

AN ABSTRACT OF THE DISSERTATION OF

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Title: Working Together for Student Success: Cross-Functional Collaboration at Community Colleges.

Abstract approved:

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The purpose of this study was to identify and describe the underlying mechanisms within community colleges that influence cross-functional collaboration. The study also explored the role of community college leadership in fostering internal collaboration. The following questions guided the research: (1) What does cross-functional collaboration look like at a community college known for strong collaborative work? (2) What organizational factors influence cross-functional collaboration in the community college? (3) How does college leadership facilitate cross-functional collaboration in the community college? Critical realism provided the philosophical perspective for this post-positivist study, and the research method utilized was a multiple, instrumental case study that was replicated at three community colleges. The data collected and analyzed included interviews with 31 participants and relevant written and electronic documents.

The findings of a cross-case analysis revealed five general themes that described the context of cross-functional collaboration in the community college. In the colleges included within this study, cross-functional collaboration: (a) arose from necessity, (b) was primed by upper management, (c) was kept on track by accountability, (d) was guided by a team leader, and (e) was supported by committed team participants. Six organizational factors were identified as having an impact on cross-functional collaboration in community colleges. The common organizational factors found to influence cross-functional collaboration included: (a) an environment of support, (b) common vision, (c) processes, (d) resources, (e) accountability, and (f) recognition. The college president and other top-level administrators were found to play a significant role

in facilitating cross-functional collaboration at their institutions. The themes that emerged across all three cases showed that college leaders influenced collaboration by: (a) contributing to an environment of support, (b) establishing the project as a college priority, (c) implementing processes that facilitated collaboration, (d) involving the right people, (e) providing clear direction and goals, and (f) owning responsibility for effective functioning. Subthemes and examples related to each of these findings provide insight regarding effective cross-functional collaboration in community colleges.

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Working Together for Student Success:
Cross-Functional Collaboration at Community Colleges

by
Joyce E. Loveday

A DISSERTATION

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Dean of the College of Education

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I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

Joyce E. Loveday, Author

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Working Together for Student Success:
Cross-Functional Collaboration at Community Colleges

CHAPTER 1 – FOCUS AND SIGNIFICANCE

Although collaboration is not a new concept, it is one that continues to maintain prominence in current literature and in the management practices of both the private and public sector. Organizational leaders continue to tout the importance of bringing together collective knowledge and resources in order to make better decisions, implement plans more effectively, and gain a joint advantage that would not otherwise be possible (Glaser, 2005; Kanter, 1994; Mohamed, Stankosky, & Murray, 2004; Sawyer, 2007). Effective collaboration is of particular importance within organizations that need to respond quickly and effectively to a changing and turbulent environment (Gray, 1989), for it is through collaboration that sustainability, innovation, and effectiveness are sometimes best realized (Johnson, 1998; Kanter, 1994; Leonard & Leonard, 2001; Mohamed et al., 2004).

The field of higher education has long recognized collaboration as an important tool for increasing effectiveness and productivity (Johnson, 1998; Kezar, 2006; Leonard & Leonard, 2001). The need to generate new solutions through collaborative processes continues to be relevant in the environment of profound change in which higher education exists (Kuh, 1996; U.S. Department of Education, 2006). To meet the present and anticipated demands of educational reform, educators must be prepared to work together in ways that in the past have been considered discretionary, personal preference, or even competitive (Leonard & Leonard, 2001). Many of the programs and activities that have the potential to result in student achievement require collaboration among faculty, administrators, student affairs professionals, and others (Kezar & Lester, 2009, Kuh, 1996; Kinzie & Kuh, 2004; Martin & Murphy, 2000; Terenzini & Pascarella, 1994).

As the gateway to postsecondary education for many minority, low income, and first-generation college students (AACC, 2008), the community college has a responsibility to generate new processes and solutions in order to more effectively serve their students. The U.S. Department of Education (2006) has noted that there is a “troubling and persistent gap” between college attendance and graduation rates of low-

income Americans and their more affluent peers (p. 1). The ability to retain underserved students and be accountable for their success requires that community colleges begin to do things differently. The challenges involved with effectively serving traditionally underserved populations are broad and cannot be resolved by an individual or single department within the college. Collaborative structures that bring together ideas and solutions from across the campus are needed. Sergiovanni (2005) explains that without the collective intelligence that comes from collaboration, “it is doubtful that closing the achievement gap and resolving other intractable problems will ever become more than wishful thinking” (p. 117).

Though collaboration is recognized as an essential practice in today’s changing educational environment, transforming educational institutions into more collaborative organizations has proven to be a difficult task (Barott & Raybould, 1998; Callahan, 2008; Sawyer, 2007). Kezar (2006) explains that colleges are often not structured to support collaborative approaches to planning and organizational functioning. All too frequently, silos within the community college make it difficult for departments to work together quickly and in a sustainable manner to meet the educational needs of the community (Guarasci, 2001). Collaboration across functional departments can be particularly difficult (Kuh, 1996; Mohamed et al., 2004). Teams that span different administrative areas of the college tend to face more challenges than teams functioning within their own department. This is largely because cross-functional projects are not directly related to the members’ immediate work and members have many competing responsibilities and varying degrees of immediate management support for participating in organizational initiatives (Mohamed et al., 2004).

Purpose

At a time when the U. S. Department of Education (2006) has called on community colleges to reduce costs, increase student achievement, and embrace a culture of continuous innovation and quality improvement, community colleges need access to the benefits that can be gained through effective collaboration. This study is intended to provide insight about effective internal collaboration through the experiences of staff at community colleges where exemplary cross-functional collaboration occurs. The purpose

of the study is to identify and describe the underlying mechanisms within community colleges that influence cross-functional collaboration. By mechanisms, I am referring to the fundamental processes, structures, or activities involved in or responsible for achieving a result.

In this study, cross-functional collaboration was examined in the context of work to support student success. When I use the term student success, I mean the retention and progression of students in accomplishing the educational goals identified by the student. This study uses the terms *student success* and *student achievement* interchangeably. The context of student success was specified in this study for two reasons: first, because improving student success involves active participation and collaboration from all areas of the college; and second, because it is an area of pressing concern for community college leaders today. Because the focus of the study is on identifying the mechanisms that influence a community college's ability to collaborate effectively, I have not attempted to quantify the impact of collaboration on student success. Rather, I examined organizational and procedural factors that influence cross-functional collaboration that occurs with the intent of improving student success. The study also explored the role of community college leadership in fostering internal collaboration. This was to provide insight into how college administrators can support collaborative work on their campuses.

Research Questions

The study revolved around three central research questions:

1. ***What does cross-functional collaboration look like at a community college known for strong collaborative work?*** This question explored the way collaboration occurs and the forms it takes within the community college. Areas of interest included whether collaborative processes were highly organized or more spontaneous, how collaborative work was initiated, the authority of the group to affect action, accountability for results, and group leadership. This question also explored the influence of organizational structure on collaborative work and examined whether reorganization occurred to better accommodate or encourage collaboration.

2. ***What organizational factors influence cross-functional collaboration in the community college?*** The characteristics of an institution play a role in the successful implementation of any endeavor. Kuh (1996) noted that organizational characteristics have a strong influence on what faculty, administrators, and student services personnel will and will not do. Identifying factors that impact the success or hindrance of collaborative efforts was useful for informing college leaders of pitfalls to avoid and actions to take to improve cross-functional collaborative work. Factors identified were compared to existing literature on collaboration and to Kezar's (2006) suggested model for redesigning for collaboration in higher education.
3. ***How does college leadership facilitate cross-functional collaboration in the community college?*** Upper management's role in the collaborative process was explored to see the impact it provided. Insight was gained related to the level of involvement of senior management and whether a sense of priority was given to collaborative activity. The role of key individuals in the development and implementation of the collaborative work was considered.

Significance

The significance of this study is based in four areas: (1) the accountability of the community college, (2) the ineffectiveness of many collaborative efforts, (3) the potential benefits of effective internal collaboration, and (4) the lack of research in this area.

Accountability of the Community College

Higher education is being called upon to make significant changes in the way it functions. It has been charged to become more accountable, more transparent, and more focused on performance (U.S. Department of Education, 2006). Because the community college serves as the entrance point into higher education for many low income, minority, and first generation students, it plays an essential role in changing the trends that are of such great concern to American society.

Community colleges must become more accountable to their communities for the success and retention of traditionally underserved populations. For example, national studies of basic skills students have found that half of the students enrolled in adult basic

education classes drop out before the end of their first term (Alamprese, 2005; Seppanen, 2007). And while about one-third of whites have obtained bachelor's degrees by age 25–29, only 18 percent of blacks and 10 percent of Latinos in the same age cohort have earned degrees by that time (U.S. Department of Education, 2006).

Factors internal to the college may contribute to the attrition of underserved college students. A study conducted by Deil-Amen and Rosenbaum (2003), for example, revealed that community colleges expect students to enter college with skills and knowledge about the college system and processes; but the reality is that students in lower income levels who have never been exposed to higher education don't typically have that requisite knowledge. Hidden obstacles such as bureaucratic hurdles, confusing choices, inconsistent advice from staff, limited counselor availability, and slow detection of costly mistakes make it difficult to navigate the college system and can affect a student's ultimate success (Deil-Amen & Rosenbaum, 2003).

These are serious challenges facing the community college that require innovation, flexibility, and a new way of doing things (U.S. Department of Education, 2006). Effective cross-functional dialog which occurs through collaboration can enable the community college to come to new insights and develop new solutions that would otherwise not have been possible (Kuh, 1996; Senge, 1990). The retention efforts within the community college must be collaborative, involving the entire college community, so that student progress is actively monitored, resources are efficiently allocated, and programs meet their desired goals (Lotkowski, Robbins, & Noeth, 2004). Collaboration is a tool that can shape new solutions to the challenges facing the community college and provide faster response to rapidly changing conditions (Kanter, 1994; Kuh, 1996).

The Ineffectiveness of Many Collaborative Efforts

According to McCaffrey, Faerman, and Hart (1995), many managers are drawn to the idea of collaboration because it provides a solution to some of the challenges that occur with centralized control; however, barriers to collaboration that are embedded in organizational systems are often stronger than the forces favoring it, causing many managers to forego collaborative systems even though they tout the advantages of them (McCaffrey, Faerman, & Hart, 1995). Inhibitors of collaboration in the community college

include the independent culture in which higher education typically occurs, faculty's view of their ability to have an effect, time constraints, fragmented vision, competitiveness, and conflict avoidance (Barott & Raybould, 1998; DiPardo, 1997; Evans-Stout, 1998; Knop, LeMaster, Norris, Raudensky, & Tannehill, 1997; Leonard & Leonard, 2001). The result is that departments often work in parallel "silos" on campus without effectively engaging in collaboration that will benefit the student (Guarasci, 2001; Kezar, 2006; Leonard & Leonard, 2001). Linden (2003) estimated that roughly 70 percent of all collaborative partnerships accomplish only their initial goals or fail all together. As Barott and Raybould (1998) summarized, schools have a tendency to maintain the status quo, so "in spite of all the good intentions of the experts, schools seem to remain pretty much the same" (p. 28).

The Potential Benefits of Effective Cross-functional Collaboration

The benefits available through effective cross-functional collaboration make this topic one of continuing interest to community college leaders (Kezar, 2006). Among the benefits of cross-functional collaboration are effective problem solving and communication, collective energy to move forward on a common solution, increased effectiveness, and an ability to respond more quickly to a changing environment (Glasser, 2005; Johnson, 1998; Kanter, 1994; Kezar, 2006; Mohamed et al., 2004). Bringing a diversity of experience and viewpoints together through cross-functional collaboration fosters the ability to identify solutions and develop plans that encompass the perspectives, resources, and knowledge base of various parts of the organization (Bensimon & Neumann, 1993). Seeking solutions that reflect the perspective of people throughout the college provides the potential for arriving at richer, more comprehensive responses to the problem at hand. Mohamed, Stankosky, and Murray (2004) contend that in coming years the complexity of work will continue to increase and the need for cross-functional teams will continue to grow.

