metcalf 2003).

**Innovation-values fit.** The implementation effectiveness model suggests that a strong implementation climate is a necessary but not sufficient condition for effectiveness. Another necessary condition is values fit: the perceived fit of the innovation with the user's values. The values fit construct is analogous to the focus of organizational culture theory that describes the *hidden unifying elements* (e.g., values, beliefs, assumptions, behavioral norms) behind organizational activities (Shafritz and Ott 2001). Starting with the idea that organizational culture determines behavior, this perspective provides insight into how these variables influence decision making and other activities. Reger and others (1994) highlight the importance of organizational culture with respect to the implementation of initiatives such as TQM.

The model focuses on both organizational-level and group values. In colleges and universities, the group values construct is more applicable because values are likely to differ between groups within the organization (e.g., between colleges, between academic programs, and between academic programs and administrative units). Similar to health care organizations, educational institutions have individual subcultures and value systems and are advised to explore and address the concerns of these subcultures with tools such as the competing-values framework (Jones, DeBaca, and Yarbrough 1997).

Welsh and Metcalf (2003) note a paucity of literature about the values fit part of the equation. One might surmise that assessment of student learning outcomes and program efficacy would be congruent with faculty values; however, faculty resistance has been posited as the primary barrier to implementation of institutional effectiveness activities (Morse and Santiago 2000). Welsh and Metcalf (2003) and Ryan (1993) suggest this resistance stems more from concerns about a lack of administrative support and suspicions about the true motivation behind administrators' calls for institutional effectiveness activities (i.e., an implementation climate issue) than from an inherent values fit problem. This observation is supported by others (Klein and Dunlap 1994; Pew Higher Education Research Group 1996). *On the administrative side*, there is evidence to suggest that institutional effectiveness work matches the values of most administrators (Entin 1993; Welsh and Metcalf 2003).

Welsh and Metcalf (2003) identified the following major variables that affect both faculty and administrative participation in institutional effectiveness activities and

support the importance of a strong values fit. This is consistent with our experience, and we provide examples that support these best practices.

- *Impetus for innovation implementation.* Institutional effectiveness activities will be compromised if the users perceive the primary motivation is driven by external forces, such as accreditation. While Williford (1997, p. 51) noted that the regional accreditation body “provided the needed incentive to persuade faculty to be more involved in student assessment,” our experience is more congruent with that of Brakke and Brown (2002), Lewis and Smith (1994), and Seymour (1992) in that innovation-values fit can be improved if the primary motivation is internal and truly designed to improve student learning or performance outcomes. This assumption has guided all initial and ongoing orientation materials and meetings concerning institution-wide assessment at UNE.

We also believe that buy-in at UNE has been strong because the student learning and performance outcomes, as well as the assessment activities, are determined at the department or unit level and are not dictated by a central administrative office. There is evidence that such participative approaches are more likely to result in successful implementation than top-down mandates (Nutt 1986). The consistent mantra from the IAC is that departments and units need to engage in activities that work for them.

## Resistance to innovation implementation is a function of normal human nature.

Pfeffer and Sutton (2000) remind us that resistance to innovation implementation should be anticipated as a function of normal human nature (i.e., there is comfort with the status quo). This observation, at least in part, helps to explain why innovations are not implemented even when there is knowledge or evidence of their benefits. The initial orientation meetings during the first year of institutional effectiveness activities were at times confrontational, with some unit representatives openly expressing suspicion and concern about the whole initiative. One of the keys to sustaining the initiative to date has been to make all aspects of the process transparent. For

example, an annual IAC report is sent to the entire university community summarizing the committee’s work and the findings from that year’s institutional effectiveness cycle.

