

The Effect of Institutional Culture on Change Strategies in Higher Education

Universal Principles or Culturally Responsive Concepts?

The array of challenges that higher education faces today is virtually unparalleled when compared to any other point in U.S. history. The litany of changes is familiar to those in the field of higher education: financial pressure, growth in technology, changing faculty roles, public scrutiny, changing demographics, competing values, and the rapid rate of change in the world both within and beyond our national borders. The changes many institutions face have accelerated beyond tinkering; more campuses each year attempt to create comprehensive (or transformational) change. Yet, change strategies have not been exceedingly helpful in their capacity to guide institutions, and we know even less about how to facilitate major, institutionwide change.

The current change literature in higher education provides mostly generalized strategies about what is effective: a willing president or strong leadership, a collaborative process, or providing rewards (Roberts, Wren, & Adam, 1993; Taylor & Koch, 1996). This broad writing may mask information helpful to advance institutional change on a specific campus. “Achieving buy-in” or “communicating effectively” can seem very empty to institutional leaders and higher education scholars. Can this strategy be used at every institution and in the same way? The assumptions behind this approach are that each strategy is enacted similarly on each campus and that nuance and context do not much matter. Broad change strategies are presented as uniform, universal, and applicable.

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As an alternative, some scholars of organizations suggest that meaningful insight to understand the change process comes from context-based (micro-level) data (Bergquist, 1992). Context-based data help the change agent to understand why and under what circumstances strategies work at a particular institution at a particular time. The difficulty of working at the micro-level is becoming too specific and idiosyncratic to be of much help to others. As Hearn noted, the first and fundamental proposition we can stress about change is so simple as to seem banal or deflating, "it depends" (Hearn, 1996). Idiosyncratic observations are often of little use to practitioners. The challenge is to chart a middle ground and identify findings informative at a level that can be used to guide change processes. This task is challenging, because markers that one might use to determine the level of detail or the appropriate level of abstraction are not readily apparent.

One solution to charting meaningful middle ground is through a cultural perspective. Organizational research in the 1980s illustrated the impact of culture on many aspects of organizational life (Peterson & Spencer, 1991). Yet, there have been few empirical studies examining how institutional culture affects change processes and strategies. The assumption from the organizational literature is that culture will be related to the change process; specifically, change processes can be thwarted by violating cultural norms or enhanced by culturally sensitive strategies (Bergquist, 1992). This study attempts to fill the gap in the literature, moving beyond generalized principles of change, by adopting a two-tiered cultural framework to examine the effect of institutional culture on change strategies across six institutions. The two research questions addressed are: (1) is the institutional culture related to the change process, and how is it related? and (2) are change processes thwarted by violating cultural norms or enhanced by culturally sensitive strategies? The two theories adopted for exploring the relationship of culture and change are Bergquist's (1992) four academic cultures and Tierney's (1991) individual institutional culture framework. The dual level of analysis offers a multiple-lens perspective that is better suited to understand complex organizational phenomena (Birnbaum, 1988; Bolman & Deal, 1991).

Analyses of the six institutions (three are presented as detailed case examples) engaged in change processes over a four-year period through case study methodology (interviews, document analysis, and observation) are presented, examining five core change strategies: senior administrative support, collaborative leadership, robust design (vision), staff development, and visible actions. In addition to demonstrating a relationship between institutional culture and change, the results support

several assumptions from cultural theory, including the significance of culturally appropriate strategies, the importance of examining multiple layers of culture (enterprise, institutional, group), and the possibility of predicting which strategies will be more important. This study challenges conventional notions about change processes; namely, that one can follow a general principle or approach and not be aware of how distinct organizational cultures impact the process. Its findings suggest the need for practitioners to become cultural outsiders in order to observe their institutional patterns. The Bergquist and Tierney cultural frameworks provide initial templates for this analysis.

Understanding Organizational Culture and Change: A Review

Six main categories of change theories¹ exist throughout a multidisciplinary literature, including biological, teleological, political, life cycle, social cognition, and cultural. (For detailed descriptions of these various models please see: Burns, 1996; Collins, 1998; Levy & Murray, 1986; Morgan, 1986; Sporn, 1999; Van de Ven & Poole, 1995). Biological (unplanned change) and teleological models (planned change) have received the most attention in higher education and have the longest histories; most recently biological models were used in a major study by Sporn (1999) and teleological models in a study by Eckel, Hill, and Green (1998). Biological and teleological models tend to produce the generalized change strategies noted in the introduction as problematic (Burns, 1996; Collins, 1998). Political models also have a long history but have been critiqued for their inability to provide solutions for organizational participants in facilitating or reacting to the change process (Burns, 1996; Collins, 1998; Van de Ven & Poole, 1996). Researchers have recently touted cultural and social cognitive theories for their sophistication in illustrating complexity in showing the ambiguity, context based nature, and human aspects of the change process (Collins, 1998). This study attempted to examine the promise of cultural theories to understand change within the higher education context, because they are mostly unexplored, yet show great potential. The researchers also assumed that comprehensive change, the type focused on in this study, might best be examined through a framework in which values and beliefs are a focus because major alterations to an organization usually impact underlying belief systems (Schein, 1985).

This next section provides the context for the study by briefly reviewing the evolution of cultural approaches to studying organizations and the implications of the culture literature for this study. Next, a review of the extant literature on institutional culture and change in higher

education is presented. Lastly, the theoretical frameworks guiding this study of culture (Tierney and Bergquist) and change (Lindquist) are reviewed.

Organizational Culture

In the 1980s, organizational researchers across various disciplines began examining the role of culture within organizational life (Morgan, 1986; Schein, 1985; Smirich & Calas, 1982) and then connected it to effectiveness (Tichy, 1983) and central processes (i.e., leadership, governance) of the organization (Schein, 1985). Culture shifted from being used as a descriptive device to becoming linked with improvement and success. Higher education followed that pattern. Early research used culture to illustrate that campuses had unique cultures from other types of institutions, describing the myths and rituals of colleges, and student and faculty subcultures (see Clark 1970; Lunsford, 1963; Riesman, Gusfield, & Gamson, 1970). Several later studies on higher education linked institutional culture with organizational success (Chaffee & Tierney, 1988; Peterson, Cameron, Jones, Mets, & Ettington, 1986). Further studies demonstrated the way that different cultures shaped various institutional functions including governance (Chaffee & Tierney, 1988), leadership (Birnbaum, 1988), and planning (Hearn, Clugston, & Heydinger, 1993; Leslie & Fretwell, 1996).