There is a Lack of Research in This Area

While much has been written about the barriers to collaborative work, particularly in the literature on student and academic affairs collaboration, little has been written about how to foster collaboration within higher education (Kezar, 2006; Martin &

Murphy, 2000). There is very little research about factors within higher education that support effective, on-going collaboration among individuals from varying departments (Kezar, 2006). Anecdotal literature presents the benefits of collaboration, but research-based studies related to factors that facilitate cross-functional collaboration are limited (Fauske, 2002; Huxham & Vangen, 2000; Kezar, 2003). The higher education research that has been conducted has focused primarily on baccalaureate institutions, and the need to study collaboration in other higher education contexts such as the community college has been identified (Kezar, 2001a, 2006).

Summary

Cross-functional collaboration within the community college holds the potential for increasing a college's effectiveness in responding quickly to environmental changes and supporting the students it serves. Yet collaborative efforts are not always successful in producing the communication, ideas, or momentum necessary to move the college from status quo to new ways of doing things. This study examined the issue of cross-functional collaboration at the community college as it pertains to improving student achievement. The focus was on identifying underlying mechanisms that influence cross-functional collaboration. The questions that guided the study were: (a) What does cross-functional collaboration look like at a community college known for strong collaborative work?, (b) What organizational factors influence cross-functional collaboration in the community college?, and (c) How does college leadership support or encourage organizational processes that facilitate cross-functional collaboration in the community college?

CHAPTER 2 – LITERATURE REVIEW

The intent of the literature review was to identify what is already known about collaboration as it relates to each of the research questions, to identify how this study may contribute to the literature on cross-functional collaboration, and to identify from literature implications that guided the design of data collection instruments and procedures for this study. The literature review is divided into three areas that correlate with the research questions selected for this study: (a) What does cross-functional collaboration look like? (b) What organizational factors influence cross-functional collaboration? and (c) How does college leadership facilitate cross-functional collaboration in the community college? Each of these areas is further divided according to whether the literature is centered around the broader organizational literature, literature pertaining to higher education in general, or literature specifically directed toward the community college. A summary that includes a synthesis of important points and implications for the present study is provided at the end of each section and subsection.

Approach to Review of Literature

The primary sources of data for this literature review were the Oregon State University (OSU) Research Database, the Summit catalog, and the Electronic Journals Service (EJS). EBSCOhost and FirstSearch were the databases used as search tools to look for articles and dissertation abstracts related to cross-functional collaboration. The primary search strategy was to review abstracts and full text studies from a variety of categories of education and business literature. Higher relevance was placed on peer-reviewed journals and more recent studies completed within the past 10 years. The rationale for this emphasis is that while collaboration has been an important topic for over 30 years, it has only been since the mid to late 1990s that the dialogue about cross-functional collaboration in higher education began to grow (Bourassa & Kruger, 2001). By focusing primarily on collaboration literature from the past ten years, I was able to identify current trends in business and examine the development of collaborative activities in higher education and, more specifically, in the community college.

The following key words and phrases, both individually and in combination, were used to search for relevant materials: internal collaboration, cross-functional

collaboration, community college collaboration, cross-functional teams, teamwork, leadership, higher education, community college presidents, and post-secondary education. Relevant articles, books, and dissertations were identified from this search. In addition to the search techniques described above, I reviewed reference lists from the journal articles and dissertations collected through my initial literature review in order to identify additional materials relevant to my study.

What Does Cross-functional Collaboration Look Like at a Community College Known for Strong Collaborative Work?

The review of literature around this question provides a basic understanding of what internal collaboration is and the forms it takes within the community college. The literature reviewed in this section revealed current practices around the topic of internal collaboration in the fields of business, higher education, and the community college. It served to inform this study by identifying practices to explore as part of the research. Among the things considered in this section was the context in which internal collaboration occurred. Attention was given to the structures established to support internal collaboration within business, higher education, and the community college.

The Meaning and Context of Collaboration in Organizational Literature

The purpose of this section is to provide a review of the literature concerning cross-functional collaboration in the fields of business and organizational theory. It is intended to inform the design of the proposed study concerning the form internal collaboration takes in an organization and the organizational context that supports it. The section begins with a definition of collaboration and a description of the types of collaboration that exist in business.

Definitions of collaboration abound in organizational literature, with several common features present among the definitions. Collaboration typically refers to an interdependence of participants or stakeholders, the emergence of solutions from sharing different perspectives, joint ownership of decisions, and collective responsibility for results (Gray, 1989). The following definition proposed by Gray (1989) will serve as the base for this study because of the clear and intuitive description it provides: Collaboration is “a process through which parties who see different aspects of a problem can

constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible” (p. 5). This definition illuminates the autonomous yet inter-dependent nature of cross-functional collaboration for the purpose of solving a problem or pursuing a shared vision.

An examination of nine research-based articles on the topic of collaboration led Wood and Gray (1991) to further explain that “collaboration occurs when a group of autonomous stakeholders of a problem domain engage in an interactive process, using shared rules, norms, and structures, to act or decide on issues related to that domain” (p. 146). This revised definition highlights some of the particular processes of collaboration, yet it is the earlier definition that provides a more practical understanding of the topic. Gray (1989) further explained that collaboration is not just for the sake of doing things in a collaborative manner. Collaboration should not be a prescribed state of organization, but rather an emergent process that enables mutually agreeable solutions to be sought and collective actions to be implemented (p. 16).

The terms cooperation and coordination differ from collaboration in that they are terms that describe static patterns of interorganizational relations. “Coordination refers to formal institutionalized relationships among existing networks,” while cooperation is “characterized by informal trade-offs and by attempts to establish reciprocity in the absence of rules” (p. 15). Both coordination and cooperation often occur as part of the process of collaborating.

Though the terms coordination, cooperation, and collaboration are at times used interchangeably, they reflect three different types of activities (Gray, 1989; Montiel-Overall, 2005; Pollard, 2005). Montiel-Overall (2005) explained that the distinction among terms is related to: (a) the intent or reason for working together; (b) the intensity or degree of involvement, commitment, or participation required of participants; and (c) interest in improving a situation. Table 1, adapted from Pollard (2005), visualizes the distinction among the terms.

Table 1

Comparison among Coordination, Cooperation, and Collaboration

	Coordination	Cooperation	Collaboration
Reason for working together	Avoid gaps and overlap in individuals' assigned work	Obtain mutual benefit by sharing or partitioning work	Achieve collective results that the participants would be incapable of accomplishing working alone
Intensity of commitment to work together	Minimal	Moderate	Substantial
Ability to initiate change	Minimal	Minimal	Substantial
Degree of interdependence of participants	Minimal	Moderate	Substantial

Gray (1989) described coordination as formal institutionalized relationships among existing networks. It requires the least amount of commitment to a process and typically involves people working together to reduce the duplication of effort or to make their own work run more efficiently. Examples of coordination include arranging schedules and making necessary adjustments in time, place, or work to avoid overlap (Pollard, 2005; Montiel-Overall, 2005). The goal of coordination is to enable people to work together more efficiently. Cooperation involves two or more entities working together by agreement on similar goals or endeavors (Montiel-Overall, 2005). Cooperation requires more of a commitment than coordination.

Collaboration is sometimes described by the type of actions exhibited among members of a team or workgroup. Collaborative behavior includes sharing knowledge freely, learning from one another, displaying flexibility, assisting one another in meeting deadlines, sharing resources, and constructively dealing with conflict (Gratton & Erickson, 2007). Collaboration is typically differentiated between internal and external collaboration (Kezar, 2006). External collaboration, also referred to as inter-organizational collaboration, involves partnerships with entities outside of the organization. The type of external collaboration frequently seen within higher education includes partnerships with local business, labor, high schools, and other colleges.

External partnerships are developed to increase student access, utilize facilities or equipment, provide opportunities for student internships, and recruit instructors.

Cross-functional collaboration is also referred to as internal collaboration or intra-organizational collaboration. Cross-functional collaboration occurs among members of the same organization and enables coordination and integration of work among departments (Mohrman, Cohen, & Mohrman, 1995). Internal collaboration is utilized within business to increase effectiveness in areas such as research and development, product distribution, information resources, and customer service (Doz & Baburoglu, 2000). Cross-functional collaboration typically occurs within business when there is an economic benefit to be received from collaboration or when complex business tasks require diverse input from a variety of specialists to get the job done (Gratton & Erickson, 2007). The type of benefits a business can gain from internal collaboration include cost savings, better decision making, increased revenue, innovation, improving organizational functioning, and enhanced capacity for collective action (Hansen & Nohria, 2006).

Though it can take many forms, cross-functional collaboration is most often structured as working groups which are designed as an overlay to an existing organizational structure (Denison, Hart, & Kahn, 1996). Collaborative teams vary along a continuum from permanent to temporary (Haskins, Liedtka, & Rosenblum, 1998; Prahalad & Ramaswamy, 2001). Some cross-functional teams are developed on a short-term basis to respond to specific needs of the organization. Task forces, advisory groups, and temporary committees all fall within this category. Other types of cross-functional teams include planning teams, ad hoc project teams, quality teams, process improvement teams, and product development teams (Denison, Hart, & Kahn, 1996; Mohrman et al., 1995). Teams in large multinational companies are often comprised of up to 100 highly educated specialists who work together virtually, collaborating online and sometimes over long distances (Gratton & Erickson, 2007). Although there are differences among the various types of teams, they are all typically task-oriented teams comprised of members representing multiple organizational functions who have come together to integrate their expertise and who operate at a level within the organization where the

work can be accomplished (Denison et al., 1996). Haskins, Liedtka, and Rosenblum (1998) refer to this traditional type of teamwork as *transactional* collaboration. They contrast this to *relational* collaboration where an ethic of collaboration becomes embedded as an aspect of the firm's culture and where an infrastructure for working together has been created.

Mohrman, Cohen, and Mohrman (1995) identify that the nature of the work being performed is a key determinant of the form that a team will take. Teams that apply collaborative plans or specialized knowledge in a routine manner often are able to function according to a traditional organizational model. However, as organizations have become more complex, interdependent, and dynamic, the type of structure that supports cross-functional collaboration has had to change. Many organizations that make substantial use of cross-functional teams for effective business functioning have found it necessary to create a context that makes it more likely that collaborative teams can make and carry out decisions (Mohrman et al., 1995). The contextual features identified by Denison et al. (1996) as having an influence on the effectiveness of cross-functional teams include: (a) the design of the team and its task; (b) the transfer of information, resources, and rewards to the team; and (c) process assistance that can be provided to facilitate a team's work. The processes that Mohrman et al. (1995) identified as important for establishing a context for effective team functioning in any environment included direction setting, information distribution and communication, and decision making (p. 171).

Many organizations have made the mistake of establishing teams without implementing or redesigning processes required for the teams to be successful. More often than not, factors that prevent effective cross-discipline performance are factors external to the team, such as a lack of consistent direction, changes occurring in another part of the organization with ramifications for the team, inconsistent goals among the functional departments, and shifting resource commitments (Mohrman et al., 1995, p. 34). How teams manage their communication with the larger organization also has impact on the success of the team. Teams that are isolated, passive, or overly technical

tend to be less successful at arriving at satisfactory outcomes than teams that proactively manage the political dynamics of their organization (Denison et al., 1996).

Within the organizational literature, internal collaboration is shown to take various forms that range from short-term cross-functional teams called together for a specific function; to large, complex teams comprised of educated specialists spread over a broad geographical region; to entire organizations structured around an ethos of collaboration. The nature of a team's work – routine versus dynamic and complex – is also shown to be a key determinant of how the context of the organization needs to adjust to support collaborative efforts. In organizations where more dynamic and interrelated work needs to occur, structural changes may need to be made to support the effective functioning of the cross-functional teams (Mohrman et al., 1995). Whatever the structure surrounding the collaborative team, there are organizational elements that can either support or hinder the effectiveness of cross-functional collaboration.

