Organizations are realizing the need to redesign for collaborative work based both on external challenges and pressure and on the documented benefits of working in this manner. External challenges such as difficult financial times, changing demographics, globalization, and increasing complexity create an atmosphere in which organizations must rethink their work. In the business literature, the main strategy for addressing these many new challenges is collaborations or partnerships. For example, partnerships help to combine resources and help to identify new solutions to problems by combining expertise. Rosabeth Moss Kanter (1994) coined the term “collaborative advantage” to describe the way that private sector organizations engage in strategic alliances and partnerships that enhance institutional capacity to meet the demands of the new environment. In addition, Peter Senge’s (1990) now famous learning organization is centered on collaboration (teamwork, cross-functional work) to increase effectiveness and to meet environmental challenges. In terms of external pressure, accreditors, foundations, business and industry, and government agencies such as the National Institutes for Health and National Science Foundation have been espousing the importance and value of collaboration for knowledge creation and research, student learning, and improved organizational functioning (Ramaley, 2001).
These external groups are responding to research about the host of organizational benefits from collaboration—greater efficiency, effectiveness, and increased complexity of decision making (Haskins, Liedtka, & Rosenblum, 1998; Kanter, 1994; Senge, 1990; Whetten, 1981; Wood & Gray, 1991). Perhaps most important for higher education institutions, it has been suggested that collaboration can also enhance student learning (Knefelkamp, 1991; Love & Love, 1995). Several studies of particular collaborations—including interdisciplinary teaching (Conway-Turner, 1998; Smith & McCann, 2001), learning communities (Lenning & Ebbers, 1999; Smith & McCann, 2001), community service learning (Eyler & Giles, 1999), and academic and student affairs collaboration (Kezar, Hirsch, & Burack 2002)—demonstrate that they enhance student performance such as grade point average, persistence, and learning outcomes such as problem solving and interpersonal skills. Although evidence is just emerging about the impact of collaborative initiatives on student learning, the organizational benefits are well documented.

Some higher education institutions are aware of the importance of building more partnerships to increase efficiency and effectiveness and to build capacity. In recent years, cross-disciplinary faculty have begun to form learning communities that bring faculty and students together to study an issue such as the environment, capitalizing on intellectual capacities throughout the institution for teaching. Other institutions have collaborated with external groups such as industry and business in an effort to increase teaching or research capabilities. For example, George Mason University has a partnership with several technology firms based on the school’s proximity to the second-largest technology corridor in the country. By partnering with local businesses, some campuses have enlarged their teaching pool and internship potential as well as increased much-needed labs and materials for conducting research. In addition, academic and student affairs divisions have begun to work more closely together and, in some institutions, to combine resources. These are just a few examples of the growing number of collaborative efforts in higher education.

However, in general, institutions are not structured to support collaborative approaches to learning, research, and organizational functioning. Such collaborations struggle, at times, to become institutionalized because higher education institutions work in departmental silos and within bureaucratic/hierarchical administrative structures. Campuses across the country have attempted to develop a host of initiatives (e.g., service learning and learning communities) to improve undergraduate education—on the edges—without taking on the challenge of reorganizing, only to find these entrepreneurial efforts thwarted by the traditional struc-
tures and processes. In addition, innovative academic programs (e.g., environmental studies, women’s studies, or marine science) have difficulty being successful within rigid, traditional disciplinary structures.

Much has been written about the barriers to collaborative work, particularly in the literature on student and academic affairs collaboration, but little has been written about how to foster collaboration within higher education (Martin & Murphy, 2000). In addition, there are few models of collaboration for campuses to follow, as most have been developed within the private sector with different purposes and within unique institutional contexts. Research has demonstrated that models appropriated from business are more successful if modified to meet the unique organizational context of higher education (Birnbaum, 1991, 2002; Kezar, 2001). The goal of this study is to use a model from the corporate literature as a starting point (because it is the only existing model related to the specific phenomenon in this study—establishing a context for collaboration) in an effort to develop a model within higher education. This model is used only to situate the knowledge about this topic and to establish a set of deductive concepts to explore within higher education.

In this article, I present the results of a study that attempted to develop a model of how to organize for collaboration within higher education institutions, building from the knowledge that we have from the corporate and nonprofit sector. The present study examined four institutions that have high levels of collaborative activities—both internally and externally. The results presented here focus on the ways that they organized to foster internal collaboration. The internal collaborations focused on learning and improving the academic core of the institution, such as interdisciplinary teaching/research, learning communities, community based learning, team-teaching, student and academic affairs collaboration, and cross-functional teams.

Collaboration Literature: Definition, Theories, and Models

In this section, I review some of the key concepts and theories related to research on organizational collaboration to demonstrate the gap in information that this study fills, and then I present the model tested within the case study project. Some of the literature presented below is a subset of the literature on organizational change since most organizations are not designed to be collaborative organizations but have to change to become one. Therefore, when I am describing models of collaboration, they are also models of change that have been developed for this particular type of change initiative.
Collaboration has been defined in a multitude of ways and has been studied across a host of disciplines from political science to biology to sociology. In this study, I draw primarily on the organizational studies literature on collaboration. Most comprehensive definitions of collaboration refer to stakeholder interests or to who is involved in the collaboration; describe common purpose and shared rules or norms; and note what is being pooled—financial capital, human resources, skills, or expertise. In their meta-analysis of definitions of organizational collaboration, Wood and Gray (1991) developed the following definition that was used to guide the present study: “a process in which a group of autonomous stakeholders of an issue domain engage in an interactive process, using shared rules, norms, and structures to act or decide on issues related to that domain” (p. 140). In order for a process to be considered collaboration, it must entail an interactive dimension (relationship over time) and the initiative must develop shared rules, norms, and structures, which often become their first work together.

There are two types of collaboration literature within organizational studies: internal (intra) and external (inter) collaboration (Wood & Gray, 1991). External collaboration includes steering committees, K–16 partnerships, stakeholder groups, and external networks or collaboratives, and the majority of research focuses on why collaboration occurs. For example, resource dependency theory examines how scarce or limited resources tend to push people toward strategically shared resources, or within strategic choice theory, collaboration occurs because the relationships are perceived to increase power, efficiency, or production (Osborn & Hagadoorn, 1997). Internal collaboration includes areas such as cross-functional teams, interdisciplinary teaching/research, and student and academic affairs collaboration. Interorganizational collaboration has received a great deal of attention since alliances and mergers were seen as a key for businesses surviving difficult financial times (Saxton, 1997; Whetten, 1981). The present study focuses on intrainstitutional collaboration because there is even less research in this area and because it is an important area for higher education related to enhancing the learning environment.

Within the intraorganizational literature, most theories have focused on why collaboration occurs as well as on barriers to such collaborative work (Doz, 1996; Oliver, 1990; Wood & Gray, 1991). Stakeholder theory posits that collaboration occurs because cooperative systems by their very nature are inclined to form coalitions and achieve common goals, but at times barriers occur (Googins & Rochlin, 2000; Hagadoorn, 1993). Structural barriers—for example, in higher education the promotion and tenure requirements of departmental units—some-
times prevent collaborations. Stakeholder theories focus on identifying barriers and creating facilitators. Organizational learning theory suggests that the main motivator for collaboration, in loosely coupled systems like higher education, is the ability to develop superior knowledge (Googins & Rochlin, 2000). Both of these theories lack a description of the process of collaboration—how it occurs as well as models for best designing collaborative activities. The present study sought to fill this gap in our understanding, moving from the reasons and barriers for collaboration to ways in which it can be fostered and facilitated.

Within the more limited intraorganizational collaboration literature, focusing specifically on the process/models of how to develop collaboration, there have been studies of group composition and dynamics (Bensimon & Neumann, 1993; Denison, Hart, & Kahn, 1996; Jassawalla & Sashittal, 1999), task design (Denison, Hart, & Kahn, 1996; Holland, Gaston, & Gomes, 2000), and the attitudes and beliefs necessary for collaboration (Barringer & Harrison, 2000; Liedtka, 1996; Tjosvold & Tsoa, 1989). These studies identify the need for careful selection of team members to ensure that collaboration works, the development of trust among members of the group so that they can evolve into a highly functioning team, the significance of clear team goals, an openness to learning among individual team members, and helping management to better outline the work of collaborative efforts to ensure that they are more successful and aligned with strategic goals for the organization.