- *Integration within institutional operations.* Welsh and Metcalf (2003) refer to this variable as the depth of implementation. Implementation is facilitated if users perceive that assessment activities are embedded within normal university operations rather than as an add-on to other responsibilities. Evidence that institutional assessment is perceived as part of the usual and ongoing business of UNE includes (1) requests to the IAC to assume more of an advocacy role for units; (2) requests to join the IAC because various stakeholders believe the committee influences decision making; and (3) requests to incorporate other university evaluation processes (e.g., annual performance appraisals) under the umbrella of institutional effectiveness since the IAC is viewed as having strong enforcement authority. Moreover, a new position, the associate provost for planning and assessment, was recently created to further integrate assessment activities into long-standing institutional planning and budgeting processes.

Klein and Knight (2005) remind us that integration of institutional effectiveness activities into the normal operations of the institution will take resources (e.g., time, training, technical support). Immediate returns on investment will not be realized and failure to account for this could lead to frustration and premature abandonment of the innovation (Repenning and Serman 2002). Our experience supports the need for a flexible and patient approach to implementation. However, in just two cycles of the new outcomes assessment and program review process, we have seen improvements in participation level and report quality.

- *Institutional quality.* Welsh and Metcalf (2003) argue that institutional effectiveness efforts are compromised when faculty, administrators, and staff have differing definitions of “quality.” Institutional effectiveness efforts are more meaningful if resource inputs, instructional and operational processes, and outcomes are assessed in an environment of common understanding and shared purpose. This has been the experience of the IAC.

At the unit level, the assessment of quality is addressed in a focused and coordinated manner.

Academic programs assess student learning outcomes (SLOs) that are stated in terms of what students know and are able to do. These differ from program goals that address variables like graduation rates and employment rates. UNE's focus on SLO assessment spans all undergraduate and graduate programs. The IAC identified the following 12 common outcome themes from data and documents provided by faculty from the three colleges: ability to engage in critical thinking, commitment to lifelong learning, understanding of human relations, acquisition of research skills, use of ethical principles, ability to understand and apply technology, acquisition of discipline-specific knowledge, practical application of knowledge, communication skills, community involvement, concepts of health and wellness, and global awareness. Academic programs determine specific SLOs that are aligned with one or more of these 12 themes. In this way, unit-level SLOs can be integrated into the analysis, synthesis, and reporting of institutional quality.

### **Involvement of faculty, staff, and administrators is a critical underpinning of meaningful institutional effectiveness work.**

Administrative units assess performance outcomes (POs) that are stated in terms of what the administrative unit contributes to the educational experience of students and/or to institutional excellence. Congruent with the identification of common SLOs, the following nine common outcome themes arose from the data and documents provided by the various staff and administrators: quality of student life, quality of institutional leadership, quality of service to university constituents, interdepartmental communication and collaboration, quality of external relationships, a safe and healthy campus, strengthening of institutional image, institutional and fiscal viability, and cost-effectiveness of operations. Administrative units determine specific POs that are aligned with one or more of these nine themes. Again, this allows for administrative unit-level POs to be integrated into the analysis, synthesis, and reporting of institutional quality.

- *Involvement.* Involvement of faculty, staff, and administrators throughout the institution is a critical

underpinning of meaningful institutional effectiveness work. Much of the literature addresses the need to garner more faculty involvement in institutional effectiveness activities (Klein and Dunlap 1994; Welsh and Metcalf 2003). While this was part of the challenge at UNE, a more important element of the plan was to involve all administrative units in this initiative. Most educational institutions concur that student learning outcomes should be assessed. This task has historically fallen to faculty and that remains the predominant model. The majority of both anecdotal and formal reports in the higher education literature about student outcomes and program review represent the experiences of faculty. In fact, Jackson and Kile (2004) note a paucity of literature regarding the influence of administrators on student outcomes. However, student learning and the assessment of student learning are the responsibility of the entire institutional community. Banta and others (1996) directly address the importance of collaborative assessment efforts involving all units across the institution.