In relationship to the current study, the information presented in this section was used to assist in identifying the type of cross-functional collaboration that was occurring in the community college. The literature provided contextual features to use during the data collection phase as I explored structures that may have a causal relationship on collaboration in the community college. The factors to explore, as suggested by the literature in this section, included: (a) whether collaborative work is completed through short-term assignments that have been overlaid upon the regular structure of the organization or whether changes in the organizational structure have occurred to encourage and support cross-functional collaboration; (b) the way in which direction setting, information distribution, communication, and decision making occur in relation to the collaborative team; (c) the composition, design, and task of the team; (d) how resources, information, and rewards have influenced collaborative efforts; and (e) other types of assistance provided to assist the team's work.

The Context of Collaboration in Higher Education

In this section, the topic of cross-functional collaboration is addressed in relationship to how it occurs within higher education. The section begins with an overview of the forms of internal collaboration that have emerged within higher

education and the barriers that have been experienced. Two key studies conducted by Kezar (2001a, 2006) are then presented to provide the groundwork for my study. The studies by Kezar explored the extent to which internal collaboration occurred within higher education and provided a context in which collaboration was believed to occur. The review of literature in this section informed the study by identifying what was already known about cross-functional collaboration in higher education and where the gaps in knowledge remain.

With the known benefits of collaboration and the need to function more effectively, several forms of internal collaboration have emerged nationally within higher education over the past two decades (Bourassa & Kruger, 2001; Kezar, 2005). Interdisciplinary teaching (Bohen & Stiles, 1998), learning communities (Thomas, 2007), service learning (Carr, 2002), and academic and student affairs collaboration (Kezar, 2001a) were frequently cited examples of collaboration within higher education, and studies conducted on specific types of collaborations such as these have demonstrated a positive impact on students in areas such as grade point average, persistence, and learning outcomes (Bourassa and Kruger, 2001; Guarasci, 2001).

Much of the literature related to higher education focused on cross-functional collaboration between the academic and student affairs departments, where barriers to effective collaboration were a primary focus (Kezar, 2006). Bourassa and Kruger (2001) noted that while some significant changes are occurring within collaborations between student and academic affairs, there are still obstacles and opportunities for further growth. Some of the barriers to effective collaboration in higher education included the solitary and independent nature of the teaching profession, the view by faculty that formal collaborative processes have minimal effect in promoting innovation and program improvement, the number of part-time faculty with limited contractual obligations, competing assumptions about the nature of student learning, reward systems based on individual accomplishment, and existing participative structures such as faculty senates and shared governance structures that tend to be slow and foster a predisposition toward the status quo (Bohen & Stiles, 1998; Bourassa & Kruger, 2001; Hirsch & Burack, 2001; Kezar, 2006; Kezar & Eckel, 2004; Leonard & Leonard, 2001).

Kezar (2001a) expanded the awareness of collaborations between academic and student affairs departments through research conducted as part of a joint project by the Educational Resources Information Center Clearinghouse on Higher Education (ERIC), the National Association of Student Personnel Administrators (NASPA), and the American College Personnel Association (ACPA). The purpose of the study was to provide a national picture of trends related to academic and student affairs collaboration (Kezar, 2001a). A survey was conducted with chief student affairs officers to collect information related to collaboration among academic and student services departments in several areas. The study revealed that every institution surveyed was engaged in some form of collaboration between academic and student affairs and that institutions were experiencing the most successful collaborations with first-year programs, counseling, orientation, and recruitment. Four primary reasons surfaced for higher education institutions to engage in internal partnerships—learning as a priority (35 percent), collegial environment (22 percent), managerial accountability (16 percent), and new leadership or leadership philosophy (27 percent). In terms of learning, the factors of retention and keeping student learning as a primary focus were noted most often. Among the institutions that were surveyed, public and four-year institutions were most successful at instituting cross-functional collaborations, with 54 percent of the four-year institutions having six or more successful collaborations compared to only 18 percent at community colleges. This was a significant variance not explained by the study.

The study also examined participants' perceptions about what made collaboration successful, as well as the actual strategies used, and compared this data to the actual number of successful partnerships. While participants perceived that personal factors such as cooperation, staff attitudes, common goals, and personalities had the biggest impact on collaboration, the actual strategies used showed senior administrative support and structural changes were important for creating effective partnerships. Analysis showed a statistically significant relationship between structural strategies and the number of successful collaborations reported by the college. The more structural strategies used, the greater the number of successful collaborations. The structural approaches that were measured included combining fiscal resources, incentives

(monetary and nonmonetary), planning, change in promotion and tenure requirements, restructuring, altered reward systems, systemic orientation, and setting expectations and accountability. The cultural strategies included cross-institutional dialog, common language development, common vision, generating enthusiasm, marketing change, and staff development. Though student affairs officers reported that they used cultural approaches more often than structural strategies (64 percent used more than three structural strategies, whereas 98 percent used more than three cultural strategies), both structural and cultural strategies were found to be critical for creating effective collaboration on campus.

The strengths of this research included a broad representation of colleges within the study that corresponded to the mix of higher education institutional characteristics across the United States. This provided opportunity for comparison among institutions based on size and mission. One of the study's limitations was a 49 percent response rate for a total of 128 responses out of a sample of 260 individuals. Though the author notes this was an acceptable response rate for conducting analysis and making generalizations, the ability to identify statistical significance was limited. For a national study endorsed by three major higher education agencies, it is curious why a higher response rate was not achieved. In addition, because collaboration was viewed broadly and specific types of collaboration were not examined, the researchers were unable to run analysis by cases for individual types of collaborations.

The research reported by Kezar (2001a) provided indication that collaboration was occurring within the realm of higher education with varying levels of success. One of the implications this research provided for my study was the finding that community colleges report a significantly lower number of successful collaborations than are present in four-year institutions. This finding reinforced the need to study the community college in more depth to identify factors that facilitate successful collaboration within this type of institution. The incongruence between perceived factors that support collaboration and the actual strategies found to correlate with the number of successful strategies suggested the need to use multiple sources of data to triangulate the data collected and strengthen the validity of findings. The research by Kezar (2001a) identified structural and cultural

factors implemented in this study as the context in which collaboration occurs within the community college was explored.

A second study by Kezar (2006) focused on the organizational context in which collaborative work was able to exist. A case study at four comprehensive university campuses was conducted to explore the phenomena of establishing a context for collaboration. The goal of the study was to develop a model within higher education related to the organizational context that enhances collaboration. Kezar (2006) used a model from corporate literature developed by Mohrman, Cohen, and Mohrman (1995) to situate the topic of how to organize for collaboration within higher education. One of the presuppositions of Kezar's study (2006) was that organizations needed to redesign in ways that will enhance group and cross-divisional work in order to make collaboration successful. This was a central concept of the Mohrman, Cohen, and Mohrman (1995) model that Kezar used to examine organizational context features. Redesigning for collaborative work meant that the organization rewarded and facilitated the work of those who want to conduct collaborative work (Kezar, 2006, p. 827); examples of how that occurs were provided in the study.

The study revealed that the institutional features which needed to be redesigned to enable collaboration included structure, processes, task and position expectations, and rewards. Study results also found that successful implementation involved people learning collaboration skills (and unlearning non-collaborative skills) and management support for the redesign. The organizational features considered highly significant for collaboration to occur included: Mission/philosophy, campus networks, integrating structures, sense of priority from people in senior positions, external pressures, values, learning, and redesigning for collaborative work vs. being a collaborative organization. These features provided potential areas of inquiry for my research.

One finding that emerged from Kezar's (2006) study was that successful efforts to create collaboration occurred with a balance between top-down and bottom-up initiatives (p. 829). If the effort was too top-down, concerns arose that collaboration was being mandated. It was also noted that many centralized units with independent budgets failed and that centralized units were viewed as destabilizing for the campus. Kezar (2006)

noted that more research on the topic of collaboration in higher education was needed to inform policymaking and institutional leadership. She suggested that future research should examine different institutional types such as community colleges or small liberal arts campuses. Within small contexts, intentional networking and restructuring may not be as significant.

One of the strengths of Kezar's (2006) study was the manner in which colleges with high levels of quality collaboration were identified and selected as case study sites. Case analysis was also conducted in a thorough manner with substantial review, triangulation, and member checking to ensure the credibility and dependability of themes identified from the study. A limitation of the study related to the use of perception to identify study sites with high levels of quality collaboration. The criterion of quality was perceptual and based on people's claims rather than on empirical evidence. Though I think Kezar implemented an appropriate method for site selection, it nonetheless provided a limitation.

The studies conducted by Kezar (2001a, 2006) identified the need for additional research in order to understand how collaboration occurs at the community college level. The structural changes proposed by Kezar and examined within her study provided deductive themes that were examined during the data collection phase of my study. The theoretical base established by Kezar provided an initial theory to test my findings against. From the data provided by Kezar and others, initial propositions for this study were developed to explore the relationship between changing structural elements and effective collaboration within the community college. Through the method of case study, Kezar examined structure, culture, processes, and an array of conditions simultaneously that cannot be captured through other methodologies (Kezar, 2006).

Areas not addressed in Kezar's (2006) study included how organizational structures impact cross-functional collaboration in the community college, the organizational context in which collaboration occurs in the community college, and the role college leadership plays in effective collaboration within the community college. This gap was narrowed through my study.

The Context of Collaboration within the Community College

The purpose of this section is to review literature specific to cross-functional collaboration within the community college. To date one study has been located that pertains specifically to the community college, and it is included in this section. Examining the community college independently of the broader higher education community is important because community colleges typically differ significantly from four-year institutions in size, services, structure, mission, and goals.

Much of the focus regarding collaboration among academic and student affairs departments has focused on baccalaureate institutions. Bourassa and Kruger (2001) noted that the community college perspective has been lacking and warrants further consideration. They proposed that “the entire higher education community should keep track of factors within the community college sector that cultivate successful partnerships that are easily adapted by either community colleges or four-year colleges and universities” (p. 15).

A community college study conducted by Kolins (1999) surveyed senior-level administrators from 327 two-year public colleges to identify and compare the perceptions of the chief academic officers and the chief student affairs officers about: (a) the frequency of collaboration, (b) the level of collaboration, (c) the importance of collaboration in enhancing student success, and (d) their satisfaction with collaboration. The significant findings revealed by Kolins were that a large number of collaborative practices occur between student and academic affairs at community colleges, both the chief student affairs officer and the chief academic officers perceive collaboration as important to enhancing student success, both groups were satisfied with the collaborations that occurred at their institutions, and both groups perceived their collaborative relationships with each other as discordant but not conflicting.

Kolins’ (1999) study provided the only empirical research that has surfaced through this literature review related specifically to internal collaboration in the community college. The study served to identify the level of collaboration occurring among the student and academic affairs departments and did not delve into specific types of collaboration or factors that support effective collaboration. The strength of Kolins’

study was the sample size and broad representation of colleges from across the nation to provide a comprehensive view of collaboration occurring within the community college setting. A limitation was that the use of a survey instrument to conduct the study restricted the researcher from asking clarifying questions or gathering rich, in-depth perceptions about collaboration from people involved in the process. Kolins also identified that there were colleges where only one key administrator participated in the study, so a full comparison of responses was not feasible in all cases.

The research conducted by Kolins (1999) confirmed that cross-functional collaboration was indeed occurring within the community college, but it provided no indication of what that collaboration looked like or how the college supported collaborative efforts. Additional study therefore needs to be conducted to gather information related to the context of collaboration in the community college.

Summary

The review of literature in this section provided a broad overview of collaboration as it related to the community college. Through the study of organizational literature, a definition of collaboration was identified and the distinction between internal and external collaboration was made. The definition that served as a base for this study was, “Collaboration occurs when a group of autonomous stakeholders of a problem domain engage in an interactive process, using shared rules, norms, and structures, to act or decide on issues related to that domain” (Wood and Gray, 1991, p. 146).