Two links between culture and change have been made in the higher education literature. The first set of literature suggests that institutions need to have a "culture" that encourages change (Curry, 1992). The goal of this body of research is to determine the aspects of culture or type of culture that need to be fostered to promote institutional change (Schein, 1985). The second set of ideas suggests that culture or key institutional elements that shape culture, i.e, vision or mission, are modified as a result of the change process (Chaffee & Tierney, 1988; Eckel, Hill, & Green, 1998; Guskin, 1996). In other words, the outcome of change is a modified culture (Schein, 1985). The research presented here pursues a third path, investigating the ways in which culture shapes an institution's change processes or strategies. It is the modifying element rather than the subject of the modification.

Conceptual Frameworks for Studying the Effect of Culture on Change Strategies

Within this study, we define culture as "the deeply embedded patterns of organizational behavior and the shared values, assumptions, beliefs, or ideologies that members have about their organization or its work" (Peterson & Spencer, 1991, p. 142). Culture provides meaning and con-

text for a specific set of people (Bergquist, 1992; Schein, 1985). Other scholars suggest nuances to this broad definition. For example, some view it as a variable (such as corporate culture), while others see it as a fundamental metaphor for a specific type of organization (see Morgan, 1986). Some researchers conceptualize culture as strong and congruent, or weak and incongruent (see Tierney, 1988); others merely note that cultures vary, without assigning a value to different cultures (see Bergquist, 1992; Martin, 1992). With these nuances in mind, culture is conceptualized within this study as a fundamental metaphor, emerging as a composite of many different levels—the enterprise, the institution, the subgroup (faculty, administrators), and the individual levels (Martin, 1992). The researchers assumed that cultures differ and that they are not necessarily negative or positive; nor are multiple cultures or fragmented cultures necessarily to be avoided.

This study adopts two conceptual frameworks of culture: (1) Bergquist's institutional archetypes of culture and (2) Tierney's unique institutional culture. First, the inquiry builds on Bergquist's (1992) work on institutional culture. Bergquist focuses on archetypes by which numerous institutions might be categorized and described.² He hypothesized (yet never empirically tested) that different change strategies would be needed and appropriate within the four different academic culture archetypes that reflect any higher education institution—collegial culture, managerial culture, developmental culture, and negotiating culture.³ The *collegial culture* arises primarily from the disciplines of the faculty. It values scholarly engagement, shared governance and decision making, and rationality, whereas the *managerial culture* focuses on the goals and purposes of the institution and values efficiency, effective supervisory skills, and fiscal responsibility. This contrasts with the *developmental culture*, which is based on the personal and professional growth of all members of the collegiate environment. Lastly, the *negotiating culture* values the establishment of equitable and egalitarian policies and procedures, valuing confrontation, interest groups, mediation, and power. Bergquist illustrated how the managerial culture, for example, might hinder an institution's ability to change structures, whereas a collegial culture was better equipped to modify institutional structures because there was greater trust.

Although Bergquist's framework provides one lens for examining the effect of institutional culture on change strategies, these institutional cultural archetypes can mask many of the complexities of individual institutional cultures. This study adopts a second conceptual framework to explore the ways in which culture affects change processes within unique institutions. The Tierney framework includes the following six

categories: environment, mission, socialization, information, strategy, and leadership. Analysis consists of examining each category in depth, asking such questions as, how is the mission defined and articulated? Is it used as a basis for decisions? What constitutes information and who has it? Or how are decisions arrived at and who makes them? This approach assumes that the values, beliefs, and assumptions of an institution are reflected in its processes and artifacts. By examining the key elements suggested by Tierney (1991), the researcher develops a clearer picture of the institutional culture.

When using both frameworks together, they provide a more powerful lens than when using only one in helping to interpret and understand culture. The archetypes provide a ready framework for institutions unfamiliar with cultural analysis; the framework establishes patterns for them to identify. The Tierney lens provides a sophisticated tool for understanding the complexities of unique institutions. Although Tierney's framework is an important framework, it may be more difficult for practitioners to use readily. Thus, both frameworks were used in this study; the dual level of analysis offers a multiple-lens perspective better suited to understand complex organizational phenomena (Birnbaum, 1988; Bolman & Deal, 1991).

Framework for Studying Change

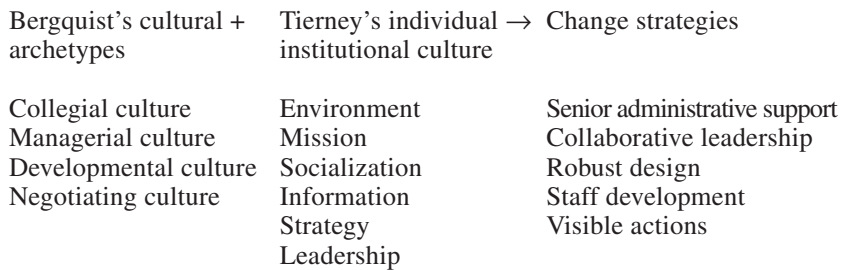
The change under investigation in this study is comprehensive change; it is defined as change that is pervasive, affecting numerous offices and units across the institution; deep, touching upon values, beliefs and structures, is intentional, and occurs over time (Eckel et al., 1998). To study the effect of culture on the change process, it is important to focus on a type of institutional change that was neither isolated in a particular unit nor affected only the surface of the institution. Lindquist's (1978) work on change, one of the most comprehensive sets of change strategies found in the higher education literature, was used as a change strategy framework for the study. Bergquist also used Lindquist's framework in his speculation of the impact of culture on change. The applicability of Lindquist's approach was recently tested on a broader set of institutions undertaking change (he only examined liberal arts institutions), and the following core change strategies emerged (Kezar & Eckel, in press):