Within the higher education literature on intraorganizational collaboration, the research also has focused almost exclusively on barriers (Love & Love, 1995; Schroeder & Hurst, 1996). Much of the literature has focused on academic and student affairs collaboration. Barriers most commonly identified within higher education include organizational fragmentation and division of labor; specialization among faculty; lack of common purpose or language between faculty and staff or administration or between areas of administration and faculty; few shared values among employees; history of separation of units; different priorities and expectations among various employee groups; cultural differences between academic and student affairs in terms of personality styles; and competing assumptions about what constitutes effective learning (humanities versus sciences or student and academic affairs) (Kuh, Douglas, Lund, & Gyurmek, 1994; Kuh, 1996; Lamarid, 1999; Love & Love, 1995; Martin & Murphy, 2000). A few studies have examined individual and group conditions that lead to or enhance collaboration, such as leadership (Kezar, 2003a; Martin & Murphy, 2000), common goals (Kezar, 2003a, 2003b; Love & Love, 1995; Martin & Murphy, 2000), personalities and attitudes of individuals in the collaboration (Kezar,
Redesigning For Collaboration in Learning Initiatives

A national survey of student and academic affairs collaboration suggests that higher education institutions have not engaged in much restructuring or alteration of mission or culture to facilitate change; instead, they depend on individual leadership and personalities (Kezar, 2003a, 2003b). The majority of the literature on conditions that enable collaboration is not research-based but anecdotal (AAHE, ACPA, & NASPA, 1998; Eickmann, 1989; Hyman, 1995; Kezar, 2003a; Knefelkamp, 1991; NASPA, 1997; Schroeder & Hurst, 1996). Generally, higher education literature lags behind the business literature because it tends to focus on individual conditions that relate to collaboration rather than on developing models of collaboration (with multiple factors/conditions); it also tends to focus on micro conditions rather than on macro conditions such as the context, which I describe next.

Until recently, researchers in business emphasized individual and group dynamics (the current focus in higher education) and missed the systemic elements of the organization that need to be changed in order to make collaboration successful (Doz, 1996). Denison, Hart, and Kahn (1996) were among the first to acknowledge that researchers have not studied how the overall environment or organizational context can enhance collaboration. Similarly, Liedtka (1996) found that a supportive context that provides commitment, processes, and resources to facilitate collaboration was critical but understudied. There is virtually no information on organizational context features that enable collaboration; thus, this became the focus within the present study.

Using private sector organizations, Mohrman, Cohen, and Mohrman (1995) developed a model examining organizational context features; this model was used to design the present study. I chose it because it is the most comprehensive model for how institutions can organize for collaboration and it offers an innovative set of assumptions that separate it from other research in this area. Mohrman et al. claimed that one of the main reasons collaboration fails is that one cannot impose collaboration within a context designed to support individualistic work (most earlier research tried to “fit” collaboration within traditional organizational boundaries). The earlier studies of group composition, attitudes, and task design have not provided an adequate foundation for designing collaborative work. To make collaboration successful, organizations need to be redesigned, enhancing group and cross-divisional work that typically ends up failing. The organizational context features that need to be redesigned to enable collaboration include structure, processes, people, and rewards. Not only must these organizational features be redesigned,
but also successful implementation involves learning collaboration skills and unlearning noncollaborative skills. Additionally, management needs to be provided to support the redesign.

Their model identifies six specific areas that need to be altered to successfully design an organization that can support collaboration. First, the strategy, or what the organization is trying to accomplish (in higher education this would be akin to mission), needs to be adjusted. Then, the tasks or the work of the organization need to be reexamined—in higher education this would be equivalent to the teaching, research, and service processes. Third, the structure will need to be changed in order to create integrating mechanisms; therefore, a centralized division might need to be created to link several currently disparate activities. Fourth, the general processes such as goal setting, management, and decision making need to be modified to support collaboration (e.g., teams and collaboratives need to be able to develop from the bottom up a set of objectives that fits in with the overall organizational goals). Fifth, rewards need to be developed to provide incentives, and accountability systems, such as recognition and merit by team rather than individuals, need to be put in place. The major reward system within higher education is the promotion and tenure process. Lastly, people need to be trained and given skill development in the area of collaboration. The strength of this model is its emphasis on comprehensive redesign of the organization from its strategy, processes, human capital, type of work, and rewards. It has a narrow structural and process focus and, to a lesser extent, learning focus; it is comprehensive in scope, but not in concepts investigated.

There are other elements that have been found to be critical to foster collaboration in other research. Culture/values and relationships are mostly not addressed in the Mohrman, Cohen, and Mohrman model, yet research by Kanter (1994) found relationships and culture to be very important to collaboration. For example, Kanter found that collaborations were much more like familial or dating relationships and worked based on the interplay of human dynamics much more so than on formal agreements, structures, or processes. Research by Tjosvold and Tsao (1989) found values to be critical to collaboration; for example, if there was a sense of shared values between groups or a set of values that drew people together—e.g., passion to help the community—such values overrode other conditions in creating and sustaining a strong collaborative partnership. One recent study on collaboration in higher education demonstrated the role of values for initiating and implementing collaborative efforts (Philpott & Strange, 2003). Additionally, the focus on management, rewards, and accountability (in the Mohrman, Cohen, and Mohrman model) might be less important in higher education, because
previous organizational research has shown that management and accountability structures are weak within higher education and that employees in higher education are intrinsically motivated rather than extrinsically motivated by rewards (Birnbaum, 1991).

In summary, the Mohrman, Cohen, and Mohrman model was used as a point of departure because it is the most comprehensive model to date, but the present study also examined the way relationships, values/culture, and other emergent conditions might be significant to fostering collaboration within the organizational context.1 I was also cognizant of aspects of the Mohrman, Cohen, and Mohrman model that might not be as significant in the higher education context, such as the role of management and accountability.

**Methodology**

Case study methodology was chosen to explore institutions that appeared to have developed an organizational context to support collaboration. This methodology is often used when a unique phenomenon can be identified and examples investigated in detail to describe and articulate the issue. In addition, complex organizational processes such as collaboration and broad phenomena such as context and environment are typically studied through case study methodology since it allows the researcher the opportunity to examine structure, culture, institution-wide processes, history, and an array of conditions simultaneously that cannot be captured through other methodologies (Merriam, 1998).

The research questions pursued were: (a) What are the organizational features (structure, processes, people/relationships, learning, rewards, and culture/values) that seem to facilitate the process of internal collaboration related to learning-oriented initiatives in higher education institutions?; and, (b) What organizational features are most important: structure, processes, people/relationships, learning, rewards, and/or culture/values? The unit of analysis was the overall institution rather than specific collaborations, which has been the emphasis in earlier studies.

**Sample**

The project utilized purposeful, unique case sampling, which entails the identification of cases based on a particular set of characteristics (in this study, extensive collaboration and organizational context features) that they share to understand better the distinctive phenomenon that emerges within these cases (Merriam, 1998). Uniqueness is more important than representation or generality. The unique cases examined were four institutions with demonstrated high levels of intraorganizational
Institutions were chosen if they demonstrated that they were conducting collaboration across a host of areas. The assumption was that a single collaboration or two might not reflect organizational features but individual leaders. The main forms of internal collaboration present within these institutions were: interdisciplinary teaching/research, learning communities, community-based learning, team-teaching, student and academic affairs collaboration, and cross-functional teams (each of these meets the definition of collaboration described in the literature review).