Three empirical studies were presented in this section: a national study of academic and student affairs collaboration reported by Kezar (2001a), a study of the context for collaboration conducted at four baccalaureate institutions (Kezar, 2006), and a study of collaboration at community colleges conducted by Kolins (1999). The literature reviewed in this section provided several implications for my study. First, support for the focus of my study was provided by the lack of information related to collaboration in the community college and the finding that community colleges reported a significantly lower number of successful collaborations than were present in four-year institutions. The literature identified the need to study the community college in more depth in order to discover factors that facilitate successful collaboration within this type of institution. The

studies described in this section provided insight into the level of collaboration occurring but did not provide an understanding of how it occurred in the community college nor did it elaborate on the factors that led to its effectiveness. My study seeks to fill this gap in knowledge by examining specific mechanisms that lead to effective collaboration in the community college.

The second implication for my study centers on the factors that were found to impact successful collaboration within higher education. Kezar (2001a) found that both structural and cultural strategies were critical for creating effective collaboration on campus. The structural strategies were further broken down to include combining fiscal resources, incentives (monetary and nonmonetary), planning, change in promotion and tenure requirements, restructuring, reward systems altered, systemic orientation, and setting expectations and accountability. These strategies, along with other factors described in the literature, were used as a theoretical base within my study. From the research results reported by Kezar, I developed propositions for what I expected to find at the case sites I studied. By using the information gleaned from the previous research and the review of related literature, the validity of my research design was strengthened.

A third implication for the design of my study came from the varying types of collaboration that were described within the organizational literature. The literature indicated that cross-functional collaboration was frequently interposed on top of the existing organizational structure with no reorganization or structural changes occurring. This provided information antithetical to the structural changes proposed by Kezar (2001a, 2006). The post-positivist approach of critical realism implemented within this study is compatible with the opposing views of the context for collaboration. Critical realism holds that knowledge is fallible and that claims to knowledge are always open to refutation by further information. By examining opposing propositions, knowledge may be gained about the mechanisms that influence successful collaboration in the community college.

What Organizational Factors Influence Cross-functional Collaboration In the Community College?

The characteristics of an institution play a role in the successful implementation of any endeavor. Kuh (1996) noted that organizational characteristics have a strong influence on what faculty, administrators, and student services personnel will and will not do. The purpose of this section is to provide an overview of the literature concerning the organizational factors that influence cross-functional collaboration. The section is organized to first provide information related to the broader organizational environment, then to examine the literature related to higher education, and finally to focus on the community college.

Factors Identified in the Organizational Literature

This section is intended to reveal organizational factors found within business and industry that influence cross-functional collaboration. The section provides a compilation of information related to the topic collected from peer reviewed journals, books, and other organizational literature. No significant studies are highlighted in this section.

The effectiveness of internal collaboration was influenced by several factors including the authority given to the collaborative team, the nature of the work to be completed, the size of the group, and the composition of the team (Gratton & Erickson, 2007; Sawyer, 2007). Providing a collaborative team with autonomy and authority to make decisions was critical for effective collaborative practices (Holland, Gaston, & Gomes, 2000; Jassawalla & Sashittal, 1999; Mohrman et al., 1995). Trent and Monezka (1994) explained that teams need to be empowered to do the work that they were asked to do. When a manager from outside the team attempted to control team activities or override team decisions, collaborative work began to break down. The result was frustration among participants and separation from the collaborative process (Holland, Gaston, & Gomes, 2000).

The nature of the task to be addressed by collaboration also has an impact on the performance of the collaborative group. Sawyer (2007) explained that collaborative teams should not be used for additive tasks that people can do individually; collaboration

should instead be used for complex and improvisational tasks that require the input and collective thought from diverse sources. There is a strong relationship between cross-functional team effectiveness and team members' perceptions of the task (Denison et al., 1996; Holland, Gaston, & Gomes, 2000; Sawyer, 2007). Participants need to know their contribution is important to the work of the group. An exciting, challenging task which is important to career, company, or department leads to higher team effectiveness (Denison et al., 1996).

The optimum size of a collaborative group has also been examined. Research on group size suggested that too few or too many members reduced performance. Some findings suggested groups comprised of six or seven individuals are most effective while others suggested a maximum of 8 to 10 participants (Holland, Gaston, & Gomes, 2000). The important point is to have sufficient functional representatives on the team that can provide the breadth of skills needed, while still fostering communication and commitment. With the advancement of new technologies that make it possible to gather knowledge and expertise from people at multiple locations, it's not uncommon for the size of a team engaged in a complex task to reach 100 or more. However, when the size of a team increases beyond 20 members, the tendency to work with one another collaboratively decreases (Gratton & Erickson, 2007). Members of large, complex teams are less likely to display collaborative practices such as helping one another complete jobs, shifting workloads, meeting deadlines, or sharing resources (Gratton & Erickson, 2007).

McCaffrey, Faerman, and Hart (1995) identified four conditions contributing to the chances of a collaborative system starting and surviving: (a) prior dispositions toward collaboration based on history, beliefs, and other earlier actions; (b) social and political organization; (c) the nature of incentives, issues, and values presently facing parties, and (d) leadership capacity and style (p. 613). Bensimon and Neumann (1993) added that the financial health of the organization, faculty and staff morale, the design of governance, and the president's style could also affect team operations and success.

The potential for effective collaboration within an organization is not always present because barriers that stand in the way of change are stronger than the forces

favoring it (McCaffrey, Faerman, & Hart, 1995). Systemic reasons not to collaborate often exist and discourage managers from implementing collaborative systems, even though they tout the advantages of them. Examples of systemic challenges to collaboration include deep-seated attitudes about working with other departments, the social and political cost of collaboration in a complex system, the difficulties of engaging in deep conflicts that are often a part of the collaborative process, and leadership incentives that favor control rather than collaboration (McCaffrey, Faerman, & Hart, 1995).

The literature presented in this section provided insights about organizational factors that have influenced effective cross-functional collaboration within the business environment. The identification of these factors contributed to the development of interview questions in the design of my study. The potential influences on effective collaboration were numerous. The organizational factors identified in this section that may be applicable to the community college included: the authority given to the team, the nature of the work to be completed, the size and composition of the team, team members' perceptions of the work, the organization's prior history and actions related to collaborative teams, the social and political environment within the organization, incentives and values, leadership capacity and style, the financial health of the organization, staff morale, and the design of governance within the organization.

Organizational Factors Identified in Higher Education Literature

In this section, the organizational factors found to influence cross-functional collaboration within higher education are presented. The national study on academic and student affairs collaboration conducted by ERIC, NASPA, and ACPA and described in an earlier section provides the background for this section. After discussing additional findings related to the initial study conducted by Kezar (2001a), a second study conducted by Kezar (2001b) from the same data set is presented.

The results of the national research described in a previous section (Kezar, 2001a) identified cooperation, student affairs staff attitudes, common goals, and personalities as the *perceived* factors that made the most difference in the success of collaborative efforts within higher education. Kezar noted that this differs from much of the recent literature

about change and collaboration, which identifies structural changes, planning, and senior administrative support or leadership as significant for creating working partnerships. The strategies identified by chief student affairs officers as the *actual* factors that were implemented as part of their successful collaborations correlated more closely to the literature and included human-oriented strategies, structural approaches, and senior administrative support. The human-oriented strategies that were implemented included cross-institutional dialog, common vision, common vocabulary, generating enthusiasm, and marketing. Structural approaches included combining fiscal resources, systemic orientation, incentives, planning, change in promotion or tenure requirements, restructuring, adjustment of the reward system, and setting expectations and accountability (Kezar, 2001a, p. 44). Senior administrative support was identified most often as a variable that contributed to successful collaborations. Eighty percent of respondents identified that senior administrative support was a very successful strategy for creating partnerships between academic and student affairs. However, statistical analysis showed that administrative leadership did not have a significant impact on successful collaboration, and if administrative leadership was missing, it was seen as only a modest barrier (Kezar, 2001a). The barriers to effective collaboration identified by the study were lack of faculty and staff time, faculty ties to their discipline, faculty resistance, and lack of established goals (Kezar, 2001a).

In a separate report, Kezar (2001b) presented findings from a different line of inquiry within the same national research project. The emphasis of this study related to the change frameworks implemented by colleges as they initiated collaborative activities on their campuses. Prior to the study, three prominent process change models were identified that held potential to facilitate greater collaboration among student and academic affairs professionals. The models selected were Kuh's seamless change model that focused on values and beliefs; planned change, which focused on leadership and planning; and restructuring, which focused on structural alterations. Change theory is closely tied with collaboration because moving from a system where departments function independently to one where planning and implementation occurs collaboratively requires a significant amount of change within the institution.

The principles provided through Kuh's seamless change model reflected human relations theories such as working in teams, learning, and vision setting. His model was considered compatible with environmental change theories in which change was unplanned, random, haphazard, and in response to the environment or context. In contrast, the planned change model held that leaders played an instrumental role and that change occurred through intentional response to leadership, rather than through chance encounters by people on campus. This model focused on intentionally altering processes, as opposed to Kuh's model, which focuses on altering values. Kezar (2001b) noted that structural changes often occurred as part of planned change models, but the restructuring itself was not the key element to creating change (p. 66). The third change model, restructuring or reengineering, focused on implementing change by modifying aspects of the organizational structure. The problem of collaboration could be addressed through this model by either developing better structures for coordination or breaking down the division of labor and decreasing specializing. The leader's role according to this model was to assess the organizational structures and think about ways to structure differently (p. 67).

Several key findings were identified through this study:

- Strategies within the planned change model were most commonly used in successful collaborations between academic and student services, followed closely by Kuh's model of seamless learning.
- Strategies that aligned with Kuh's model of seamless learning were perceived as slightly more successful than planned change strategies, yet the difference was marginal.
- Senior administrative support and leadership was by far the most often cited strategy for success. This factor was found to be statistically more significant for community colleges and liberal arts colleges.
- The more campuses used strategies from Kuh's seamless change model or the planned change model, greater were the number of successful and very successful collaborations (Kezar, 2001b, p. 70).

- Restructuring was not seen as a sufficient action to alter the environment enough for people to embrace collaboration.
- Of the twenty individual strategies examined, three of Kuh's strategies were found critical for developing change: cross-institutional dialog (ranked second), generating enthusiasm (fourth) and creating a common vision (fifth). Three planned change strategies identified as extremely important for creating partnerships were: leadership (first), setting expectations/holding people accountable (third), and staff development (sixth).

The findings suggested that pairing the human and relational principles outlined in Kuh's model with some concrete management practices offered within the planned change model might provide the most effective way to facilitate collaborative work (Kezar, 2001b, p. 72).

In reviewing the findings by institutional type, Kezar (2001b) noted that private four-year institutions were less likely to be able to use Kuh's strategies successfully. She also explained that although restructuring was not found to have significant impact on successful numbers of collaborations, this could be because fewer institutions were using restructuring strategies or because there were many smaller colleges represented in the sample, which could have impacted the usage and importance of restructuring strategies. Some evidence in the data suggested that restructuring was more successful and used more on larger campuses (Kezar, 2001b).

The strength of this research was that it incorporated a broad representation of colleges with varying institutional characteristics from across the United States. One of the limitations was a low response rate (49 percent) on a national study conducted by major educational agencies. A second limitation was that the data collection instrument didn't allow for any form of follow up, clarification, or more in-depth study as all information was collected through a single survey.

In relation to my study, the organizational factors found to be relevant to higher education by Kezar's (2001a) were useful in developing questions related to factors that influence collaboration. The information provided in this section contained a more detailed account of the human-oriented strategies and the structural approaches described

in an earlier section. The human-oriented strategies that were found to impact internal collaboration in higher education and which might pertain to the community college include cross-institutional dialog, common vision, common vocabulary, generating enthusiasm, and marketing. The structural approaches include combining fiscal resources, systemic orientation, incentives, planning, change in promotion or tenure requirements, restructuring, adjustment of the reward system, and setting expectations and accountability. Because the study by Kezar (2001a) indicated that senior administrative leadership did not influence successful collaboration to the degree perceived by participants, this is an area I considered from multiple perspectives as I reviewed the data from my study.