1. *Senior administrative support*, refers to individuals in positional leadership providing support in terms of value statements, resources, or new administrative structures.
2. *Collaborative leadership*, defined as a process where the posi-

- tional and nonpositional individuals throughout the campus are involved in the change initiative from conception to implementation.
3. *Robust design*, a more complex and less well known term than vision; it is adopted from the work of Eccles and Nohria (1992). Leaders develop a “desirable” and flexible picture of the future that is clear and understandable and includes set goals and objectives related to the implementation of that picture. The picture of the future and the means to get there are flexible and do not foreclose possible opportunities.
 4. *Staff development*, a set of programmatic efforts to offer opportunities for individuals to learn certain skills or knowledge related to issues associated with the change effort.
 5. *Visible actions*, refers to advances in the change process that are noticeable. Activities must be visible and promoted so that individuals can see that the change is still important and is continuing. This is an important strategy for building momentum within the institution.

These five core strategies contain sets of substrategies; for example senior administrative support is related to incentives, change in governance structures, and providing support structures. Because it is not the intent of this article to investigate the specific strategies for change, please see Kezar and Eckel (in press) for a detailed discussion of the core strategies and substrategies. These strategies are identified here to provide a framework through which the investigation of culture and its relationship to the strategies for change can proceed.

In summary, the following diagram illustrates the relationships among the various concepts reviewed and used to frame the study:



Each institution in the study will be examined using the four elements of Bergquist’s cultural archetype in addition to Tierney’s six characteristics that define unique individual institutional culture. These two cultural frameworks will then be explored in relation to the way the change process occurred at all six institutions along the five core strategies.

*Research Design and Methodology**Case Selection Criteria*

This study is based on six institutions participating in the ACE Project on Leadership and Institutional Transformation; the project included 23 institutions. The project focused on understanding the process of institutional transformation. A subset of six institutions was identified through purposeful sampling utilizing four criteria: (1) they made the most progress on their identified change agendas; (2) they had the capacity and willingness to collect detailed data on change strategies and institutional culture; (3) they represented different institutional types; and (4) they had similar change initiatives. The six institutions in the study included one research university, three doctoral-granting universities, a liberal arts college, and a community college. Because institutional type has been related to Bergquist's cultural archetypes (Bergquist, 1992; Birnbaum, 1992), various institutional types were purposefully examined. As noted previously, all of the institutions were engaged in intentional comprehensive change. But to ensure additional consistency across cases, institutions were selected that had similar change initiatives; i.e., they were all working to transform teaching and learning. Thus, differences in strategies would be associated with cultural differences, rather than related to diffuse change agendas.

Data Collection and Analysis

In order to examine the effect of organizational culture on change and to move beyond the broad generalizations in the literature, an ethnographic approach was adopted. The project was a five-and-a-half year initiative on institutional transformation; the reported data were collected in years one through four. Participant-observers from each institution provided data on a semesterly basis in response to open-ended questionnaires and at biannual project meetings. Outside researchers visited each campus twice a year for the first three years and once during the fourth year. Researchers additionally collected and analyzed internal institutional documents.

Data analysis was conducted through three different approaches. First, theme analysis of the change strategies was conducted, using Lindquist's framework, examining ways each strategy was enacted on that campus. Categorical analysis was used to search for micro and macro themes (Miles & Huberman, 1994). Second, researchers developed institutional culture profiles of all six institutions based on the Bergquist and Tierney frameworks for examining institutional culture.⁴ This analysis resulted in the example profiles provided in the results sec-

tion. Third, Bergquist's and Tierney's frameworks were applied to the data to identify whether institutional culture patterns could be identified in the change strategies. Variations from the cultural lens were also noted. Emergent themes were identified and negotiated between the two reviewers. After the analysis was completed, the profiles of institutional culture, change strategies, and the relationship between the two conditions were sent to the site visit researchers (other than the lead researchers) to confirm interpretations of institutional culture and to have outsiders check the themes that emerged.

Due to space constraints, profiles of three sample institutions are presented to illustrate the relationship of institutional culture and change strategies common to all six institutions. These three were selected because they represent three different types of institutions (a research university, a doctoral university, and a community college), they illustrate three different Bergquist cultural archetypes (developmental, managerial, and collegial), and they had the most and the richest data to best capture their culture and change strategies.

Limitations

First, because institutions self-selected to be part of the project from which this subsample was taken, they may not represent the range of institutions undergoing comprehensive change. Second, although we attempted to identify institutions with similar change initiatives, there were small variations in their agendas. Finding institutions engaging in identical change efforts is almost impossible. Third, since much of the data are self-reported they may be biased to reflect success.

Results

This section is organized as follows: (1) descriptions of the three highlighted institutions, introducing the institutions, their change initiatives, and their cultures; and (2) presentations of the way the cultures have a bearing on institutional change strategies. Because the intent of this study is to understand the effect of culture on specific change strategies, the results are organized by each of the five core change strategies. Space limitations prevent a detailed description of the institutions and all the ways that institutional culture manifests itself across all five core change strategies. It is hoped that the summary tables and results section provide some of the key data to make these institutions real for the reader. Each of the five tables focuses on one change strategy, describing the way the strategy emerged at all three institutions. The notation "B" or "T" next to each theme reflects the way it related to the Bergquist or Tierney frameworks.

Institutional Profiles

Informal Trusting University (ITU) is a public doctoral university located in a small Midwestern town. It enrolls approximately 18,000 students, of whom over half are women. Close to 90% of its students come from within its state, and 1% are international; approximately 40% live on campus. The university has seven academic colleges and a graduate school with over 870 full-time faculty. Included among the colleges are architecture, business, fine arts, communications, and applied sciences and technology. Its 100-year history is that of a teacher's college developing into a doctoral university. It is endeavoring to integrate technology into the core of the teaching and learning process. This initiative had the ambitious goal of having the entire faculty involved in rethinking their courses and curricula around infusing technology to enrich the undergraduate student experience.