A typical technique for identifying cases is contacting national organizations that conduct work in the area under study. The American Association for Higher Education (AAHE) was contacted because it is a national association that works to create change within colleges and universities and because it focuses on encouraging collaborative initiatives including student and academic affairs partnerships, service learning, and assessment. Because the AAHE’s primary work is in boundary-spanning projects, they were contacted about possible institutions that met the sampling criterion (listed below). Four individuals who head projects focused on collaborative initiatives from AAHE were asked to make nominations because they have significant expertise and working knowledge of institutions nationally. These preliminary nominations were based on reputation and working knowledge of these institutions. Thirty institutions were nominated from all over the country. The criteria used by AAHE nominators, in the survey described next, and in campus interviews to narrow to the final four institutions were:

1. number of collaborative initiatives
2. restructuring or redesign efforts to help facilitate collaboration
3. reputation for collaboration among peer institutions (this criterion was particularly important for the AAHE nominators, but was less significant within the institutions; reputation was purely subjective and not based on measures)
4. perception of depth and quality of collaborations on their campus in comparison to their peer institutions.

After nomination, the 30 institutions were contacted and asked to fill out a brief survey (just for selection purposes, not data collection—all 30 institutions filled out the survey). The survey was typically sent to the provost or a vice president, depending on what contact I could make at the institutions. Certainly it is difficult for any one individual to understand what is happening throughout an institution, yet provosts and vice presidents are well positioned to know what happens related to cross-
campus initiatives, which tend to be high visibility projects. Where I was concerned about his or her knowledge, I sent the survey to another individual and/or spoke to another member of the institution—for example, another executive. I used personal contacts to gain access to an informant who would help ensure the survey would be filled out and who would provide names of individuals for interviews. I reviewed the survey and was able to narrow to seven institutions that had more collaborations (criterion 1) and that had conducted more work to redesign for collaborative work (criterion 2). I then interviewed three to five individuals on the seven remaining campuses in order to narrow to the final four cases based primarily on criterion 4, the perception of depth and quality among members of the institutions. This process took approximately 8 months.

Another selection criterion was that the institutions chosen were “typical” higher education institutions (without significant funding to leverage partnerships and collaboration) and were non-elite. Many studies of collaboration or partnerships focus on models of excellence among elite or high-profile organizations, and the findings are often not transferable to other settings with more limited resources. Thus, although these cases were studied because they are unique in their ability to create a context supportive of collaboration, I wanted the institutions not to be so unique in terms of resources that other institutions would conclude that the lessons learned from these campuses would not have relevance for them.

In addition, collaboration was assumed to emerge distinctly based on institutional type and mission. As a result, within this study, the type of institutions examined was held constant. Four public comprehensive institutions (one in the west, one in the Pacific northwest, one in the midwest, and one on the east coast) were explored since this is among the largest sectors and the one mostly directly affected by recent budget cuts. These institutions are in even greater need for collaborative strategies.

The institutions shared several similar characteristics of this sector—they are in urban areas, serve around 25,000 students, and have large numbers of commuter students. But they also differed in meaningful ways that help the reader understand that the model operates across different types of contexts. For example, two campuses had faculty oriented toward teaching, while two had faculty more oriented toward research. Some people hypothesize that faculty oriented toward teaching are more likely to collaborate or that it is easier in that environment to create collaboration (Ramaley, 2001). A more detailed presentation of these institutions is provided in Appendix A, providing the reader an understanding of the context of the campuses from which the model for designing for collaboration emerged. The following pseudonyms were
created for the four schools: Interconnected Global University, Partnership University, Collaborative Leadership University, and Community University.

**Data Collection**

Multiple methods were used to collect data, including interviews, document analysis, and observation, which are common to case study methodology (Stake, 1994). Prior to the campus visits, documents such as institutional planning documents and cross-campus committee and accreditation reports were reviewed. Approximately 20 interviews were conducted at each site. The interviewees were identified through an institutional representative, usually the provost, as individuals who had knowledge of or experience with a host of collaborative activities. I asked to speak with a mix of faculty from various disciplines, administrators, and staff from various divisions. I also used snowball sampling and asked people I interviewed for the names of others I should interview. Because collaboration occurs within so many different areas on these campuses, to have an accurate picture, I needed to speak with people across different collaborative ventures to ensure that an organizational feature was not specific to any one collaborative activity, but was used across collaborative activities. I also thought it important to ask individuals across the institution for their perspective on what organizational features enabled collaboration, as faculty, staff, and administrators often have varied perspectives about organizational life. Doing so would help to ensure the views were commonly held and not reflective of the individual’s specific positioning within the institution. I also wanted to examine differences by position for meaningful distinctions. A chart summarizing the individuals interviewed is shown in Appendix B. I conducted one-on-one interviews, which were tape-recorded and transcribed. Follow-up interviews or emails were sent to individuals who appeared to have a particular insight; they were also sent to clarify information from the interviews, observation, or document analysis. Where possible, observation of various collaborations (e.g., meetings of the groups or activities such as an interdisciplinary research symposium) was also conducted to triangulate institutional members’ perceptions.

I explored which aspects of the organizational context were observed to be the most important for facilitating collaboration, specifically focusing on those features identified in the literature: structure, processes, people/relationships, learning, rewards, values, and culture. I used several sources of data to examine these issues, as noted above: (a) perceptions of members of the institution; (b) observation of collaborations; and (c) official documents related to the collaboration and the campuses.
The time period for the research was 8 months to identify institutions, data collection took place over a 9-month period, and then data analysis followed directly afterward and lasted 3 months.

**Data Analysis**

Data analysis proceeded following case study techniques outlined by Merriam (1998) and thematic analysis outlined by Boyatzis (1998). All transcripts were read an initial time for the themes that emerged (inductive) as well as the themes brought to the study from the model and literature (deductive). Transcripts were then coded according to the inductive (four initial inductive codes emerged) and deductive (12 initial deductive codes) theme codes. Secondarily, field notes and documents were also reviewed and coded. I invited two students and one colleague to review the data with me in order to add credibility to the themes developed. They read the literature used to frame the study from which I developed the deductive codes. Transcripts were read independently, and we compared the coding. Where we noted differences, the team negotiated the interpretation.

The main items that facilitated collaboration were documented, and then I attempted to determine which conditions seemed to be playing a more significant role. This analysis was based on the following: (a) examination of the interview question where I asked interviewees what they believed were the most significant features that enabled collaboration; (b) review of answers to individual questions and notation of times they believed that condition was more important than others; (c) comments from a person on campus who seemed to have particular insight into the workings of the campus—she or he tended to be a person with a long history or a person new on the campus who had been at several other campuses, thus providing a point for comparison; and (d) triangulation by the researcher, based on information from document analysis, interview data, and observation. In one instance (importance of rewards), the data conflicted. Documents and some key interviews pointed to the significance of this theme, yet it did not emerge in the interviews as important as the other contextual themes identified. I describe this conflict in the Results section. I did not privilege the researcher’s or the interviewees’ voices, but tried to create balance between both voices.

**Trustworthiness and Limitations**

Credibility was ensured through triangulation, multiple readers of transcripts, and member checking (Yin, 1993). Multiple sources of data ensured trustworthiness; in particular, observations, field notes, and documents by the researcher were carefully compared to interview data.
(triangulation of data). Different interviewees’ perspectives were also used to ensure credibility (which is why 20 individuals were interviewed per institution). Although one person conducted the study, I had a group review the data and compare themes. I had a set of deductive themes (noted above), and we compared inductive themes that emerged. This process was followed to ensure credibility and dependability of the themes. Lastly, I asked selected individuals interviewed to review my interpretations of the contextual conditions that were important as well as the model.

In terms of limitations, the sample for the study represents an attempt to find institutions with high levels of quality collaboration occurring. Because quality was perceptual and based on people inside and outside the institution making such claims, it is difficult to say whether these collaborations are empirically high quality. In addition, the findings are reflective of people’s perceptions about how a process unfolded and are thus reliant on memory. Two campuses had been operating in this manner for over a decade. I was not on the campuses at the time of the change to a collaborative environment, and I had to rely on perceptions and opinions. Yet, when there was disagreement or differing perceptions, I had to make judgments about the way events unfolded, using trends in the data and triangulation with documents to make such judgments. Lastly, the model presented in the Results section may only be reflective of comprehensive institutions.