The second study by Kezar (2001b) discussed in this section also provided factors found to be relevant to collaboration within higher education that could also be relevant to the community college and were included in the design of the study. In particular, the theories of planned changed and seamless learning provided additional factors to examine and a structure by which to summarize findings.

Organizational Factors Identified in Community College Literature

This section addresses the literature related to organizational factors in the community college that influence cross-functional collaboration. Though no research specifically related to the community college and the factors that influence internal collaboration has been conducted, the studies cited above (Kezar 2001a, 2001b) considered institution type in the assessment of institutional factors that impact collaboration. One distinction about the community college noted by Kezar (2001a) was that it possessed the fewest structural obstacles to effective collaboration. The structural changes that Mohrman et al. (1995) and Kezar (2006) described as important for supporting cross-functional collaboration have been considered in the implications of my study.

Summary

Though a significant amount of anecdotal literature existed related to collaboration, research-based studies related to factors and processes that impact internal collaboration were limited (Kezar, 2001a; Kezar, 2006). Two studies by Kezar (2001a,

2001b) provided insight in this section about factors within higher education that were found to influence collaborative work. The factors included human-oriented strategies, structural approaches, senior administrative support, cross-institutional dialogue, generating enthusiasm, and creating a common vision. This prior research provided factors that were compared to the information generated from my study.

Peer-reviewed articles, books, and other scholarly materials in the field of business also identified factors that influence collaboration within the business environment. The factors identified that may also influence collaboration in the community college included: the authority given to the team, the nature of the work to be completed, the size and composition of the team, team members' perceptions of the work, the organization's prior history and actions related to collaborative teams, the social and political environment within the organization, incentives and values, leadership capacity and style, the financial health of the organization, staff morale, and the design of governance within the organization.

Information provided in this section indicated that the findings from the higher education studies may not fully apply to the community college because of characteristic differences between four-year and two-year institutions, and that additional study of the community college was suggested (Kezar, 2001a; Kezar, 2001b; Kezar, 2003). My study on collaboration provided an opportunity to examine some of the factors to determine where the similarities and differences exist.

How Does College Leadership Facilitate Cross-functional Collaboration in the Community College?

The involvement of senior leadership has been identified as a contributor to the success of cross-functional collaboration (Bensimon & Neumann, 1993; Gratton & Erickson, 2007). This section is intended to provide an overview of the literature related to the way institutional leaders support or facilitate cross-functional collaboration. The section will first provide information related to the broader organizational environment, followed by a review of the literature related to higher education, then lastly the literature related specifically to the community college.

Leadership Role in Organizational Literature

In this section, the organizational literature related to the role that leadership plays in facilitating cross-functional collaboration is examined. A brief overview is provided, followed by the findings of a study conducted by Gratton and Erickson (2007).

Upper management plays an important role in facilitating the conditions that support effective cross-functional collaboration within an organization (Fauske, 2002). The active involvement of the executive leadership has an influence on the outcomes of collaborative work, as does the absence of involvement (Huxham & Vangen, 2000). Responsibilities ascribed to upper management in the development of collaborative work include establishing a common vision, providing the necessary resources to ensure its success, providing access to training in the skills that collaboration requires, investing in the infrastructure to support collaborative work, and providing time to allow collaborative work to occur (Liedtka, 1996). Organizational leaders influence the mechanisms – the structure, processes, and people – that enable collaboration to occur (Huxham & Vangen, 2000). By fostering conditions that support collaborative activities, upper management has a direct impact on the success of collaboration across the organization (Gratton & Erickson, 2007).

The study of 15 multinational companies conducted by Gratton and Erickson (2007) revealed the direct influence organizational leadership has on the success of collaborative work. The study first identified several factors that undermine success but which were necessarily present in large, dispersed collaborative teams: participants numbering close to 100, a high proportion of people who don't know one another, significant use of virtual communication due to dispersed locations, and a high proportion of highly educated specialists on the team. From a sample of 55 large teams that experienced these obstacles, the researchers identified the teams that demonstrated high levels of collaborative behavior despite their complexity, and the conditions that enabled their success were explored further. It was found that conditions established by upper management across the organization were vital to the success of the collaborative work.

The purpose of Gratton and Erickson's study (2007) was to determine how executives strengthen an organization's ability to successfully engage in complex

collaborative tasks. Over 100 factors were examined and a range of statistical analyses were conducted to identify the factors manifested in collaborative action. Eight practices that fall within four general categories were found to correlate with successful collaborative activity. The general categories found to facilitate successful collaborations include executive support, human resources (HR) practices, the strength of the team leader, and the structure of the team itself. It was found that at the most basic level, teams do well when top executives demonstrate collaborative behavior themselves, invest in supporting social relationships within the organization, and ensuring that mentoring and coaching become embedded in their own routine behavior and throughout the company. The HR office also plays a role in successful collaboration by providing training in skills related to collaborative behavior and establishing hiring and performance standards that consider collaborative skills. Selection of a team leader that is both task- and relationship-oriented also has a significant impact on a project's success, as does forming teams that capitalize on preexisting relationships (Gratton & Erickson, 2007).

One of the strengths of the study conducted by Gratton & Erickson (2007) was the level of research conducted of 55 large teams in 15 multinational organizations. Following an initial phase of data collection and statistical analysis in which more than 100 factors were considered, the researchers isolated eight factors that were found to help teams overcome the difficulties imposed by size, long-distant communication, diversity, and specialization. The research team then interviewed the teams that were very strong in these practices to find out what they did. The results of the study were reported in a concise, interesting manner; however, sufficient detail about the research process was not provided to enable informed feedback about procedural strengths or limitations within the study.

Gratton & Erickson's (2007) research reinforced the concept that leaders impact the success of collaborative work by establishing conditions that support it within the organization and by modeling collaborative behaviors themselves. It also differentiated the role of upper management in the collaborative process from the role of the person leading the collaborative work. As I engaged in research related to leadership's role in

furthering collaboration within the community college, I examined the influence of both upper management and the specific project leader. Factors for further examination suggested by this study included the level of collaborative behavior modeled by the president, the way in which upper management's commitment to collaboration was demonstrated, how collaborative skills were developed at the campus, qualities of the project-team leader, the amount of latitude the team was given to achieve the work, and the level of role definition provided to group members.

Leadership Role in Higher Education Literature

In this section, the role of the leader in facilitating cross-functional collaboration within higher education is presented. The section provides a compilation of information related to the topic collected from peer reviewed journals, books, and other higher education literature. No significant studies are highlighted in this section.

Higher education has a long history of utilizing teams to support institutional decision making through the use of committees, cabinets, and other forms of collegial involvement (Bensimon & Neumann, 1993; Kezar, 1998). However, there was little literature about how college administrators build teams within their institutions or the role they played in fostering collaborative work throughout their organization (Bensimon & Neumann, 1993; Crow, 1998; Fauske, 2002).

Models of team development within higher education have tended to focus on cultural and social elements of the institution (Bensimon & Neumann, 1993; Kezar, 1998). The impact upper management has on collaboration within higher education was described by Bensimon and Neumann (1993) by using the analogy of culture, which is comprised of norms, beliefs, and values that influence both the president's leadership team and the implementation of effective teams throughout the organization. College presidents and other key leaders play a prominent role as team builders within the institution by aligning goals and behaviors, seeking multiple perspectives, and developing an environment of mutual support. Kinzie and Kuh (2004) referred to senior college leaders as the "designers, stewards, and teachers" responsible for building an organization with mutual goals that are well defined and that focus on student success.

Collegiate leadership also impacts collaboration by assuring that necessary functions within the system are met. This includes promoting a vision, obtaining resources, providing encouragement, adapting standard operating procedures, and monitoring reform. These functions are not position dependent but may be completed by a variety of roles, sometimes singly and sometimes collectively (Firestone, 1996, as described by Crow, 1998). Crow (1998) expanded upon Firestone's view by explaining that school administrators influence collaboration in three ways: administrators assess what is provided by others and offer what is missing, they create a context where leadership by others is encouraged and where skills and potential in others is cultivated, and they fulfill the responsibility of representing the organization to the outside world (Crow, 1998).

In a report prepared as part of the American Council on Education's Project on Leadership and Institutional Transformation, Eckel, Green, and Hill (2001) presented findings from a 5-year study at 23 institutions of higher education related to the attitudes and habits of effective change leaders. The concept of change is closely related to collaboration in that collaboration brings diverse viewpoints together in a way intended to result in innovation, action, and change. Eckel, Green, and Hill (2001) noted that the way leaders approached problems, the attitudes they displayed, their dispositions, and their commitments "powerfully influenced the change initiative" (p. 14). The attitude and habits demonstrated by effective change leaders include being principle driven, taking a long-term perspective on change, remaining persistent over time, helping people think differently, giving attention to the process by which desired changes would be identified and implemented, and providing opportunities for participation by many.

The literature reviewed in this section suggested that leaders within higher education have the ability to impact effective collaboration through the vision they set, the environment they create, and the oversight they provide for the effective functioning of the system. This was consistent with the findings of Kezar (2001b) that suggested pairing the human and relational principles with concrete management practices might facilitate collaborative work. Implications for my study stem from the factors identified in the higher education section—such as promoting a vision, obtaining resources,

providing encouragement, adapting standard operating procedures, and monitoring reform. The factors were used to compare findings from literature with the role community college leaders in my study took to influence collaboration at their institutions. The questions developed for college leaders were purposefully designed to be broad and focused on both the relational side and the organizational side of leadership, which corresponds with the broad categories presented in this section.

Leadership Role in Community College Literature

This section addresses the literature related to the way community college leaders facilitate and support cross-functional collaboration. While no research specific to the community college has been published related to the leader's role in supporting or facilitating internal collaboration, a study previously cited provided information pertinent to this topic. From the national study of academic and student affairs collaborations, Kezar (2001a) reported that support by senior administration plays a significant role within the community college for the development of cross-functional collaborations. The study showed a statistically significant variance by institutional type, with public four-year and comprehensive institutions citing senior administrative support as less important than at community colleges (Kezar, 2001b). It also found that structural strategies, such as providing additional resources and incentives, were needed at the four-year public and comprehensive institutions for establishing institutional priorities, where at the smaller community colleges this could be accomplished by the leader describing her or his priorities for the institution.

The research described in this section identified relational and managerial factors that were considered in my study. A line of questions was developed to identify how community college leaders communicate their direction and support for collaborative work in general, as well as for specific collaborative initiatives.

Summary

With a few notable exceptions, research has not explored in detail the concept of leadership in relationship to collaboration (Huxham & Vangen, 2000; Fauske, 2002). This section has provided a brief overview of the literature related to the influence senior leadership has on collaboration. The study conducted by Gratton and Erickson (2007)

provided the strongest empirical evidence that senior leadership has an impact on an organization's ability to successfully engage in complex collaborative tasks. Additional higher education literature suggested that college leaders influence collaboration through both the interpersonal and managerial aspects of their role. Support for collaboration was provided within business and higher education through actions such as promoting a vision, obtaining resources, providing encouragement, adapting standard operating procedures, monitoring reform, being principle driven, taking a long-term perspective on change, remaining persistent over time, helping people think differently, giving attention to the process by which desired changes are identified and implemented, and providing opportunities for participation by many. The information in this section was instrumental in providing factors to consider during examination of how community college leaders influence collaborative work. The articles provided a point of comparison to the findings from my study related to human/inter-relational factors and managerial factors. Kezar's (2001b) finding that community college leaders exert more influence over collaborative work through the relational aspects of their position than by the managerial aspects was considered in the findings related to research question three.