At ITU, both the organizational culture and change strategies used reflect the developmental culture in Bergquist's typology. The mission and faculty socialization strongly supported the importance of learning; at one time the institution defined itself as a "premier teaching university." Bergquist noted that many developmental cultures tend to have a strong focus on teaching. The leadership process on developmental campuses tends to be facilitative and strongly collaborative, as was the case at ITU. Developmental campuses like ITU also tend to share information widely, because it is critical to growth.

From a Tierney perspective, ITU's institutional culture is best characterized by the terms informal and trusting. Although a sense of trust is likely to develop within the developmental culture, it is stronger than described in Bergquist's framework. Trust at ITU appears to result from the long and stable leadership created by having the same president and provost for over 15 years, the large number of long-term dedicated employees (over 60% have only worked under the current president and provost), and the strong connection between the campus and its community. The institution also is run exceedingly informally. For example, the institution does not have a strategic planning process, and institutional direction is set informally and communicated through a series of conversations between the president, the provost, and various key stakeholders. ITU's policies and practices were developed locally in departments and colleges, were modified frequently, and lacked uniformity. Although some campus decision-making structures are in place, such as a faculty senate, there appears to be little reliance on them as the primary decision-making venues. Much of the business of the campus happens around a lunch table, in the hallways, or through various different meetings. People who work at ITU are likely to know each other well, for

many interact both within the workplace and outside of it in the local community.

Responsible and Self-Reflective Community College (RSCC) is a multi-campus community college of approximately 54,000 students, located outside a major Southern metropolitan area. It serves two of the fastest growing counties in the state. Founded in the late 1960s, close to 70% of RSCC students enroll in credit courses, and over 60% of its students are enrolled in at least one developmental course. The average age of its credit students is 25. The college ranks fourth in the nation in the number of A.A. and A.S. degrees it awards. It has 326 full-time faculty and approximately 1,100 part-time instructors. Last year, it generated over \$8 million in federal and state grants. It is attempting to shift from a teaching- or faculty-centered institution to a more learning-centered one, a process that the institution views as a major transformation in the ways it conducts its business. If successful, institutional leaders note that the structures, processes, pedagogies, and beliefs will change dramatically.

The culture at RSCC is best classified as managerial, using Bergquist's framework. It is characterized by strong senior administrative directive, driven by goals, plans, and assessment, is cognizant of outside forces pressing the institution, strives to meet customer needs, and frequently experiences clashes in values between faculty and administrators.

However, there are many ways that this campus is different from the managerial archetype. RSCC has a strong commitment to student learning, which pervades this large and complex four-campus college, and we therefore label it "responsible." RSCC's responsible culture is not simply driven by managerial accountability, but a deeply human desire to help. RSCC also is strongly introspective. Central administrators force introspection by the types of questions they ask faculty and the heads of the four campuses. Faculty and administrators also spend significant time discussing "the way we do things around here" and how to improve those practices. Institutional leaders note that the environment is changing and seek to effect change on campus that will align it with these external shifts. Information and data are collected not only to assess college goals, but also to understand institutional identity. There was a strong desire across the campus to understand RSCC students and their needs and, additionally, to understand who RSCC is and how it works. Staff development through workshops such as managing personal transformations (based on personal introspection) provide additional self-reflective mechanisms.

Autonomous Insecure University (AIU) is a private research univer-

sity, located in a major urban area on the Eastern seaboard. It has seven academic colleges, including a law school, and a school for continuing education. It has approximately 13,000 undergraduate and 6,000 graduate students, and close to 750 full-time faculty. Close to 85% of new students live on campus, and 55% come from out of state. Its expected tuition and fees for new students is approximately \$20,000. It is attempting to re-craft its general education program. Its agenda for change will lead to a profound shift in the campus' thinking about the purposes and structures of general education and in the strategies to actualize the new general education objectives, disseminating to all faculty responsibility for the goals of general education.

AIU manifests Bergquist's collegial culture. Colleges and schools are highly independent; the institution is focused on research and the disciplines. One of AIU's main goals is striving to move up in the traditional academic rankings. Academic affairs issues and priorities dominate governance, and decision making occurs at the department and school levels.

Through the Tierney lens, the autonomous nature of AIU far exceeds that described within the collegial archetype. The change initiative itself—to reexamine the general education curriculum, its structure and its purposes, as well as its modes of delivery—results from a history of high fragmentation across the extremely autonomous schools and colleges and a poor accreditation review. The institution is private, which may contribute to the high level of autonomy, as it is neither part of a system nor dependent on state funds, but is responsible for its own resources in a continually shrinking fiscal environment. Central administrators, in the past, have had a high turnover rate, leaving colleges and schools responsible for their own continuity of purposes and for providing their own direction. Many people in the highly academic city where it is located view it as a low-status institution. New faculty are quickly socialized to learn that they work at a less prestigious institution. AIU has recently gone through a downturn in enrollment, creating significant financial distress at the university, which included laying off academic staff. Its insecurity was additionally reinforced and heightened by the poor accreditation review.

Change Strategies

Having briefly described the cultures of the three institutions through both the Bergquist and Tierney frameworks, the following discussion is framed around the five core change strategies. The intent of this organization is to present examples that highlight the different ways each distinct culture appears to shape the application of each change strategy.

Senior administrative support. Senior administrative support concerns itself with the way senior administrators can facilitate change through resources, structures, and so on. This strategy varied across the three campuses discussed here. A summary of the variations in senior administrative support across the three institutions is found in Table 1.