Results

The results are organized according to the two research questions and are summarized first. The first question investigated which organizational features facilitated the process of collaboration related to learning-oriented initiatives in higher education institutions. The following features emerged: (a) mission/philosophy; (b) campus networks; (c) integrating structures; (d) rewards; (e) a sense of priority from people in senior positions; (f) external pressure, (g) values; and, (h) learning. The second research question examined which conditions were the most important for enabling collaboration. Although many different elements supported collaboration, some, if missing, would undo the collaborative activities or would have resulted in them not emerging at all. The following emerged from interviewees as the critical features to be altered to enable collaboration: philosophy (aligning collaboration with the institutional mission), a campus network, and integrating infrastructures. The results section begins with a description of these highly significant organizational features as well as an explanation of why they emerged as
so important. One feature—rewards; in particular, the alteration of the tenure and promotion process—was not mentioned as often by interviewees, but was described in documents and brought up in key interviews.

Mission/Philosophy

There were three ways that the mission was important to fostering collaboration, and the first was having a mission that respected and encouraged collaboration. At Community University, collaboration is part of the mission statement itself, and as the provost noted, it “defines who we are.” Many people noted that a philosophy of collaboration that is tied to the mission of the institution made collaboration a systematic process and part of all work in which they engaged. For three of the four campuses, the philosophy that guided their work and that was infused into their mission statement was a belief in collaborative learning. Each campus had formally adopted a philosophy of learning that challenged traditional individualistic views of learning and that noted the importance of relationships to learning and the social construction of knowledge. With a collaborative philosophy of learning in place, the core activities of the institution—teaching and learning—and all employees’ work become related to working collaboratively.

A second strategy was to have a well-articulated mission that was known by everyone, which tended to bring people together. For example, at Partnership University, administrators and faculty noted, “Our mission statement can be repeated by any faculty, staff, or student on campus. That familiarity is also important for building collaboration.” A strategy that helped to make the mission statement so powerful is that these campuses all spent a tremendous amount of time and effort to rearticulate their mission statement on an ongoing basis, socializing and resocializing people to the mission.

A third way that the mission enabled collaboration was in efforts to align the collaborative initiatives to the mission and goals (having a sense of purpose) of the institution. At Community University, community partnerships and outreach were a specific focus in the mission statement, and at Collaborative Leadership University, active learning held such a prominent position in the school’s mission; both of these themes became the focal point of collaborative projects. In fact, many people noted how other collaborative efforts that were not aligning with the mission had more difficulty in gaining support, and the depth of implementation was affected. They believed that the lack of alignment with the mission was one reason the other efforts struggled and active learning and community partnerships thrived.

Informants noted that a philosophy related to collaboration aligned with the mission of the institution was one of the most powerful
symbolic strategies. Each campus had adopted a philosophy that, to achieve a particular kind of learning environment and to meet the institutional mission (be it innovative teaching, community-based learning, interdisciplinary research, or a true liberal arts education), collaboration was necessary. In the words of one faculty member:

Well, what connects our work more than any unit, person, rewards, or value is a philosophy. What I mean by philosophy is that we all share a common understanding in the notion of collaborative learning. We all discuss collaborative learning and what it is. We realize that it is this philosophy that helps us meet our mission, which focuses on active learning experiences and relational learning.

Each of these campuses moved from having sets of unconnected collaborations, with little effect on the overall teaching and learning environment, to a culture where collaboration is central to their work.3

Campus Networks

Another critical organizational context feature for supporting collaborative work was an intentionally created campus network (defined as a coalition, alliance, or complex set of relationships among a group of people that are useful to accomplish a present or future goal). It was important for gaining initial support for collaborative efforts, developing ownership, implementation, and ongoing support of collaborative work. This finding overlapped with integrating structures, as the centralized collaborative unit often served a key role in developing the campus network. At Interconnected, Global University, they wanted to revamp their undergraduate curriculum, an effort that began by tapping into a network of faculty dedicated to collaboration. Interviewees usually referred to this group as “the critical mass of people” who would take ownership and help to diffuse collaboration across campus.

In order to replicate them on other campuses, it is important to understand how these networks were created. First, these four institutions had intentionally invested in building strong relationships—for example, through hosting events for new faculty, a leadership series for people across campus, social events, a symposium, and other campus activities. These events were important because they maintained the “existing” critical mass, provided an opportunity for new people to become part of the network, and helped to connect informally people who might develop a new collaborative effort. They often happened at the departmental or school level, which had some limitations in that it did not facilitate campus-wide collaboration. However, such efforts were complemented by the centralized unit for fostering collaboration on campus (often the faculty development center), which operated to build relationships and
noted its work “as a matchmaking function.” At Community University, they used the metaphor of being “a hummingbird, pollinating flowers all over campus with the seeds of collaboration.”

Second, in addition to these formal units who saw their role as network building, there were also people who served a convener role and connected people across campus. These individuals were usually in cross-functional units such as assessment, community service, community outreach, international office, and the like. Two conveners were mentioned by almost everyone at Interconnected, Global University as “routinely taking people out to lunch from across various units to develop new relationships.” Thus, key positions can be developed and capitalized on to build networks.

A third approach to developing the networks involved the use of incentives. For example, to obtain funding for the assessment initiative at Community University, applicants had to form teams within the school that would work with teams across campus. Almost every school and college took advantage of this initiative, and new campus networks are now in place.

Fourth, serving on campus committees and participating in campus governance was also described as a key mechanism for building relationships, although this was generally not an intentional strategy. The campus service work built a comprehensive network that resulted in collaborations based on synchronicity. For example, a department chair commented:

This may sound strange, but as I think about the collaboration[s] I have been involved with, many emerged from random encounters I had with people on campus committees. The more committees you serve on, the broader your network, and over time that serves to support initiatives, create new ideas.

Fifth, campuses used physical space such as a campus center or faculty/staff dining area to build networks. A sixth strategy was opening up meetings and processes to more people. One administrator described this strategy of building networks:

They never used to have division wide meetings, but then I thought how are people going to meet and get to know each other so they can collaborate? So, I began to invite everyone to the meetings and new initiatives have popped up as a result.

Why was a network so central? Once the idea or concept was in place, people in power became central to enabling collaboration. There appeared to be several key properties of networks. The network provided a vehicle for the ideas to flow, helping them gain momentum and energy and leading people to identify needed support to sustain the collabora-
tion. In addition, once there was a network on board, other individuals were willing to join and to exert more effort. Campuses that had a network always had the critical mass and energy and were not expending time to build people power. Collaborations often die because relationships have yet to be developed and connections made. Because of the tremendous amount of time that it takes to build relationships, in addition to getting the collaboration off the ground, this can prove too much of a barrier. Furthermore, after the collaboration was in place and obstacles encountered, network members worked together to cull expertise or relationships needed to overcome barriers. Networks were also noted as the organizational context feature that helped to maintain and generate more collaboration on campus. People noted how “collaboration built upon itself.” As relationships developed through participation in one collaboration, that led to other activities and ongoing connections.

**Integrating Structures**

Integrating structures were very important across the four campuses. Each had established a central unit or initiative for collaboration, developed a set of centers and institutes across campus, and revamped their accounting, computer, and budgetary systems. These three structural changes oriented toward collaboration helped create very different campuses. Each campus had a unit that specialized in what might be termed cross-institutional work such as assessment, technology, service or community-based learning, interdisciplinary teaching/research, and so on. It was the work of these units to ensure that people were working together across campus. These units typically reported to the provost or president and had strong support from senior administrators. As one faculty member at Partnership University commented:

> We all know what is going on at the X center. That is the one place everyone seems to read the marketing materials and announcements. Plus, we know the work there is a priority for the institution; they work directly with the president. I like to serve on committees or go to events because I meet others, it is high visibility, and I know the work is seen as a priority.