Summary

Collaboration has been described as an emergent process that doesn't conform to a formula for success (Gray, 1989; Sawyer, 2007). Yet examining patterns across institutions can provide insights that may help to promote success (Eckel, Green, & Hill, 2001). In this review of the literature, I examined research related to how cross-functional collaboration occurs within the community college, what organizational factors influence its effectiveness, and how college leaders facilitate cross-functional collaboration at their campus. The literature review revealed several patterns of interest that are relevant to cross-functional collaboration in the community college. In this section, a summary of the literature review is presented by describing the main points or patterns observed through the literature review. A set of initial propositions developed from this information and used in the development my research questions are described next and presented in Table 2. The need for this study as identified by the literature review is discussed at the end of this section.

The first pattern identified within the literature review relates to the varying types of collaboration that were described within the organizational literature. One line of thought revealed through the literature review indicated that cross-functional collaboration was frequently interposed on top of the existing organizational structure with no reorganization or structural changes occurring. A second line of thought indicated that in more dynamic, non-routine environments, structural and cultural changes were needed in order to support the existence of cross-functional collaboration. In both scenarios, it was noted that processes or strategies needed to be developed to support collaboration within the organization. These processes included direction setting, information distribution and communication, and decision making (Kezar, 2006; Mohrman et al., 1995).

A second pattern identified by the literature review for further exploration was whether community colleges have primarily implemented cultural or structural strategies to support collaborative work and the change that it involves. Cultural strategies included cross-institutional dialogue, common language development, common vision, generating enthusiasm, marketing change, and staff development. The structural strategies included combining fiscal resources, incentives (monetary and nonmonetary), planning, change in promotion and tenure requirements, restructuring, reward systems altered, systemic orientation, and setting expectations and accountability. This information can be used to determine the type of strategies community colleges have initiated to support collaborative work on their campus.

A third pattern identified within the literature that was explored through my study related to the factors that influence cross-functional collaboration. In addition to the strategies colleges may use for implementing collaborative teams, numerous factors have been identified within the literature that also have an impact on the effectiveness of collaborative efforts. Some of the factors included the authority given to the team, the nature of the work to be completed, the size and composition of the team, team members' perceptions of the work, the organization's prior history and actions related to collaborative teams, the social and political environment within the organization,

incentives and values, leadership capacity and style, the financial health of the organization, staff morale, and the design of governance within the organization.

The fourth pattern was related to the influence senior leadership has on the college's ability to successfully engage in complex collaborative tasks. Senior administrators have been found to provide support for collaboration through actions such as promoting a vision, obtaining resources, providing encouragement, adapting standard operating procedures, monitoring reform, being principle driven, taking a long-term perspective on change, remaining persistent over time, helping people think differently, giving attention to the process by which desired changes are identified and implemented, and providing opportunities for participation by many. These factors may be categorized according to whether influence was exerted through the interpersonal or managerial aspects of the leader's position. As a result of this information, the question of how senior administrators influence collaboration was explored within my study according to these categories in order to examine Kezar's (2001a) proposition that community college leaders exert more influence over collaborative work through the relational aspects of their position than by the managerial aspects.

The final pattern identified by the literature that I considered during my study related to the influence the leader of the collaborative team has in supporting the success of the collaborative work. Gratton & Erickson (2007) suggested that the selection of a team leader that is both task- and relationship-oriented has a significant impact on a project's success. The characteristics displayed and processes implemented by the team leaders at the colleges included within my study were therefore examined.

From the information provided through the literature review, initial propositions were developed that identified factors to be examined within the current of the study. Yin (2003) noted that identifying propositions assists the researcher to move in the right direction and keep the study within feasible limits. Table 2 provides a listing of the propositions derived from the literature. The propositions guided identification of data needs, interview questions, and supporting documentation needed for the study. Comparison of the study findings to the propositions is incorporated in Chapter 5.

Table 2

Propositions Examined Within the Study

<p><i>Question 1: What Does Cross-Functional Collaboration Look Like?</i></p> <p><i>1.1 Cross-functional collaboration occurs within the community college by interlaying additional responsibilities on top of the regular structure of the organization, rather than by restructuring.</i></p> <p><i>1.2 Effective collaborative teams actively manage information distribution and communication with the larger institution.</i></p>
<p><i>Question 2: What Organizational Factors Influence Cross-Functional Collaboration?</i></p> <p><i>2.1 Both cultural and structural factors influence cross-functional collaboration.</i></p> <p><i>2.2 Cultural factors have more influence on cross-functional collaboration than structural factors.</i></p>
<p><i>Question 3: How Can Leadership Facilitate Cross-Functional Collaboration?</i></p> <p><i>3.1 Senior administrators in the community college influence collaboration at their institution through both interpersonal and managerial processes.</i></p> <p><i>3.2 The leader of the effective collaborative team is both task- and relationship-oriented.</i></p>

In reviewing related literature, it was apparent that little research has been conducted related either to the organizational factors that influence effective collaboration or to how leadership facilitates cross-functional collaboration in the context of business, higher education, and community colleges. Much of the literature in these areas was anecdotal in nature and did not explore existing practice. Research conducted by Kezar (2001a, 2001b, 2006) provided the most significant research related to the organizational context in which collaboration exists in the higher education environment. The primary focus of Kezar's research was public comprehensive universities. The literature related specifically to collaboration in the community college was particularly sparse. The one relevant study related to collaboration in the community college that emerged from the literature search focused on whether or not collaboration is occurring in the community college between academic and student affairs departments and the level of satisfaction related to those collaborations. There was little specific information related to what cross-functional collaboration looked like in the community college, what

organizational factors influence cross-functional collaboration, or how community college leaders facilitate cross-functional collaboration.

The studies presented in the literature review provided a solid rationale for the case study approach that was utilized in my study. The literature that was reviewed relied on observation, interviews, surveys, focus groups, and the review of secondary literature as the source of their data – all appropriate to a case study approach. One of the studies modeled a multiple case study approach similar to what I incorporated as it investigated the context of collaboration in higher education (Kezar, 2006). It also described a detailed approach for site and participant selection that was useful to my study. The case study provided a way to gather knowledge of complex social phenomena that occur in of real-life events (Yin, 2003). Implementing a case study research strategy was shown by the literature to be appropriate for the study of cross-functional collaboration.

CHAPTER 3 – RESEARCH DESIGN

This exploratory research study was conducted to gain an understanding of the underlying factors that influence effective cross-functional collaboration within a community college. The philosophical approach that guided this study was critical realism, the research method implemented was a multiple case study, and the primary research technique was the interview. This section provides a description of the following research design elements that served as the base for this study: philosophical approach, personal disclosure, research method, study sites and study participants, data needed, procedures for collecting and analyzing data, strategies to ensure soundness of data, and strategies for protection of human subjects. The rationale for all design decisions is included.

Philosophical Approach – Critical Realism

Identifying the philosophical assumptions about the nature of reality and how we can know what we know is essential in the research process for establishing a coherent study and understanding the overall perspective from which the study is designed and carried out (Krauss, 2005). Guba and Lincoln (1994) described the philosophical paradigm as the “underlying belief system or world view that guides the investigation” (p. 105). The philosophical approach that defined the underlying premises of this study is critical realism.

Critical realism has its roots in the writings of R. W. Sellars who in 1916 wrote a book entitled *Critical Realism* (Flew, 1979). The American critical realism of the 1920s and 1930s, which is particularly associated with Arthur Lovejoy (1873-1962) and Roy Wood Sellars (1880-1967), has generally faded from view and has little impact on the contemporary discussion of critical realism (McGrath, 2004). Today, critical realism is increasingly being associated with the British philosopher Roy Bhaskar, who has developed parts of the philosophic tradition and contributed a coherent philosophical language (Danermark, Ekström, Jakobsen and Karlsson, 2002).

Modern critical realism is a post-positivist philosophy that developed in response to problems inherent in the philosophy of science (Collier, 1994). It works from the premise that science and reason can provide insight into the nature of reality. Yet it holds

that reason and experience are not enough. History and social context also interrelate with reason and science to provide a foundation for knowledge (Collier, 1994). Critical realism is therefore also highly applicable to the social sciences. In addition to its acceptance in the physical and social sciences, critical realism is gaining notoriety in the “science and religion” community through the writings of authors such as Ian Barbour, Arthur Peacocke, and John Polkinghorne (McGrath, 2004, p. 143).

Critical realism is a *realist* philosophy in that it contends that reality exists beyond our knowledge of it. Our understanding of reality grows through our experiences, but our knowledge and understanding do not define what reality is. Critical realism is a *critical* philosophy in that our idea of “how things are” is open to criticism. Our views of reality are fallible and open to dialog and critique, and knowledge is gained through critical examination of our theories (Cruickshank, 2002). Critical realism may be categorized by the terms *transcendental realism* (which is associated with Roy Bhaskar’s view of ontology developed from scientific practices), and *critical naturalism* (which refers to the application of the concepts of transcendental realism to the social sciences) (Collier, 1994).

Critical realism was selected as the theoretical basis for this study because of the epistemology (the view of knowledge and how we come to know), the ontology (the view of reality), and the methodology (the practices used to attain knowledge of reality) it offers. Critical realism holds that reality exists beyond our understanding of it, and that there are multiple perceptions of that reality (Krauss, 2005). Critical realism sees the world as comprised of many layers of existence, and each layer – whether physical, biological, or cultural – is to be seen as “real” and capable of investigation using means appropriate to its distinctive identity (McGrath, 2004). This differs from traditional science where one basic logical structure method is applied to the whole. Critical realism holds that the choice of method utilized in a research study should be governed by what we want to know and what we can learn with the help of the different methods (Danermark, Ekström, Jakobsen & Karlsson, 2002). The researcher is encouraged to investigate the stratified structures of existence at every level open to human enquiry in order to understand the deep causal processes at work (McGrath, 2004).

Critical realism holds that knowledge is *objective* in that it is derived by looking outside of our subjective senses. Knowledge is also *fallible*, and claims of knowledge are always open to refutation by further information. Knowledge is gained as you look beneath perceptions and the course of events to identify the mechanisms that generate the phenomenon (Collier, 1994; Groff, 2004).

Strengths of Critical Realism

The idea of a stratified reality that includes a distinction between what we experience, actual events, and underlying structures is useful for the social researcher (Archer, 1998). McGrath (2004) explains that our perception of these concepts gives us access to concepts and structures that exist independently of us. Critical realism allows the researcher to move beyond examination of the physical world, to consider the impact of social structures on a situation, and to look for causal relationships.

The ideas of an open world and the plurality of causal mechanisms are useful for the social scientist. “It is immensely useful for the social scientist at least to start off with the assumption that you are not going to find just one cause producing effect. What is likely to be happening is a whole lot of causes interacting with each other, often in very complex ways, producing a variety of effects in different circumstances” (Archer, 1998, p. 1). Critical realism encourages an open approach to research by insisting that its correlation with the various layers of reality be explored, both as a means of intellectual enrichment and as a matter of intellectual responsibility (McGrath, 2004).

Critique of Critical Realism

The critiques of critical realism focus on its application to the social sciences through the theory of critical naturalism. Bhaskar’s view of critical naturalism has been accused of conceding too much to relativism. Collier believes this critique has caused Bhaskar to throw out the correspondence theory of truth, which he believes a consistent realism ought to retain (Collier, 1994, p. 239).

Brown (1999) contends that critical realism neglects intrinsic links between ontology and epistemology, which results in an inadequate methodology. Brown continues, however, that the more recent emphasis within critical realism on dialectic

reasoning has responded to some of the problems and that the theory should not be rejected. Instead, it must be surpassed or transcended.

Because the contemporary model of critical realism is really quite recent (over the past 30 years), the school of philosophy is still being explored by many and it is still evolving and clarifying itself in response to questions and critiques that are posed. For example, Bhaskar's work on Dialectical Critical Realism shows some modifications from his original writings, and critiques find it a more developed and cohesive system (Collier, 1994).