At ITU senior administrative support appeared in the background of the change efforts and consisted primarily of providing needed resources and facilities regarding technology. Senior administrators also continually reminded the campus of the importance of technology and computer competency, but they were *laissez faire* in the direction of the initiatives. At managerial oriented RSCC, the senior administration provided very visible project leadership: developing the plan and a conceptual model to drive campus transformation, coordinating the leadership team, facilitating and coordinating communication among the four campuses, and securing external resources and reallocating internal ones. RSCC also created a new position, vice president for transformation, to help facilitate the campus' efforts. At collegial AIU, the provost and his administrative staff designed the overall process and oversaw it from a distance but moved much of the key decision making to the faculty of each college. Senior administrative support took the role of launching the efforts and then providing resources and creating accountability mechanisms. They were fairly absent from shaping decisions directly and worked intentionally to stay out of the way. All decisions were pushed down to the college.

Although Bergquist's archetypes were partially helpful in explaining the way senior administrative support emerged, the Tierney individual-level cultural analysis, provided additional insight. ITU differed from the developmental culture in the way senior administrative support emerged; for example, no governance structures were altered or support mechanisms established. Within the developmental culture Bergquist predicted that leaders would establish many support mechanisms to facilitate change; governance structures were typically altered to assure inclusiveness and formal communication vehicles were typically established. Yet, within this informal environment, people, not processes or structures were the core support. Furthermore, the informal communication around lunch tables and in hallways with senior leaders was the ideal process rather than the more deliberate communication mechanisms established within typical developmental cultures. The insecure culture of AIU seemed linked to the reliance on incentives as a major strategy for change. It appeared that incentives became the primary way that senior administrators could develop a sense of efficacy among insecure faculty. Thus, the unique culture of AIU seemed to alter the central

processes needed for change from those offered in Lindquist's framework. Incentives became more important than senior administrative support, which was the general pattern on other campuses. Table 1 presents the different manifestations of senior administrative support.

Collaborative leadership. Lindquist's change framework suggests that leadership at the top alone is insufficient and that change requires collaborative leadership from throughout the institution, particularly from the faculty. Collaborative leadership was a natural element of the developmental culture of ITU, where decisions and much of the action was pushed out to individual academics and departments. Mechanisms for collaborative leadership were already established through informal information networks and cross-departmental groups that met on a regular basis to discuss improvements. Developing people's leadership capacities and tapping their creativity had been a long-term philosophy for the current administration.

This manifestation was quite a contrast from RSCC, where the managerial culture had not historically created mechanisms for collaborative

TABLE 1
Senior Administrative Support Strategies by Institution

Informal, Trusting University (Developmental)	Responsive, Self-Reflective Community College (Managerial)	Autonomous, Insecure University (Collegial)
Provide resources ^B In the background ^B Provide opportunities and support ^B Informal communication ^T Few changes to governance or structures ^T Facilitate indirectly ^T External forces encourage and coalesce community ^T Remind campus of importance ^T	Formal communication ^B Sr. admin. actively involved and center of communication ^B Securing funding ^B Coordinate leadership team ^B Developed new structures to facilitate communication and decision making ^B VP for Transformation hired from outside ^B Provide incentives through central structure ^B Frame external forces to motivate (threat) ^B Develop conceptual framework ^T	Top-down plan, turned over to units ^B College-level focus ^B Respected faculty promoted to VP to oversee related change area ^B Develop mechanisms to work with colleges ^B College-level incentives as key support ^B Saw outside influences as interference, not help ^B Outside influence important to facilitate change ^T Colleges involved in grant-writing process, money as central ^T Few changes to governance or structures ^T Cross-functional teams ^T Public deadlines and discussions ^T

NOTE: ^Brefers to Bergquist Framework; ^Trefers to Tierney Framework

leadership. Cross-campus input was foreign to RSCC, thus several different committees were established by central administrators to tap leadership across the college. One of the first big steps in sharing leadership was to help people understand that they could now shape institutional direction and that their leadership was welcome. To promote shared leadership, twelve collegewide forums and campus structured dialogues were held in order to capture the good ideas from the faculty and staff. To demonstrate their willingness to share leadership, central administrators started writing “draft” on all documents and encouraged written and electronic comments throughout the change process.

AIU reflected the collegial culture in its approach to collaborative leadership by tapping its decentralized bureaucracy. Deans and chairs were expected to take leadership within their various units. The senior administrators delegated leadership to them and encouraged them to get faculty involvement and ownership in key unit decisions. Many key decisions and valuable solutions to institutional problems were made in cross-functional task forces that brought together faculty and staff from different units. AIU also learned that the term “draft” needed to be placed on documents until there was official approval from each college. On a few occasions a document was sent out without one or two schools’ official approval, which led to great disruption.

Examining these institutions through the lens of their individual cultures, collaborative leadership was enacted in distinctive ways. The trusting and informal environment of ITU shaped involvement; campus leaders did not need to invite participation or develop channels for communication, and there was no need to work through troubled relations on campus. Within most managerial cultures, the level of participation that RSCC obtained at their dialogues, forums, and voluntary action teams would be unheard of. The reason so many people attended the meetings was their commitment to students. This sense of responsibility made them attend meetings where they were not sure if they would be heard, events that might simply be a waste of time. Also, RSCC’s focus on self-reflection seemed to make communication a core strategy; the forums and dialogues took on a distinctive form with people expressing feelings, beliefs, and interpretations. Collaboration on this campus meant people needed to understand each other and themselves. Another helpful insight through the Tierney framework is the way in which AIU’s autonomous culture related to collaborative leadership. Few institutions would “truly” delegate responsibility solely to the colleges and schools for the change initiative. But, at AIU, this was the only way to successfully achieve faculty ownership and participation. Many other initiatives had failed because they had not been attuned to this aspect of the culture

on AIU's campus. Several faculty noted that this respect for the nature of collaborative leadership is what made this particular initiative succeed.

Robust design. This concept is an extension of Lindquist's ideas modified with the work of Eccles and Nohria (1992). It suggests that a flexible vision is needed, one that does not foreclose future opportunities. ITU, with its developmental culture, epitomizes the flexibility inherent in the concept of robust design. Institutional leaders had no overall grand scheme for change; instead they established a process that launched a series of uncoordinated, yet broadly linked change efforts. Decisions and ideas emerged at the local, departmental level, often informally. The few planning documents evolved at the local level (within programs and departments) were for local use. The vision and "real" plan for the future regarding technology and the educational experience was in each individual's head or within the strategy of each department. Even new promotion and tenure criteria that reflected the institution's technology goals were left to the design of each unit to best fit their specific intellectual contexts.