The faculty development center was usually a second or complementary center on campus for cross-unit work, particularly among the faculty. Campuses also used another less permanent mechanism for creating collaboration at the centralized level—presidential initiatives. These initiatives became themes that provided focus for collaborative efforts and joint planning. At Community University, every person interviewed could recite the areas of collaborative work—diversity, internationalization, student support, and assessment—as well as their contribution and involvement in these efforts.
A second integrating structure—cross-institutional institutes and centers—was important at all four campuses. An administrator at Interconnected, Global University referred to the way that institutes had transformed the campus and how cross-institutional centers and institutes differ from traditional centers and institutes:

We made an intentional effort about 20 years ago that we wanted to be more collaborative—cross-campus collaboration, especially in the areas of interdisciplinary teaching and research. We examined ways that we might foster this work and we felt giving institutes a visible status was important—with independent budgets, high profile, and administrative support. Centers and institutes are on many campuses, at the departmental or school level. We didn’t want that model. Those tend to be shadow centers with little work going on. We wanted these to be high profile that everyone on campus knew about and would want to be part of.

Often, there are individuals who have a liaison role between the traditional academic units and the newly formed units and who are given release time or some compensation for the responsibility to ensure that the centers and disciplinary units come together to work as needed. Interconnected, Global University and Partnership University had some success working with traditional departmental centers and institutes that were spread across campus. These centers did not connect people across the entire campus but attempted to develop a meaningful assortment of individuals for joint research, outreach, or teaching. In fact, the traditional centers and institutes existed on the other three campuses as well and did serve to enable collaborative work, but most people thought the cross-institutional centers and institutes were more important, especially symbolically, in demonstrating support for collaboration.

A third integrating structure (computer and accounting systems) was extremely important and appeared key to moving beyond valuing to enabling and sustaining collaboration. These accounting and computer systems allowed for sharing of full-time equivalent (FTE) in team-taught courses, cross-listing classes, arranging joint appointments, and splitting indirect costs for research, all of which were noted as critical supports for collaboration. To quote one interviewee: “If the administrative structures reinforce people staying in their boxes, then this makes partnerships difficult, and most people do not need another difficult issue on their plate.” Budget issues cannot be ignored in collaboration. Successful efforts tended to funnel money back into the traditional departments and units; efforts to create centralized collaborative efforts with independent budgets usually met with resistance and sometimes resulted in failure (the centralized institutes and centers were an exception to this issue, but they did meet with resistance on some campuses by certain constituents,
especially at first). At Interconnected, Global University, an interdisciplinary unit was downsized and lost most of its budget because it was perceived to be draining from the departmental structures.

Why were integrating structures noted as so significant? With an idea (mission/philosophy) and people on board (network), structures were important to sustain collaboration. Integrating infrastructures were important across all the campuses and served to support efforts people rallied behind that were focused on the institutional mission. Sustained collaboration seems highly dependent on redesigning campus structures, from computing systems to divisional meetings to the creation of new structures such as institutes.

Rewards

Rewards were also very significant for enabling collaboration. In particular, rewards such as change in the promotion and tenure requirements, incentives, and making the intrinsic rewards of collaboration visible through the creation of “good” collaborative experiences emerged as important factors. One common facilitator of collaboration was the alteration of tenure and promotion processes, which had been modified at each campus. At Partnership University, where new promotion and tenure requirements had been institutionalized, an administrator and faculty member each noted “that you could see faculty work and priorities changing; the cases that move forward now are much more diverse and reflect the new institution we are attempting to become.” Altering rewards also socializes new faculty to an alternative approach to faculty work and attracts people to the campus who want to conduct collaborative work. The change in promotion and tenure requirements has served as a recruitment tool for the campuses. Yet, on two campuses (Interconnected Global University and Partnership University), people were suspicious of whether interdisciplinary research and teaching, work with the community, and cross-campus service and efforts were really regarded as equal to traditional standards. Some cases had gone through, but this remained an area of concern and at this point was not serving as an enabler of collaboration. People on these two campuses mentioned that if the new promotion and tenure requirements are institutionalized, they believe it will be a powerful enabler. This finding about rewards overlaps with sense of priority from senior executives, since these were the only individuals with the authority to alter reward structures.

Rewards, particularly alteration of the promotion and tenure requirements, appeared critical to enabling collaborative work in higher education, but this issue was not discussed directly by all people interviewed. A key informant made an observation that I heard on each campus:
Well, I guess rewards are a driving force. I want to believe it is our philosophy and value for collaboration. I like to think people are motivated by all the compelling and attractive aspects of collaboration. But, when I talk to people about why they are not team teaching or conducting inter-disciplinary research, and they do say, because it is not 'really' rewarded here and would not be rewarded elsewhere if I left this campus. So, when I think about what I have heard from people over the years, it is about rewards.

Administrators and faculty both shared bitter experiences with efforts to realign reward structures to value collaborative work. Efforts to alter reward structures often resulted in administrators having to leave the campus, faculty stepping down from administrative posts, and antagonistic feelings among the campus community. I hypothesize that rewards may have been brought up less often by interviewees because of these heightened and unpleasant feelings surrounding the alteration of rewards.

In terms of incentives, they need to be individualized rather than a "one approach for all" design. Disciplines and units vary in terms of what might be an attractive incentive; for one, it is a mini-grant, for another administrative assistance, and for a third help with grant writing. Of the extrinsic incentives, grants were mentioned most often as an enabler, but they varied in importance based on the groups within the institution. For faculty in the humanities and certain areas of the social sciences, with limited grants and funding potential, small grants to work on a collaborative effort were a successful strategy. There was also a trend for people to note that there are intrinsic rewards to collaboration, such as meeting new people and accomplishing a task that could not be done alone. The key for the institution is to make sure that when it structures collaborative activities, it keeps in mind that people need to feel intrinsic rewards out of the experience or they will likely not continue. As one faculty member recounted:

People come from all sorts of different backgrounds and they may not have had particularly good experiences with collaboration in the past. For example, my early experiences were tragic, with a senior faculty member stealing my ideas and passing them off as his own. So, you need to create opportunities for people to have a good experience, to feel the many intrinsic rewards, because that will foster collaboration for the long-term when mini grants or external rewards can not be provided and those times always seem to come.

Sense of Priority from People in Senior Positions

A sense of priority from people in senior positions (referred to as senior executives, since they ranged across areas and could be faculty or administrators) was noted as a critical element at all four institutions and by all the different constituents interviewed. Sense of priority was
determined if collaboration was discussed often by senior executives; if collaboration was written into official documents such as strategic plans, accreditation reports, and board correspondence; and if it was connected to strategic objectives or work of the institutions (e.g., the major campus initiatives had an element of collaboration—teams, stakeholder input, etc.). Although people believed that collaborations were best supported and most successful when they emerged from and had ownership from throughout the organization—within the faculty or staff—collaborations usually failed or were not sustained long term if there was not a sense of priority among senior executives. Senior executives were usually the only ones with the ability to alter reward structures and to create integrating structures to support collaborative efforts since they control resources. As a result, this finding is conflated at times with rewards and integrating structures, and it was hard to isolate this issue in people’s comments and attribution of importance. The independent effect could be identified when interviewees noted that, even if the structures and rewards to support collaboration were in place, if people did not sense that the senior executives believed this was a priority, most people would not get involved (and had in the past avoided certain collaborative efforts that were not deemed a priority). It did not always have to be the president or provost; encouragement and support by deans and department chairs were seen as crucial by faculty. Sense of priority from senior executives was also strongly related to mission, since typically this group of individuals has the authority to alter or rearticulate the campus mission.

Faculty and staff at the four campuses believed that modeling by people in senior positions was one of the key ways to signal that collaboration was a priority. Each person interviewed noted that if the senior leadership simply says something is important, but does not practice it, then one is unlikely to believe and follow their encouragement. One faculty member at Collaborative Leadership University commented:

I have been on several campuses and I had heard presidents talk about collaboration before, and seen that it wasn’t really valued, because they did not practice it, and therefore did not realize the needed support that has to be put in place like rewards or resources. But, when I arrived here, the president and provost modeled collaboration and provided real support such as the new institutes. So, I saw that in practicing it, they believed it and would support it institutionally as well. I think those two go hand-in-hand.