Rationale for Selecting Critical Realism

I have selected critical realism as the underlying methodology of this study for four reasons: it is intuitively appealing, it is a broad enough theory to apply to both the physical and social sciences, it allows for a plurality of methods, and it recognizes causal relationships. First, the view of reality held by critical realism is intuitively appealing. Flew (1979) describes realism as a philosophy that reaffirms the standpoint of common sense in its belief that physical objects exist independently of our perception. Critical realists hold that knowledge of the world can be gained because there is some sort of reliable correspondence between our senses and intuition on the one hand and external objects on the other (Flew, 1979). The second reason critical realism was selected is that it is a broad theory that can be applied to research in both the physical and the social sciences. It recognizes the value of reason and science, yet also incorporates history and social context to provide a broad and flexible foundation for knowledge.

The third reason for selecting critical realism is that it is a methodology conducive to the use of a plurality of methods. This is appealing because it allows the researcher to explore the breadth of a topic and select the research methods best suited to the question. The fourth reason for selecting critical realism is the view that underlying causal mechanisms exist in both the physical and social world and have the power to influence events, whether intentionally or unintentionally (Groff, 2004). Recognizing that underlying structures have the potential to enable or limit possible courses of action provides the opportunity to identify and examine what those causal structures might be.

As causal relationships are considered, an in-depth understanding of a phenomenon may be gained.

Impact of the Philosophical Approach on This Study

Approaching this study from a critical realist perspective influenced my research in the following ways:

- The language used throughout the study reflects a critical realist perspective. Rather than referring to multiple realities or co-constructed reality as a constructivist would, I have referred to multiple *perspectives* and *underlying mechanisms* or factors. Other terms which reflect a critical realist perspective center on a *stratified* reality, *causal structures* or *mechanisms* which influence a phenomenon, and an *open system* (Collier, 1994; Danermark et al., 2002).
- An emphasis of the study was to identify the underlying mechanisms and structures that lead to effective collaboration. Because reality is complex and underlying structures don't necessarily appear to the senses through experience (Collier, 1994), prior theory was considered to help identify mechanisms and structures that influence the case. Participant perspectives were the primary source of information for the study.
- Critical realism holds that claims of knowledge are always open to refutation by further information (Collier, 1994). Error checking procedures were used to test assertions that developed from the study, and my intent was to check for soundness by refuting my conclusions rather than to verifying them.
- Causal relationships were sought through this study in order to identify underlying mechanisms that influence effective collaboration.
- A structured approach to case study research was applied in order to clearly show how conclusions were derived and to strengthen the validity and reliability of the study. The work of Yin (2003), Miles and Huberman (1994), and Robson (2002) provided valuable input for research preparation, data collection, and data analysis to support a post-positivist study.
- From the literature review, initial propositions were developed related to each of the research questions. Establishing propositions served to focus the study and direct

attention to the things that needed to be examined within the scope of the study. Yin (2003) suggested that identifying preliminary propositions helps the researcher reflect on the important theoretical issues and provides direction concerning where to look for relevant evidence (p. 22).

- In evaluating the trustworthiness of research processes and findings, this study utilized traditional criteria for evaluation. The traditional criteria shared by both positivist and post-positivist schools of thought for assessing the trustworthiness of a study are internal validity and external validity (Robson, 2002; Yin, 2003). Internal validity relates to whether the findings of the study are consistent with reality and provide an authentic portrait of what is being looked at. External validity is the extent to which the findings can be generalized. These criteria for truth are expanded upon in the section below titled “Strategies to Ensure Soundness of Data.” By maintaining the above criteria within this study, the research findings can be considered trustworthy (Miles & Huberman, 1994; Yin, 2003).

Personal Disclosure

The topic of cross-functional collaboration within the community college is of particular interest to me because it offers opportunity for greater effectiveness within my own institution and others like it. It’s my observation that for the most part people want to work collaboratively, and I believe there is a sense of urgency about working together more effectively to help students stay in school and achieve their educational goals; yet team efforts have difficulty coming to fruition, there is little sustained commitment to collaborative projects, and the plans that arise seldom encompass more than just the few who participate in the initial planning. Glasser (2005) explained there is a difference between involving people in a collaborative process and capturing the energy and momentum of the group to bring those plans to fruition. The challenge is to move beyond idea sharing to the type of “generative engagement” described by Glasser that harnesses the collective energy of the group and enables them to move forward to solve a problem or create something new. I believe it is both possible and necessary to have this type of involvement within the community college, and my goal through this study was to identify the keys to success from community colleges that are already experiencing it. I

feel responsible as a college leader to help facilitate effective collaboration within my own institution and to uncover information that may assist others in strengthening their collaborative efforts as well.

The use of critical realism as the philosophical approach for this study suits me well, as it closely reflects my own views of reality and how knowledge is acquired. I appreciate its focus on causal relationships within the social and political world in which we live and believe it provides the opportunity to explore how factors facilitate or impede desired outcomes. The more structured approach to case study consistent with a post-positivist approach also appeals to me as it calls for rigorous standards in demonstrating validity. I acknowledge that my understanding of critical realism as a cohesive system of thought is still developing, and I have enjoyed the journey of expanding the depth of my understanding through the course of this study.

Research Method – Multiple Case Study

The research method selected for this study was the multiple case study because of the ability of the method to reveal insights that can expand an understanding of a complex phenomenon with multiple influencing structures. Merriam (1998) noted that case studies are appropriate for advancing understanding of human perspectives and complex organizations that are organic (such as an organization) rather than static. The case study process offered the potential for providing insights that could expand an understanding of the phenomenon of cross-functional collaboration in the community college, with the ultimate goal of improving practice.

Stake (1995) differentiated between an *intrinsic* case study that focuses on a particular case that is of interest in and of itself, and an *instrumental* case study where the case is selected in order to understand something else. In this study, an instrumental case study was conducted, and the cases involved were selected based upon the information they could provide about cross-functional collaboration. Instrumental case research provided a focus on an external reality which can be studied through the perceptions of individuals (Stake, 1995). The case study is also considered *exploratory* because the purpose of the enquiry is to seek new insights and to find out what is happening in little-understood situations (Robson, 2002; Yin, 2003).

The factor that best identifies whether the study is appropriate as a case study is whether it is a “bounded” system that is being studied (Merriam, 1998; Miles & Huberman, 1994). A bounded system is a single entity, such as a person, group, policy, or community, with a finite number of members. In the multiple case study conducted for this research, the bounded system studied in each of the three cases was a community college that utilized collaboration across department to establish and implement plans to support student achievement at their college. By concentrating on the single phenomenon of cross-functional collaboration at each of these sites, my goal was to uncover the interaction of significant factors characteristic of cross-functional collaboration and to provide a holistic description and explanation of the phenomenon (Merriam, 1998).

One of the challenges of a case study is that it can be very time consuming to collect and process data at the level of detail desired for the case (Merriam, 1998). As the researcher, I had control over this problem through the site choices that I made prior to beginning the research, as well as through the development of the study. Merriam (1998) noted that case studies can also over-simplify or exaggerate a situation, leading the reader to have a false impression of the situation. There is also the danger that case studies can reflect the bias of the researcher. I have considered these potential weaknesses and have taken steps throughout the research process to check for errors in interpretation and clarity of conclusions.

Study Sites

For this study, I conducted a multiple instrumental case study of three institutions. Three sites were included to provide an opportunity for triangulation of the findings and to strengthen the precision and validity of the findings (Miles & Huberman, 1994). As a multiple case study, each case was considered a unique, bounded entity and studied independently to gain a thorough understanding of cross-functional collaboration at that site (Stake, 1995). As an instrumental case study, each selected case was considered instrumental in and of itself to learning about effective cross-functional collaboration. Coordination among the individual cases occurred in order to replicate the study and test my findings. I limited the number of cases to three because of the need to balance depth of inquiry with breadth of findings. Creswell (2005) noted that "the overall ability of a

researcher to provide an in-depth picture diminishes with the addition of each new individual or site” (p. 207). Yin (2003) proposed that two or three replications of a study are sufficient when the questions at hand do not demand an excessive degree of certainty and the conditions are not expected to produce much variation in the phenomenon being studied.

Case sites were purposefully selected to promote an understanding of effective collaboration occurring across functional departments in order to support student success. Choosing study sites and participants based on whether they are information rich is referred to as *purposeful sampling* (Creswell, 2005). The specific purposeful sampling strategy I implemented is *extreme case sampling* in which cases that are particularly noted for successful cross-functional collaboration were selected. To identify colleges that meet these criteria, it is common to gather recommendations from others (Creswell, 2005). The related literature provided an example of this method in the study conducted by Kezar (2006).

To develop a list of potential colleges to include in the study, I contacted educational leaders at both the Washington State Board for Community and Technical Colleges and the Oregon Community College and Workforce Development Office to solicit recommendations of colleges that met the following selection criteria.

1. Cases must be using cross-functional collaboration to develop and implement solutions to improve student success at their campus.
2. The people involved in the cross-functional collaboration include front-line individuals most familiar with the problem.
3. The collaborative team has been successful at moving forward to invent solutions, solve problems, or create something new.
4. The college has a reputation among peer institutions for effective cross-functional collaboration.

I also conducted an internet search to identify community colleges that have received recognition for collaborative projects they have engaged in to promote student success. This search focused on websites of national higher education organizations and

professional conferences in order to identify recent reports that have been written, honors that have been awarded, or other recognition that has been given.

From this search, ten colleges that met my criteria were identified. To narrow the selection, each college was contacted so I could identify their interest in participation and gain initial information about the collaborations that were occurring across departments to support student success. I collected information from nine of the colleges. The tenth college didn't respond to my initial inquiries. The three colleges selected for this study were chosen based upon the following factors:

- Affirmation from the college that collaborative work was indeed occurring across departments to support student success.
- Clear examples cited by the institution of work that has been carried out as a result of the collaborative teamwork that occurred across departments.
- Ability to participate in a timeframe that met the schedule needs of this study.
- Variety among institutions.

At each site, the college identified a collaborative effort that they felt provided a strong example of collaboration across functional departments to support student success. If the college identified more than one significant effort that utilized collaboration across functional departments to support student success, the college was invited to identify those they thought would provide the most information about how collaboration works at the campus. It was recognized that individuals from more than one team might have relevant input about the factors that influence collaboration across departments and therefore should be included in the study. Identification of a collaborative effort at each site provided a base for selecting interview participants and establishing a context for inquiry.

Study Participants

At the selected case sites, I interviewed administrators, staff, and faculty who were involved with collaborative work across functional departments to support student success. Individual interviews were conducted with people who participated on a collaborative team in order to gain an understanding of the way collaboration occurs and the factors that influence it. At each case site, I worked with an administrator to identify

potential individuals to be interviewed, based upon the following participant selection criteria:

- Staff, faculty, and administrators that directly participate on the selected collaborative team.
- Employees that had an impact on the collaborative work of the group or who might provide additional insight through a different perspective.
- Key administrators who had responsibility for student achievement or who played an instrumental role in the collaborative work of the group.

Each individual identified as a potential participant was invited to participate and provided with an informed consent letter and form. Eight to ten individuals representing a diversity of administrators, faculty, and staff were interviewed at each site to ensure that multiple perspectives were included and to allow for the potential of disconfirming information. At each site, a key administrator with the responsibility of student achievement was included as an interview participant in order to provide insight related to the cultural and structural changes that have been implemented to support collaboration within the college.