TABLE 2
Collaborative Leadership Strategies by Institution

Informal, Trusting University (Developmental)	Responsive, Self-Reflective Community College (Managerial)	Autonomous, Insecure University (Collegial)
Individual initiative, no central initiation ^B	Collaboration foreign to the campus; needed outreach and invited participation ^B	Faculty ownership of initiative key to success ^B
Individual unit-level invitation ^B	Cross-site planning team representing all groups ^B	Campuswide committee to gain involvement across campus ^B
Part of the long-time philosophy ^B	Invited to comment on notes; action teams asked for volunteers ^B	Formal newsletter; Faculty Center for communication ^B
Trust; positive working relations ^B	Realized importance of communication—12 structured dialogues ^B	Draft until colleges were able to provide feedback ^B
No formal structure ^T	"Draft" on everything sent out from central source ^B	Forum to discuss relationships among different colleges—historically tension between some disciplines ^B
All individuals realize process involved authentic opportunity for communication ^T	Forums to discuss relationships between groups ^B	Cross-unit interest groups to assure all of faculty voice included; older students involved as well ^T
Decentralized efforts ^T	Had to provide stipends to get participation ^B	Delegation of all key decisions ^T
No new collaborative mechanisms ^T	Consensus of collegewide vision based on responsibility to student ^T	Used fear of being behind competition as motivator for involvement ^T
Loose cross-unit teams ^T	Public reflection of college purposes ^T	
	Comprehensive leadership development program for self-reflection ^T	

Note: ^Brefers to Bergquist Framework; ^Trefers to Tierney Framework

The managerial culture of RSCC, which gravitated toward having a mandated vision and clear plan, at first had difficulty in creating a strategy characterized by robust design. After a slow start, the change leaders developed mechanisms by which they could be more flexible and yet stay visionary. The message behind labeling every document with the word “draft” was an artifact of a new flexible mindset. The leadership team also incorporated the comments and feedback from the various campus dialogues and feedback sessions in ways that continued to leave future options open. Outside pressures, in particular concerning performance indicators, also helped to promote the change design.

AIU’s collegial culture was evident in its strategies to create robust design. Members of the campus immediately rejected the initial plan developed by the president as too restrictive and unwarranted. The responsibility for designing and implementing the change then shifted to the college/school level. The design was created to allow for flexibility at the departmental level. For example, the central administrators created a master document tracking aspects of the plan that had been delegated to the colleges and departments, yet central administrators allowed each unit to create the specifics to meet institutional goals. Careful communication, always in writing, existed between the various levels of the organization related to the design of the change process. Central administrators also moderated the pace of change based on faculty feedback about the implementation scheduling. Finally, because faculty did not want to have responsibility to be accountable for each other, also a familiar aspect of the collegial culture, they gravitated toward an outside, legitimate source, an accreditation team.

The archetypes were not a powerful enough explanatory lens to understand some of the unique ways that the robust design efforts were shaped on these campuses. For example, RSCC attempted to develop a robust design through a whole series of data collection efforts. Data collection seemed to be such a strong element of robust design because it reflected the campuses’ drive to be responsible and to become more self-aware. Some of the types of data collection mechanisms are extremely self-analytic, including an organizational character index and a collective vision index. These different assessments focused on learning about the nature of the organization and working to develop a more functional culture and vision, if needed. Data collection that focused on students was also seen as important to better respond to their needs and to improve the learning environment. On most campuses with a developmental culture similar to ITU, a detailed and clear robust plan would be critical for moving forward with change. Yet, within ITU’s family-type environment, it appears that there was little need for this type of docu-

mentation, which was unique to their distinctive culture. At AIU, the central administration built the plan around areas of insecurity and used faculty and staff insecurity as a lever to coalesce the campus around the robust design. They also used outreach to help gain momentum for the plan; for example, externally publicizing faculty's new ideas about general education. In the past, designs for change were thwarted at AIU; leaders knew it would be difficult to coalesce people without some strategy or crisis. Building on faculty insecurity was identified after months of searching for a motivational technique that would reach faculty, in particular. No generalized cultural archetypes would have been helpful in discovering these nuanced aspects of developing a robust design.

Visible actions. People need to see that their hard work is leading toward progress, thus visible actions are an important change process strategy. Table 4 reflects the following discussion. There were very distinct ways in which the three institutions used visible actions to facilitate change. The developmental culture at ITU, heavily tied to the growth of

TABLE 3
Robust Design Strategies by Institution

Informal, Trusting University (Developmental)	Responsive, Self-Reflective Community College (Managerial)	Autonomous, Insecure University (Collegial)
Local planning; they know best ^B	Centralized communication, design at administrative level ^B	Goals and implementation plan designed at local level ^B
Accountability was connected to ideal of being a better teacher ^B	Setting expectations for accountability and gather baseline data and assess core processes over time ^B	Strong planning documents top-down design of project created tension ^B
Long-term orientation: visionary, future perspective part of leadership culture ^B	Long-term orientation: Data-driven planning ^B	Accreditation team provides support for initiative ^B
Celebrated accomplishments ^B	Outside perspective: Performance indicators in state heavily influenced planning ^B	Used externally generated legitimacy ^B
Informal communication facilitates momentum ^T	Reports written up and shared; esp. meeting-targeted goals ^T	Highly coordinated, intentional, structured communication ^T
Few planning documents ^T	Establishing plan by describing other campuses with similar plans ^T	Master document ^T
Uncoordinated, but loosely linked strategies ^T	Type of data collection, organizational index ^T	Tapped campus insecurity for action ^T
Outside perspective did not play a role ^T		Moderated pace of change through setting range of goals and obtaining feedback from faculty to change rate ^T
Did not put change in larger context ^T		Publicity of high achieving faculty ^T
		Putting change in broader context; trends among peer institutions ^T

NOTE: ^Brefers to Bergquist Framework; ^Trefers to Tierney Framework

people on campus, appeared to necessitate a change in the people and their attitudes as a means to maintain momentum. This was achieved through the award of developmental grants for staff development and through a change in hiring policies aimed at bringing in new faculty. At managerial RSCC, goals needed to be met to maintain the momentum for change. A short-term action team was established and initially documented a 20% increase in graduation rates. This strategy created a surge of energy, bringing many holdouts to the change initiative. The collegial culture at AIU focused on resources as a motivation. The acquisition of several grants provided the needed incentive to build the change initiative. Although each institution obtained grants for their initiatives, they seemed to be valued most at AIU. Allocating grant money to faculty within departments at AIU developed a sense of ownership and enthusiasm.