The senior administrators on these four campuses embodied the collaboration they had hoped to foster; this also provided an example of healthy collaboration for people to follow and from which to learn. Many interviewees saw a relationship between the modeling of collaboration and these senior administrators’ willingness to create campus systems and
culture in support of collaboration. Therefore, sense of priority was conveyed most strongly through actions, but words, documents, and association of collaboration with strategic initiatives all signaled that collaboration would be valued and supported.

Some people noted that the downside of this strategy was that, at times, it stifled entrepreneurial, grass roots efforts to collaborate as people followed the signals from senior staff. However, the strategy of network building worked to bring grass roots efforts to the fore. Thus, as long as both of these strategies were used, a balance was achieved between top-down and bottom-up collaborative initiatives, which seemed the most successful approach at all four campuses.

**External Pressures**

External pressures to collaborate emerged as an important dimension that facilitated and enabled this work. It was not merely that these pressures exist, but that these campuses had mechanisms for communicating these messages to various campus stakeholders. Disciplinary and professional societies have been emphasizing collaboration in recent years, and this created a source of support for those interested in collaboration and transformed the view of faculty previously uninterested in such work. This finding was mentioned by faculty and administrators at all four campuses. One faculty member commented:

> The pressure from the National Science Foundation has changed the nature of faculty work on many campuses. I was always inclined toward collaboration, but usually my colleagues were uninterested and, in fact, actively against working with community agencies, other fields across campus and the like. But now, grants encourage collaboration and people have become accustomed to the benefits—the increased dissemination of results, better studies, etc.,—so now things are much easier, but it has taken time. I have been at this 28 years and have only recently seen the groundswell of change. In large measure, the change I see on this campus is that we now pay attention to and channel those external messages around campus.

Another enabler for faculty was the pressure from foundations, which are now requiring that organizations submit proposals in collaboration with other disciplines and non-profit and state agencies conducting similar work. Accreditors and state agencies have been stressing collaboration, especially around the issue of assessment. The pressure from accreditors was a major source of support for administrators and faculty, who believe in collaborative work, but in particular, it held sway with administrators who saw a poor accreditation report affecting the institutional reputation. Business and industry are communicating that collaboration is important for graduates entering the workplace. The pressure
from business had a particular effect on certain disciplines and professional fields such as engineering, which had transformed its curriculum on three of the four campuses visited. Furthermore, diminishing resources at the state level provide incentives for divisions and units to work together to preserve important programs and initiatives. These pressures have been persuasive and have helped to provide momentum and an ideology for efforts to redesign campuses. Because collaboration is such a difficult transition to make, external pressures seem needed to overcome institutional inertia and disciplinary silos. Leaders on these campuses actively capitalized on these messages from external groups and were vocal about creating dialogue (retreats, campus-wide or school meetings, and public talks) about the external environment and pressures for collaboration. One administrator at Interconnected, Global University described how they were using external conversations to enable collaboration:

We know that people read the papers, know what’s going on, but often do not translate that into their workplace. So, we create dialogues about changes in the workplace, new accreditation standards, and the like, and make that connection for people. The feedback I have heard from people across campus is that these conversations work to create collaboration.

Values

Certain values, such as being student centered, innovative, and egalitarian, seemed important to foster collaboration. Campuses that embraced these three values seemed to be able to foster collaboration more easily. These values provided a common ground for why to collaborate (for students) and an ethos to experiment (innovation). Furthermore, the egalitarian ethic helped people to see the value in other people and obliterated some of the common barriers prevalent in an elite culture, such as hierarchies of disciplines, positions (faculty/staff, administrator), and administrative units (academic versus student affairs). One faculty member reflected on this key point:

We talk about our values here and they all have an underlying element of collaboration and help to foster it. It really is important because the mission seems so elusive, you may not interact with senior staff, rewards are infrequent, but values are always there. They provide a stable foundation and for me seem very tangible since they guide our work and interactions, especially the student centered and innovative values.

Two other values—efficiency and capacity building—were also mentioned, but not quite as frequently. As state appropriations shrink, efficiency and capacity building are becoming more compelling values on
campuses. In general, the values tended to be infused by leaders and senior administrative staff constantly asking questions about what values are used to guide decisions, planning, and campus efforts. Values were a helpful foundation to begin collaboration, but a sense of priority from people in senior positions, rewards, and campus networks were noted as much more important for sustaining collaborative projects.

Learning

Learning was similar in importance to values in that people thought training for collaboration was helpful, but without the rewards or integrating structures, learning the skills of collaboration would be limited. When interviewees described learning, the main focus was usually on becoming informed of the benefits of collaboration in order to motivate people to conduct collaborative work. However, to successfully teach people the benefits or to introduce them to collaborative work, one needs to approach the task with the constituents in mind. People in the humanities might be compelled by a quotation by Hannah Arendt—that “excellence occurs in the company of others.” For a chemist, empirical data about the outcomes of collaborative versus individual efforts might be convincing, whereas another individual may have to experience collaboration before he or she can be aware of its benefits. Individual, disciplinary, and other differences need to be taken into account when instructing others about collaborative work. As one campus official noted:

You need to be multi-modal and use the language of various disciplines and be aware of different learning styles. Collaboration is more intuitive to certain disciplines, personality styles, and individual preferences, so you need to move beyond that and help all people to see collaboration as important.

In particular, modeling collaboration was noted as a place where people learned the skills of collaboration. Although this was discussed under senior executives giving priority to collaboration, this finding also related to learning.

Redesigning for Collaborative Work versus Being a Collaborative Organization

One distinction that emerged in this study and that is worth noting is that most of these campuses had redesigned to enable collaborative work, but three of the four campuses had visions of being collaborative organizations or having a collaborative culture. The difference is that redesigning for collaborative work means that the organization rewards and facilitates the work of those who want to conduct collaborative work. However, some individuals wanted to create a culture of collabo-
ration on campuses where the expectation is that people collaborate and that it is the norm for institutional work. In the end, three of these campuses have been redesigned for collaboration, and most people on campus are happy with that status, with a minority wishing that the campus could be a collaborative organization/culture. Community University, for example, was operating more like a collaborative organization, although it would be misleading to say that it operated completely in that fashion.

This is an important distinction to make since there was a difference of opinion on these campuses as to whether they would be a collaborative organization or were simply redesigned to foster collaborative work. However, the view about what kind of collaborative organization they aimed to be was never articulated or made explicit at these campuses, mostly because people were unaware of the differences in goal. It is clear that everyone supported collaboration on these campuses but had distinctive visions of what they meant by collaboration—some meaning being redesigned for collaboration and others meaning becoming a culture of collaboration.

The effort to develop a collaborative organization/culture can be seen on a campus that tried to alter the task or work of the campus. This usually referred to a general education college/university college or teaching venture that involved faculty from across every unit to deliver an interdisciplinary core curriculum with a single set of shared competencies. When the main process and central mission of the organization is delivered in a collaborative way, then, to quote an interviewee, “people cannot escape collaboration.” Each campus had attempted to develop or had developed a teaching unit that was shared across the campus. General education initiatives had the most difficulty being implemented and were a source of pain for these four campuses. Interviewees spoke of the wounds suffered from pulling the campus together to create such collaborative ventures, having many people actively fight against and later harboring resentments about massive collaborative efforts. The philosophy of collaborative learning being integrated into the mission of some of these campuses was also a contested issue. However, people were able to ignore or interpret differently a mission statement. The efforts to transform the nature of the work, however, could not be ignored by those who still wanted to conduct work in non-collaborative ways, and these efforts created more tension.