Operationalizing what institutional effectiveness means to an academic support or administrative unit remains a challenging task. While the necessity of providing development opportunities for faculty regarding assessment has long been recognized, the development of non-academic staff appears to have been ignored. Serban (2004) notes that problems with implementing institutional assessment activities may be directly attributable to a lack of user knowledge of and skill with assessment tools and processes. However, we contend that waiting for a critical mass of faculty, staff, and administrators to become thoroughly knowledgeable about assessment methods, processes, and analytical tools leads to action paralysis. Our experience is that using the "lack of expertise" argument can be a convenient excuse for not engaging in the work of institutional effectiveness. The literature supports our view that institutional effectiveness is a developmental *process* that should allow for imperfection and mistakes. In this context, the recommendation to start small is well-advised since successes early in the process positively affect the values fit of the users (Koch, Cairns, and Brunk 2000).

Klein and Knight (2005) provide another perspective about the involvement of individuals and groups in institutional assessment activities with respect to role delineation. While coordination and teamwork are arguably essential to the success of institutional effectiveness, this effort may alter the working relationships among individuals.



Members of the IAC function as a peer group where there are otherwise clear hierarchical working relationships or no apparent working relationships among members. While stepping out of hierarchical role relationships is difficult, our experience has been positive. Similar to the findings of Hossler, Kuh, and Olsen (2001a, 2001b), the working relationships created between diverse representatives from academic and administrative units has also served to bridge gaps between units with no clear reporting relationships. We posit that for administrative unit participants, membership on the IAC shifts the dynamic of their otherwise "behind the scenes" or "academic support" status to one where their unit's work is seen as critical for institutional effectiveness. For academic unit participants, this initiative is not seen as simply an administrative mandate to the faculty, but as one that also holds the administrative units accountable for their contributions to the organization.

## **Applying the Implementation Effectiveness Model**

We now turn our attention to applying the model and its two main variables, implementation climate and innovation-values fit, to institutional effectiveness initiatives. Implementation climate is characterized as either strong or weak and values fit as good, neutral, or poor (Klein and Sorra 1996). The combination of the climate strength and level of values fit determines the magnitude of implementation success. Using a matrix with weak or strong implementation climate as the row variables and poor, neutral, or good values fit as the column variables, one can evaluate the interaction of implementation climate and values fit. The following examples demonstrate how the model can be used to predict the likelihood of implementation success.

The model predicts that integration of institutional effectiveness activities into routine practice will be maximized when institutional climate is strong and the users' values fit is good. The strength of institutional climate and the degree of values fit can be evaluated using the various indicators described earlier in this article. For example, time, training, resources, support, and praise demonstrate a strong institutional climate. If the strong climate is coupled with strong buy-in from the administrators, faculty, and staff (i.e., the values fit is good), the outcome should be the successful implementation of the initiative.

The model also predicts that organizations will not realize the full benefits of institutional effectiveness activities

when the values fit among users is poor. Birnbaum (2000) concurs with this outcome, noting that a primary cause of managerial strategy failures is lack of support from users. Lyons (1999) observes the following possible outcomes related to user behavior in the context of values fit: "eager adopters" who willingly engage in any new initiative, "hesitant-prove it types" whose values fit could be categorized as neutral, and "resistors" who exemplify a poor values fit. It is important to identify in to which of these categories the majority of users fall with respect to institutional effectiveness activities. For example, if most faculty and staff oppose the initiative, the buy-in problem should be addressed prior to attempts at implementation.

Other possible outcomes reflect the tenuous nature of the determinants of implementation effectiveness. For example, the model predicts that when buy-in to institutional effectiveness initiatives is strong (i.e., a strong values fit) but there is little institutional support or incentive to conduct the work (i.e., a weak implementation climate), the expected outcome will be some degree of implementation failure. In our case, we are mindful that compliance with any of the established assessment processes is directly related to the use of the data (i.e., closing the loop or sharing the data with the units in a way that benefits them). Because outcomes assessment has inherent value for units, these initiatives are perhaps less vulnerable to avoidance behavior.

However, if institutional support for outcomes assessment is weak (e.g., no incentives to participate, no disincentives for avoidance behavior), we predict participation will decrease over time. Similarly, we predict program review will become a "check the boxes" process if there is no follow-up on action plans.