Two examples will help illustrate the ways that their unique cultures emerge within the visible-action-taking strategy. The informal culture at ITU appeared to result in numerous activities throughout the campus, falling under visible actions. This differed from most developmental campuses, where centralized staff development was the core feature. Activities ranged from a faculty group that wrote one of the guiding documents that created a new language on campus to centrally administered developmental grants to a regular newspaper column that described efforts to incorporate technology into classrooms. All these efforts helped to build momentum throughout this informal environment. However, at AIU, bringing in outside money seemed to provide the incentive that made the campus feel that they were becoming more prestigious, and therefore successful, in their change process. The insecure culture at this campus seemed to link outside recognition through money as a validation of its robust design and change initiative. Although the collegial culture would have predicted that money would be important to taking action, the consuming nature of this strategy would not have been predicted or understood purely through the cultural archetypes.

Staff development. Staff development, a set of programmatic efforts to build new capacities within faculty and staff, was extremely important to the change processes at all three institutions. Yet, it was enacted in very different ways, based on the culture of the institution. ITU utilized a local departmental model for technology staff development. Leaders within different schools or colleges led the efforts to develop the needed support for their colleagues. The training programs were focused on the individual and their needs. At RSCC, however, most of the staff development was produced by outside consultants or outside speakers. The decision to create the formal staff development program emerged from the president and vice president for transformation's office. There was

TABLE 4
Visible Action Strategies by Institution

Informal, Trusting University (Developmental)	Responsive, Self-Reflective Community College (Managerial)	Autonomous, Insecure University (Collegial)
Needed people change; hiring criteria ^B Faculty development ^B Focused on personal growth ^B Local, informal multilevel action: guiding document written by faculty, institutional grants, faculty- led workshops ^T Make individual responsible ^T	Meet goals. Short term action—20% increase in graduation rates ^B Developed new policies and procedures ^B Incentives: small grants and monies provided for any initiative related to the change initiative ^B Gave national presentations and received national recognition ^T New leadership development program ^T Measure progress of student learning via data ^T	Secured new resources and prestigious grants ^B Allocated money to departments for related initiatives ^B Support structures: cross unit interest groups ^T Faculty ownership, immediate change in curriculum and department culture ^T Getting funding to support projects ^T Prestigious publicity and recognition ^T

NOTE: ^Brefers to Bergquist Framework; ^Trefers to Tierney Framework

little if any input from individuals on campus about the content or approach for staff development. The focus of the learning was how to develop staff to better serve the college, an objective that is closely aligned with a managerial culture rather than personal development for the individual, as was stressed at ITU within a developmental culture. In AIU's collegial culture, several different models emerged. Many faculty were sent off campus to observe how their peers were working to transform general education. In addition, speakers were often brought to specific colleges and schools to describe new approaches to general education, particularly in disciplines such as engineering. Experts within each college were also called upon to describe innovative ideas and ways to facilitate the change process. The focus of the development was at the departmental level; the outcome was that the faculty member could serve his or her department more effectively.

What is the relationship between the individual cultures and the ways these strategies emerged? The developmental culture of ITU would have predicted staff development as the most important strategy for change. Yet, it was not emphasized heavily on this campus. The culture of this unique campus also seemed to affect the way staff development was enacted. The informal and trusting nature of ITU appeared to shape the staff development initiative, which was much more unstructured than that on any of the other campuses in this study or within the entire

project. This institution drew exclusively on internal staff for development because of the deep trust they held, knowing they would be the best guides for assisting each other’s growth. At RSCC, staff development was the dominant strategy in the change process, which appears to be related to their unique culture of self-reflection. This fact also counters the cultural archetypes, because robust design and senior administrative support would have been predicted to be the most important of the core strategies within a managerial culture. It appears that their great interest in self-reflection and personal transformation made this area a high priority and a successful strategy. The unique culture at AIU can also be seen in the way staff development emerged. The autonomy of AIU appeared to have resulted in multiple levels of staff development by various colleges/schools and throughout levels within the college—department, program, and other levels. Their insecure culture seemed to make them seek outside expertise, not trusting their own knowledge for various aspects of the staff development. Table 5 compares the variety of ways staff development played itself out across the three institutions.

Discussion

The results of this study illuminate several new insights into higher education organizational change processes. In addressing the first research question, whether there appears to be a relationship between institutional culture and change, the results suggest that at all institutions and among every strategy there was a relationship. In examining the

TABLE 5
Staff Development Strategies by Institution

Informal, Trusting University (Developmental)	Responsive, Self-Reflective Community College (Managerial)	Autonomous, Insecure University (Collegial)
Focus on individual needs ^B	Outside expertise and administratively decided ^B	Faculty sent to off campus conferences by school, see what other faculty are doing ^B
Faculty development program ^B	Centrally coordinated leadership development program ^B	Department level, serve department ^B
Internal grants program ^B	Efforts were coordinated and purposeful ^B	Outside experts ^T
Decentralized by school or department ^T	Focused on serving college ^B	Different models across units ^T
Technical support developed at local level ^T	Central focus of the change process ^T	Cross-departmental teams ^T
Not well developed ^T	Transformation series ^T	
Unstructured ^T		
Tapped internal experts ^T		

NOTE: ^Brefers to Bergquist Framework; ^Trefers to Tierney Framework

nature of this relationship (the second part of the first research question), several patterns were identifiable. First, exploring the strategies used by institutions to effect change through a cultural approach appears to provide a richer description of the often empty strategies, such as collaborative leadership or senior administrative support. Each campus enacted strategies in different ways. The distinctions are important, because the approach to senior administrative support taken at RSCC most likely would not have been acceptable on the two other campuses, and vice versa. The findings about how institutional culture and change are related also sheds light on the second research question, whether ignoring institutional culture can thwart change processes. Where strategies for change violate cultural norms, change most likely will not occur (Eckel et al., 1998; Schein, 1985). The three case studies illustrate the weakness of and the challenge to presenting change strategies as universal principles. Future research might be more insightful if it were more sensitive to the relationship of culture to strategies for change.