Another element used to create a collaborative culture was hiring people based on their collaborative activities and skills. This strategy was used on three of the campuses (Community University, Collaborative Leadership University, and Partnership University), and it eventually
met with resistance. An individual’s interest in conducting collaborative work as well as his or her record of collaboration was part of the hiring criteria for several campuses. Search committees used the question, “Would you want to work with this person on a project?” as one of the criteria for hiring. Hiring committees themselves are usually composed of people from across the institution, further supporting the notion of collaboration both to current and prospective employees. Although some units still use this approach, the implicit hiring criteria met with resistance over time. It seemed that organizational conditions that moved toward creating a collaborative culture on campus were met with greater resistance and were eventually dismantled.

Creating too many centralized units with their own budgets was also met with great resistance and was seen as giving “too much emphasis to collaboration—going too far.” Faculty, in particular, believed that too many centralized units destabilized the traditional disciplinary structures that were maintained on all these campuses to some degree. They also worried that the campus was becoming too top-down and that collaboration was being mandated. One finding that emerged is that successful efforts to create collaboration occurred with a balance between top-down and bottom-up initiatives. There needs to be energy and support at both levels or efforts are likely to fail. This also explains why the infrastructure to support collaboration happened within both centralized and decentralized units and why relationship building across campus was so important. The need for balance between top-down and bottom-up efforts also explains why too many centralized units with independent budgets failed and destabilized the campus.

Discussion and Implications

What emerges from the present study are approaches to redesigning higher education institutions to enable collaborative work and elements of a preliminary model. Many of the findings mirror earlier research on other types of organizations (e.g., the model set forth by Mohrman et al.), but some distinctive features related to the higher education context also have emerged.

In terms of similarity, the importance of mission (strategy), integrating structures, and rewards directly mirrored earlier research and were part of the model developed by Mohrman et al. (1995). Two of the most important facilitators—mission and structures (potentially three, with rewards)—were key features of that model. Learning (training) and sense of priority from senior executives (management) are very close to concepts in the Mohrman model, but they differed slightly in character.
within this setting. The significance of learning was not as strong as in the Mohrman model, but it did emerge as an item that people thought important for convincing others of the value of collaboration. The study did not find formal training sessions or particular content within training (e.g., conflict resolution) as significant, a major focus in the Mohrman model. Instead, learning was often an informal process that happened among peers. Mohrman et al. emphasize management structure and roles to initiate and sustain the redesign, which is similar to the “sense of priority from people in senior positions and modeling of collaboration.” I had not hypothesized that management (priority from senior administrators) would emerge as important given the decentralized and loosely coupled nature of higher education, but management turned out to be important. This is likely related to the difficulty in changing the entire context, which requires institutional priority setting.

However, there were ways that the organizational context features used to enable collaborative work differed from the Mohrman model. For example, relationships and networks are extremely important within the higher education context. Not only did this differ from the Mohrman model, but also it may be a distinctive feature of higher education collaborations. Because higher education institutions are professional organizations where individuals are greatly influenced and persuaded by peers, and where rewards are less important than prestige, this may account for why networks and relationships are a key lever (Birnbaum, 1991; Kezar, 2001). This finding suggests that there need to be more mechanisms for people to interact, such as communal dining areas or retreats that bring people together.

A few other items emerged as important and seem distinctive to the higher education context. External pressures and values may be unique to this sector. The necessity of external pressures, values (often external values or those oriented toward an external environment), and a philosophy about why collaborative work is needed suggest that creating a story or narrative to support collaboration is more important within this context. This finding might be the result of the differences in management and hierarchical structures between corporate and higher education settings. In the corporate setting where there is more control and the management can mandate a change in the environment, there is likely less need to persuade and articulate the reasons why collaboration is necessary. The importance of a network is also likely related to the fewer management controls and hierarchical arrangements as well. Grass roots efforts and ownership are needed to create motivation. Members of the higher education context are likely motivated by people more than by goals, management, or rewards.
A set of key recommendations can be developed from this study for change agents interested in creating a context supportive of collaboration:

1. Review the mission and underlying campus philosophy. Find ways to communicate the new mission and philosophy to campus groups.
3. Rethink traditional structures and add new ones such as cross-disciplinary institutes and centers.
4. Revise computing and accounting systems to support collaboration. In general, review campus systems and processes.
5. Alter rewards structures to support collaborative work using discretion and care. Act cautiously in this area as it is full of minefields.
6. Obtain support from senior executives and recommend that they publicly model collaboration.
7. Build collaboration into all major campus documents such as strategic plans, accreditation reports, and board memoranda.
8. Capitalize on external pressures for collaboration in speeches and announcements on campus.
9. Promote values that support collaboration (such as innovation), and try to identify the key values that support collaboration on your own campus.
10. Provide sessions to inform individuals about the benefits of collaboration and get faculty from multiple disciplines to be spokespersons.

There are also lessons from these institutions about the importance of deciding whether a campus is going to become a collaborative organization or is going to redesign itself for collaborative work. The experience of these campuses suggests that higher education seems best suited to move first toward redesigning its systems and that efforts to create a collaborative organization may be too destabilizing and may threaten institutional survival and operations.

Still more research is needed on this topic to inform policymaking and institutional leadership. Future research should examine different institutional types. There are likely differences in the way that a model of collaboration would emerge on a small liberal arts campus. For example, within smaller contexts, intentional networks and restructuring may not be as significant. In addition, research supports that leadership and individual personalities play a more significant role at smaller institutions than at large campuses (Kezar, 2003a, 2003b). Most likely the results would be relatively similar for the research university and community college, but these institutions should also be examined for potential differences.

In conclusion, by combining the emergent findings (relationships/network, values, and external pressures—hinted at in a few earlier studies) with the elements that mirrored the Mohrman model (mission, integrating structures, rewards, and two modified features: learning and sense of
priority from seniors executives), a new model for enabling higher education collaboration emerges. Moreover, institutions have advice for where to focus efforts—mission, network, and structures. These findings come at a crucial time—resources are dwindling, state governors are demanding reforms usually toward work that involves collaboration (e.g., K–16 initiatives and learning communities), and federal pressures are moving toward accountability efforts such as improved student retention, which requires a more collaborative approach to institutional operations. Armed with the experiences of these campuses, institutional leaders can now work to foster a philosophy about the importance of collaborative work; fashion a narrative using the words of external groups about the necessity of collaboration that takes into account disciplinary and other types of differences on campus; develop campus networks and grassroots leadership more intentionally; create a centralized unit to foster collaboration; bolster resources for faculty development activities; and work to alter computing, management, and accounting systems.
Interconnected, Global University

Interconnected, Global University is a commuter campus located just outside a major urban area; the surrounding community is fairly affluent. The community is a rich resource of business and industry with which the university has taken the opportunity to collaborate for both teaching and research. The campus has approximately 17,000 undergraduate (predominantly first generation & working full- or part-time) and 11,000 graduate and professional students (mostly working adults, many of whom are also first generation college students) that is highly diverse with over one-third students of color. There are also many international students. There is a growing number of residential and full-time students, but they are still a minority on campus. Most faculty are research oriented and connected to their disciplines, but there is a pocket of faculty interested in interdisciplinary research and teaching that was attracted to the campus by some of its innovative programs that have emerged over the years. Also, faculty development is quite strong on the campus and there is interest among faculty in enhancing their teaching, while also being highly committed to research. The leadership of the campus has been fairly stable with three presidents in the last 35 years, exceeding the national average for college presidents of 7 years. The upper-level administrators have also been fairly stable and many promoted from within. Staff play a critical role on campus and feel part of campus decision-making and the process of teaching and learning. Student affairs and academic affairs are merged.