Because implementation climate and values fit are dynamic variables, institutions can use this model to evaluate implementation climate, values fit, or both. We have noted that some traditional liberal arts programs not familiar with program review initially viewed this process with suspicion. However, support from the IAC (e.g., the workbook, orientation workshops, ongoing assistance from designated liaisons) continues to demonstrate strong institutional commitment. Involvement of administrative units in institutional effectiveness activity is also an important variable leading to the development of an institution-wide culture of assessment. Equally important is that data generated from this activity provide an evidence-based approach to decision making regarding program improvement and resource allocation.

An interesting application of this model relates to the situation where different groups within the organization have differing levels of buy-in to institutional effectiveness work. UNE has many professional education programs with specific external accreditation agency oversight. Without exception, these programs had experience with student learning outcomes assessment and program review. Some of the liberal arts programs had limited experience with student learning outcomes assessment and no experience with program review. It was not surprising to see a difference in the values fit between these two groups when the institutional effectiveness initiative was first presented. The model predicts that when the values fit for one group is strong and the other is poor and neither user group has power over the other, the implementation climate variable will determine the outcome; that is, a strong climate will favor positive implementation effectiveness. In our case, the strong values fit in the professional education units, the mixed values fit in the traditional liberal arts programs and administrative units, and the strong implementation climate university-wide led to a favorable implementation of this initiative.

### Discussion

Many institutions continue to struggle with the integration of institutional effectiveness activities into routine practice. The organizational management literature suggests this is largely attributable to problems with implementation. While there is no magic management strategy or theory that can guarantee successful implementation of institutional effectiveness practices, there is growing evidence that attention to the various implementation climate and values fit variables discussed in this article is critical. In this context, the implementation effectiveness model has great utility to administrators, faculty, and staff as they grapple with efforts to implement and sustain institutional effectiveness activities by providing a framework to evaluate the relative importance of potential barriers. Variables influencing implementation effectiveness in higher education are largely the same as those identified by more typical corporations, including provision of adequate training and time, buy-in of stakeholders, and use of data to inform decision making.

An equally important suggestion from the management literature is that institutional effectiveness initiatives should not be delayed until the activities are perfected. It is

worth emphasizing that institutional effectiveness is a *developmental process* in which experimentation should be supported and encouraged. We suggest it must also develop from the ground up and be meaningful to the academic department or administrative unit. If not, such efforts are unlikely to be sustained over the long run.

Hossler, Kuh, and Olsen (2001a, 2001b) offer linkages from the management sciences literature to the research on institutional effectiveness. This article extends those linkages by introducing a practical predictive and evaluative tool that addresses the key variables influencing the implementation and sustainability of institutional effectiveness activities in higher education. The model has also been applied to health care organizations (Koch, Cairns, and Brunk 2000), which we argue have many organizational parallels to higher education institutions.

UNE's report card to date mirrors the observations of Hossler, Kuh, and Olsen (2001a, 2001b) who note that the focus on common institutional outcomes connects individuals from units that rarely if ever interact with each other. These authors concluded that the collective approach resulted in outcomes that were better than those achieved by the summation of the disparate parts. At UNE, the annual assessment process has helped to communicate, share, and link institutional effectiveness efforts across the university.

UNE is not unlike other institutions attempting to implement and sustain meaningful institutional effectiveness processes. The mechanisms discussed in this article helped to bring ongoing assessment work to a collective institutional awareness. While units have flexibility in their assessment activities, uniform reporting forms and structures ensure that data can be interpreted from an institutional perspective.

We concur with Friedlander and Serban (2004) that many challenges remain regarding the implementation and sustainability of institutional effectiveness activities in colleges and universities throughout the United States. They expressed concern that "...colleges have no experience or models on how to develop and sustain a comprehensive effort for assessing student learning outcomes at the institutional level" (p. 105). The implementation effectiveness model proposed by Klein and Sorra (1996) and discussed in this article helps to interpret these challenges as either implementation climate or values fit issues and can thereby assist in the development of targeted approaches to address these challenges for the benefit of the institution as a whole. ❧

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