A second finding about how institutional culture and change are related is the recognition that Bergquist's four cultural archetypes are a helpful lens for understanding the ways in which culture is related to the change process. The findings note a relationship between institutional cultural archetypes and the way the change process was enacted. For example, IAU, a collegial campus, followed the predicted pattern of engaging in a change process where faculty and traditional academic governance structures and bodies were central to the change process, where motivation was derived from prestige, where collaborative leadership utilized the traditional academic leaders, and where key planning and decision making occurred at the college and departmental level.

A third result is the discovery that each campus' change process could not be explained by the archetypes alone. The distinct nature of the campus cultures cannot be overlooked in trying to understand how change processes unfold and which strategies institutional leaders should emphasize. The self-reflective tendency of RSCC would have been overlooked if that institution had only been examined through Bergquist's managerial lens. A structured change process, as predicted by the developmental culture, most likely would have derailed the change effort at ITU. Furthermore, the lack of structure to support change at ITU could not have been predicted by the developmental culture. Examining institutional culture in depth, beyond the four archetypes, provides a deeper and richer understanding of the change process and appears to facilitate change.

A fourth finding in this vein is the understanding that cultural archetypes and unique institutional cultures may help to determine which

strategies might take prominence in the change process. For example, at RSCC staff development appeared to be the most important core strategy based on the self-reflective culture of the campus. At ITU, collaborative leadership seemed to play a prominent role based on the family atmosphere on the campus. Also, certain substrategies emerged as core strategies based on the culture of the institution in the same way as incentives did at AIU or communication at RSCC. Understanding the strengths and relative contributions of different strategies may help leaders determine where to focus their efforts.

These results clearly reaffirm what we assumed was the answer to our second research question—that change strategies seem to be successful if they are culturally coherent or aligned with the culture. In this study, institutions that violated their institutional culture during the change process experienced difficulty. Because of the culture's collegial nature, AIU's process was almost immediately halted when the president tried to initiate change. Not writing the word "draft" on documents hurt the process at RSCC, because it showed insensitivity to the feelings of faculty, who did not see themselves as the natural allies of administrators. These examples reinforce the idea that missteps in the change process are often cultural misunderstandings. Leaders might be more successful in facilitating change if they understood the cultures in which they were working.

These results have several implications for campus change agents. First, they need to attempt to become cultural outsiders, or as Heifetz (1994) suggests, they need to be able to "get on the balcony" to see the patterns on the dance floor below. Reading institutional culture in order to develop and match the strategies for change are fundamental to an effective change process. Change agents' strategies for achieving this outside perspective on campuses include working with a network of institutions, using outside consultants, presenting at and attending conferences where they publicly explore their assumptions, bringing in new leadership, and participating in exchange programs to broaden the horizons of personnel. Second, individuals or campuses interested in change need to be aware of the four cultures of the academy and how these are reflected within their campus. Bergquist's (1992) typology can be a useful tool for leaders undertaking comprehensive change.

Finally, future research is needed regarding culture and institutional change. Drawing on this analysis, there is evidence that working within the culture facilitates change. If change strategies violate the institution's cultural norms and standards, they might be viewed as inappropriate and stifle the change process. Yet, this study was not designed specifically to address this question. Are there certain instances (for example during a crisis) that cultural norms can be violated to affect change?

Further research should examine, in what situations, it might be necessary or important to challenge institutional culture, rather than work within it. As noted in the literature review, some studies have identified how certain cultures facilitate and hinder change; these various lines of culture research need to be examined together (Curry, 1992). We want to emphasize that this study did not attempt to ascertain the efficacy of various change strategies, rather it sought to understand the relationship between institutional culture and strategies. Although working within the culture of the institutions appeared to assist institutions in moving forward, this relationship and its complexities need further study. Additionally, the archetypes were examined as exemplifying the institutional culture. Bergquist (1992) notes how campuses will have different subcultures that operate within a specific archetypal culture. These nuances and effects of subcultural archetypes need further investigation.

The intent of this study is to urge researchers and practitioners to reflect on change as a cultural process. As Bergquist notes, "one of the best ways to begin to prepare for (change) and to cope with challenges is to examine our own institutions in order to appreciate and engage diverse and often conflicting cultures that reside in them" (1992, p. 230). This article provides a framework for ways that institutions can begin to engage in this type of examination and reflection.

Notes

¹Model and theory are not necessarily interchangeable, although many scholars use them this way. Instead, "theory" is a broader term suggestive of contemplation of reality or insight, whereas "model" delineates a set of plans or procedures. Certain disciplines tend to develop models of change, such as business or psychology, whereas other fields tend to discuss theories. We use the term "theory" generically within this article.

²Although he did not focus specifically on the change process, instead focusing more on general issues of administration and leadership and how these processes are influenced by the four cultures, a small component of his work did speculate on change and culture.

³Birnbaum also examined different institutional types as representing different cultural archetypes (1988).

⁴The researchers acknowledge that even more detailed data could reveal interesting subcultures within the institution that would also assist in our understanding of comprehensive change. These two frameworks are illustrative of the levels of culture but do not examine the department- or program-specific level of culture, for example. This is an area for future research.

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