The curriculum has evolved several innovations over the years, such as writing across the curriculum, learning communities, interdisciplinary residential college, and service-learning programs. The campus has a set of interdisciplinary research institutes that are well known across the country. The campus is committed to a global, interconnected understanding of the world that embraces diversity of people and knowledge. The campus ethos is characterized by a commitment to innovation, diversity, and collaboration. The ethos of innovation is reflected in people on campus priding themselves on being experts with technology, assessment, interdisciplinary and experiential learning, and other innovations. Attention to the needs of diverse students is pervasive in all program and curricular planning. Collaboration is part of their curricular efforts (interdisciplinary and service learning programs, across the curriculum initiatives, student and academic affairs collaboration), teaching approach (team teaching), and research efforts (through external partnerships and internal connections). People from all units work together on each initiative, from hiring to problem-solving retention issues, to academic and student affairs being fused into one unit, to budgeting and planning. Collaboration has become infused into all activities on campus, and has become part of the ethos and culture of the campus. The physical campus has undergone renovation, allowing the creation of spaces that allow for more collaboration and innovation. The campus has had two stages of moving toward collaboration, although it has been moving in this direction for years. One effort happened from 1985–1991 and a second wave emerged in 1997 and continues today. Although the campus has long felt resource deprived, the state funding situation has been worse in recent years, similar to most public comprehensive institutions in the country. However, in recent years entrepreneurism within research has brought in many grants that have made the funding less precarious than that of other public institutions in this state.

Partnership University

Partnership University is a commuter campus located in a moderately sized urban area, and it has developed significant partnerships with the museums, cultural organizations, environmental, and business enterprises surrounding the campus. This campus serves approximately 8,000 graduate and professional students and 21,000 undergraduate students who are mostly working adults and first generation students. Throughout its history, it has been dedicated to providing educational experiences and environments that meet the needs of commuter students who typically combine education with work and family responsibilities. The faculty is committed to working with professional students and all have connections with local resources and enterprises related to the area within which they teach. The faculty is oriented more toward teaching. When conducting research, faculty
have a great deal of involvement in applied research working with local organizations. Research grants have been on the rise in recent years. The university realizes that growth and leadership in research requires a state-of-the-art research infrastructure, and it has been partnering with outside groups for labs and research space.

The leadership on campus has been very stable with only two presidents in the last 30 years. Many upper-level administrators have been promoted from lower levels and have been at the institution for many years. The campus has developed innovative teaching/learning programs such as learning communities, service learning, experiential learning, and interdisciplinary programs that have received national recognition. Efforts over the past 10 years have focused on developing first-year experiences that integrate students into the institution and give them the skills and confidence to persist in college; on building cocurricular programs that help engage students in campus activities; on making the most of technology to widen access and enhance learning; and on defining clear goals for student learning and then assessing for achievement of those goals. The university has garnered a number of national awards for educational innovation and success, and in its accreditation it received high praise for faculty commitment to teaching and innovation. Civic engagement is considered a crucial campus responsibility, and it has resulted in the development of model service learning and community partnerships.

The campus has had a more evolutionary process toward collaboration as the campus has been involved in collaborative activities for over 30 years, but the intensity and commitment heightened in the last 12 years. The campus has long operated in a tight funding environment, but has developed an entrepreneurial ethos, which has led to fairly stable funding based on individuals on campus capitalizing on ideas for revenues that support the campus.

Collaborative Leadership University

Collaborative Leadership University is located outside an urban area. Student enrollment is about 15,000 and growing. It differs from the other three campuses in the study in that the campus serves predominantly undergraduate and not professional and graduate students. The campus serves a combination of older adult students (living off-campus) and residential students; a majority of students are first generation college students. The campus is undergoing expansion and new buildings are being built. Campus leadership is also fairly stable, as it was on all the campuses within the study. The faculty on the campus tend to be attracted to the campus because of its reputation for having an innovative and cutting-edge mission and curriculum. Therefore, they differ from those at the other campuses in this study because the faculty tend to be less invested in the traditional disciplines and are not committed to traditional university structures and cultures (e.g., departments, colleges). The administration and staff on campus have been somewhat unstable with turnover in many areas, and they share less of an overarching philosophy or commitment to the campus compared to the faculty.

The campus is known for a commitment to active and experiential learning, diversity (local and international), and innovative curricular structure based on learning outcomes. Students are deeply committed to the institution and deeply engaged in the educational process. The ethos of the campus is one of connection and collaboration in order to create leaders. The campus aims to create change agents that go out and make a difference in the world. The faculty, staff, and administration believe that change agents are created by making students passionate about an issue (getting them outside the campus and dealing with the issues they are studying, such as poverty) and by connecting theory and practice. The belief system is that students are made more passionate about learning if it happens both inside and outside the classroom. These beliefs and philosophy create an environment where collaboration is deemed critical to meeting the mission of the campus. This campus was more philosophical, almost ideologically driven, compared to the other campuses in the study. The campus moved toward a more collaborative context approximately 7 years ago.
when it committed to some new approaches to teaching and learning. This campus has had relatively stable funding and support compared to the other campuses in this study, with mostly increases or steady funding over the last decade. However, funding is anticipated to decline in upcoming years.

Community University

Community University is located in an urban area and serves 23,000 largely adult, commuter students in undergraduate (15,000) and professional/graduate programs (8,000 students). The students are fairly diverse (approximately 20% are students of color), although less so than those at Interconnected and Collaborative Leadership Universities. The campus is highly integrated into the community surrounding the campus, working actively with business and cultural organizations, embracing their urban mission. The leadership of the campus has been fairly stable with four presidents in 30 years and has played a key role in creating innovation on the campus over the years. This campus had a mix of professionals promoted from within and administrators brought in from outside to bring new perspectives. In contrast to other campuses in this study, this campus depended more on new individuals from outside for some of the innovations on campus and commitment to collaboration. For example, the student affairs staff are fairly cutting edge and have helped to create a great deal of innovation on campus. Student affairs is part of academic affairs to ensure there is appropriate linkage between the units. Many arrangements like this have been made over the years in an effort to create more connection between the work of various groups. The faculty are traditional—invested in the disciplines and departments—and largely research oriented. However, some faculty members actively partner with external groups and are involved in what has been termed community-based research. Faculty development is quite strong on the campus, with a center that is used actively.

In the last 10 years, the campus has developed many innovative changes to the curriculum, including an interdisciplinary, undergraduate curriculum, learning communities, and service learning. Programs, activities, and curriculum are vastly different than they were in previous years. Students seem excited about the new approach, and faculty appear largely satisfied that all the transformation they have gone through has created an enhanced learning environment for students. The ethos of the campus is focused on service to students and the community. In general, the campus has an air of "community," even though it is highly urban and the physical facility not amenable to a sense of community. The campus has encountered financial problems because of declining state funds in recent years; these problems have also emphasized the importance of collaboration for saving resources. However, similar to two of the other campuses in the study, Community University has always felt like it struggled for resources, and it has been slightly underfunded for many years.

The move toward collaboration began about a decade ago with new leadership. The campus had been highly fragmented with little communication, coordination, or work between schools and colleges and divisions. Leadership promoted collaboration in order to effectively use limited resources, promote student learning, and capitalize on external resources and learning opportunities. In addition, the campus was embracing an urban mission of connection to the local community. Internal collaboration centered on improving the learning environment for students.
APPENDIX B
Sample of Interviewees

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Interconnected Global University</th>
<th>Collaborative Leadership University</th>
<th>Community University</th>
<th>Partnership University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty humanities</td>
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<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Faculty social sciences</td>
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<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Faculty sciences</td>
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<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Staff—administrative affairs</td>
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<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Staff—academic affairs</td>
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<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Staff—student affairs</td>
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<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Administrators</td>
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<td>5</td>
</tr>
<tr>
<td>Number from Snowball sampling</td>
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<td>5</td>
<td>4</td>
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<tr>
<td>Total number interviewed</td>
<td>23</td>
<td>22</td>
<td>24</td>
<td>24</td>
</tr>
</tbody>
</table>

Notes

1The reader is reminded that the focus of this study is the elements of the macro organizational context. These findings need to be paired with the literature at the micro level—group psychosocial traits and task design, which have been thoroughly studied.

2There is a separate paper about differences based on the type of collaborative activity. However, features were shared across collaborative work making these generalizable conditions important for institutional policy.

3This differs from a culture of collaboration, which will be distinguished later in the paper.

References


Lamarid, L. (1999). Putting Descartes before the horse: Opportunities for advancing the student affairs link with academic affairs. *College Student Affairs Journal, 19*(1), 24–34