Data Gathered

Data was collected at three case sites through interviews and review of written and electronic documents to gain insight related to the research questions guiding this study. The cases were community colleges that use cross-functional collaboration to develop and implement solutions to improve student success at their institution. A series of interview questions were developed to gather participant viewpoints and provide information related to the three research questions below:

1. What does cross-functional collaboration look like at a community college known for strong collaborative work?

The first set of questions was crafted to gain a broad understanding of the processes and characteristics of collaboration occurring at the community college. My goal was to understand the context in which collaboration occurred. Areas of particular interest included whether the collaborative processes were highly organized or more spontaneous, whether they were long-term efforts or short processes to support a specific

goal, how the collaborative work was initiated, how the team moved from planning to implementation, and how team member's responsibilities changed when they become part of a collaborative team. Specific questions that were asked include the following: Where do you see collaboration occurring across departments at your college to support student achievement? Would you describe the collaborative work you have participated in? How effective has your collaborative team been at establishing ways to improve student achievement? When you became part of the collaborative team to work on improving student achievement, did your regular responsibilities with the college change? If so, how? How do you know if the work you are doing is important to the college? How has the team kept others in the college informed about work to improve student achievement? What has been the key to moving plans forward once they have been made? Does collaboration occur from the top down, or from the bottom up?

2. What organizational factors influence internal collaboration in the community college?

Data collection related to the second question focused on factors within the college that either facilitated or hindered effective collaboration. The questions were: What has enabled your group to successfully come together to develop and implement solutions to improve student achievement? What organizational factors have facilitated the ability to collaborate effectively? What organizational factors have hindered the ability to collaborate effectively? What could the college do differently to better support cross-functional collaboration? Would you consider the culture of your college to be collaborative?

3. How does college leadership facilitate cross-functional collaboration in the community college?

The third set of questions referred to how the president and others in upper management positions impact the ability of college to engage in effective internal collaboration. Areas of exploration included the role the president had taken in supporting the collaborative work, as well as attitudes and actions that support collaborative activity. The influence of the team leader was also explored. Have senior administrators supported your cross-functional collaborative work? How do you know?

Can you provide examples of specific ways senior administrators have either facilitated or hindered the work of your team? Would you like to share any other information based on your experience? How does the team leader influence collaboration?

Data Collection Procedures

Creswell (2005) explained that the widest variety of data collection methods is available for use within the case study. Some of the multiple forms of data collection include documents, archival records, interviews, direct observation, and physical artifacts (Yin, 2003). The methods of data collection used for this study were interviews, participant observation, document review, and archival records. The documents I reviewed included flyers, brochures, web pages, summary sheets, newsletters, college catalogs, institutional research reports, grant reports, and booklets related to the collaborative work occurring at each college.

The primary source of data collection for this study occurred through individual interviews. Stake (1995) noted that interviews provide an effective way to obtain both a description and an interpretation of a phenomenon from people who have observed the situation first hand. Data collection began in January 2009 and was completed in March 2009. A total of 31 face-to-face interviews were conducted with community college staff from three colleges located in the Northwest and Midwest regions of the United States. Each interview was tape recorded using a digital voice recorder to ensure accuracy of information. I transcribed audiotapes verbatim with the assistance of one transcriber. An Informed Consent Document was sent to participants prior to each interview. Prior to beginning the interview, each participant was provided an opportunity to ask questions before signing the form.

Interviews ranged in length from 30 to 90 minutes. Average length was approximately 1 hour. Data was organized and stored securely in electronic folders when feasible, and paper documents such as margin notes, transcribed interviews, consent forms, collected documents, and notes were stored in a secure file. After interviews were transcribed and supporting documents were gathered, a systematic analysis of data was undertaken. The data analysis procedures are described in the following section.

Data Analysis Procedures

From a critical realist perspective, the aim of analysis is to account for events, rather than simply to document their sequence. “We look for an individual or a social process, a mechanism, a structure at the core of events that can be captured to provide a *causal description* of the forces at work” (Miles & Huberman, 1994, p. 4). For the data analysis phase of this study, I implemented the three-tier process proposed by Miles and Huberman (1994) that includes the following activities: data reduction, data display, and conclusion drawing/verification (p. 10). *Data reduction* refers to the process of “selecting, focusing, simplifying, abstracting, and transforming the data” that appear in notes, documents, and transcriptions (Miles & Huberman, 1994, p. 11). The process of data reduction began once the interviews were transcribed in their entirety, and it continued to some degree throughout the data analysis process. Utilizing a data reduction process enabled me to identify key points and decrease the amount of data I focused on to a more manageable size. *Data display* is the second major activity in the process of analysis. Rather than displaying information solely through a large amount of text, I applied the concept of data display to present data in a visual manner using matrices and charts. For each of the major points, I have included a graphical presentation of the data to provide the reader with a visual overview of the section and make it easier to see connections. During the data analysis phase, putting the data in a graphic form enabled me to more quickly visualize what was occurring and to draw connections and assertions. The third stream of analysis activity—*conclusion drawing and verification*—involved the process of deciding what the data meant. The patterns, regularities, and connections that were observed throughout the study were firmed up during this activity and underlying mechanisms and structures were identified. Miles and Huberman stressed that conclusion drawing should be accompanied by a verification process of testing the validity and reliability of findings.

The steps below describe the procedures I implemented as I worked through the data analysis process:

1. Transcribed 31 interviews verbatim.

2. Read through text of interviews multiple times, highlighting important points and making periodic notes. Read through other sources of case data.
3. Data reduction – reduced transcribed documents to create one electronic file for each case containing major points and quotes from each participant.
4. Placed data in categories according to patterns that corresponded to each research question.
5. Data Display (within case) – Created a matrix of descriptive information for each case site organized by themes within each research question.
6. Developed a description of each individual case and identified key factors that emerged from analysis of the data.
7. Data Display (cross-case) – Assembled descriptive data from each of the three cases into a “meta-matrix,” placing like data together.
8. Conclusion drawing and verification - Clustered the data on the meta-matrix according to themes and key factors that emerged across the multiple cases for each research question.
9. Applied tactics for testing findings.
10. Prepared an interpretation of findings.
11. Returned to key research literature to examine its correlation with my findings.

The presentation of findings included in Chapter 4 describes findings from the cross-case analysis only. Each section was structured to examine one of the research questions. Information from the individual cases was dispersed throughout each section. Yin (2003) explained that when the presentation of findings focuses on the results of the cross-case analysis, summary information about the individual cases, if not ignored altogether, is often presented in abbreviated form. The data display that resulted from each individual case analysis is included in the Appendix.

In summary, the case study research methods used in this study involved an analysis of interviews and document review in order to develop an understanding of cross-functional collaboration in the community college and the factors that influence it. A data analysis process that implements data reduction, data display, and conclusion drawing/verification was used to guide this phase of the study. Each case was treated as a

comprehensive case in and of itself to learn as much about the contextual factors as possible before comparing findings of the three cases to one another.

Strategies to Ensure Soundness of Data

Strategies were employed within this study to ensure trustworthiness of the findings and strengthen the quality of conclusions. As the post-positivist philosophy guiding this study, critical realism values rigorously defined standards that stand up to the critique of traditional social scientists (Yin, 2003). Therefore, maintaining traditional standards to examine the soundness of data was appropriate for this study. I therefore used the criteria of internal validity and external validity as standards to evaluate the overall trustworthiness of the study. I also applied the criteria of reliability and validity to the data collection process. This section describes the evaluation criteria that were used, lists potential threats, and presents the strategies that were implemented to ensure soundness of data, data analysis, and interpretation. The information presented below is organized according to whether the criteria support the trustworthiness of the study or the validity and reliability of data collection techniques.

Trustworthiness of the study

The trustworthiness of this study was guided by the standards of internal and external validity.

Internal Validity

Internal validity refers to whether the findings of the study are consistent with reality and provided an authentic portrait of what was being examined (Miles & Huberman, 1994). It also refers to the degree to which inferences could legitimately be made from the data collected in the study to the theoretical conclusions that were drawn from the data.

Threats to internal validity occur when the researcher's ability to draw correct cause and effect inferences are hindered (Creswell, 2005). This problem has the potential of occurring if the researcher assumes a framework or theory of what is happening in the case rather than allowing an interpretation to emerge from the data (Robson, 2002). This required that appropriate measures were taken to show how the interpretation was reached. The process for doing this was described earlier in the design section. The

matrices of descriptive data collected at each site are included in the Appendix to allow the reader to examine condensed data and the categories that were formed.

Another threat to internal validity is not considering alternative explanations of the phenomena being studied. This was counteracted in this study by replicating the study at three independent sites and considering alternative interpretations that arose.

Within critical realism, knowledge is considered objective because it is developed outside of our subjective senses. Knowledge is also considered fallible, so claims of knowledge are always open to refutation by further information. In the quest for objectivity, a critical realist study therefore considers alternative theories and attempt to refute information rather than confirm it. Examining alternative theories and looking for refutations to the findings was applied to strengthen the external validity of my study.

The strategies I used to achieve internal validity within my study included *replicating* the study at three independent sites, *pattern matching* among data and against the initial propositions of the study, carefully *building explanations* that incorporate evidence and consider alternatives, and examining and testing *rival explanations* as the data was explored (Yin, 2003).

External Validity

External validity refers to the generalizability of the findings beyond the immediate case study. Yin (2003) explained that generalizability should occur in relationship to theoretical constructs rather than to other sites. The ability to generalize findings to a theory is an important concept within critical realism because it enables knowledge of a causal mechanism to be expanded. Research is intended to result in a set of theories about the nature of the world, which gives the researcher's best approximation to truth about the world (Yin, 2003). The work of science is to then take these theories and seek to transform them into deeper knowledge of the world by exploring the higher-level mechanisms that are rooted in and emergent from the more basic one (Collier, 1994).

Threats to external validity occur when the ability to draw correct inferences from the data to other settings and situations is threatened (Creswell, 2005). Factors which may threaten external validity include findings being specific to the particular group or context

in which the study took place. Specific and unique historical experiences related to the study may also affect the external validity of the findings (Robson, 2002).

External validity is strengthened within a single site case when findings can be generalized against a theoretical base derived from the literature. This may be referred to as analytic or theoretical generalization (Robson, 2002; Yin, 2003). In a multiple case study, external validity is strengthened by replicating the study at a second or third site where the theory has specified that the same results should occur. When such direct replications are made, the results have more potential for providing strong support for the theory. In this study, external validity was strengthened by the study's relationship to the theoretical propositions derived from the literature review and through using a replication approach within a multiple case study.

Validity and Reliability of Data Collection Techniques

The criteria for determining a good data collection instrument is whether the data it produces is reliable and valid. Within this study, validity and reliability are the standards that were used to evaluate the data collection processes.

Validity

Data is considered valid if it provides an accurate representation of the phenomenon being studied and provides an authentic portrait of what is being examined. The threat to validity in the data collection process is that inaccurate or incomplete data might be collected. By applying measures of validity, the researcher can have confidence that the data collected accurately reflect the perceptions of participants and sheds light on the aspect of reality being studied. This fits with critical realism's view that although reality cannot fully be known, it is through inquiry and research that knowledge of the world is increased (Danermark et al., 2002). By examining multiple sources and going beyond initial appearances, knowledge of underlying structures that influence observable entities may be identified (Collier, 1994).

The strategies used to test for validity of data include the triangulation of data by using multiple sources of evidence at each case site, establishing a chain of evidence that details how conclusions were reached, and implementing member checking by having key informants review the draft case study report to provide feedback about the accuracy

of the findings (Yin, 2003). In this study, triangulation occurred through the use of interviews with multiple participants, multiple data collection methods, and comparison of three independent cases.

Member checking, which involves the researcher asking participants whether their perceptions have been represented appropriately, is a strategy I implemented on a continuous basis throughout the study, then again at the end when conclusions were drawn (Guba & Lincoln, 1982). To reduce this risk of incomplete or inaccurate data, I also tape recorded each interview.

Reliability

Reliability is the stability and consistency with which something is measured. (Robson, 2002). Within the data collection phase, reliability is seen to exist when the instrument used for data collection produces consistent results. Yin (2003) explained that the objective is to be sure that if a later investigator followed the same procedures and conducted the same case study all over again, the later investigator should arrive at the same findings and conclusions as the first (p. 37). In a post-positivist study, reliability involves “not only being thorough, careful, and honest in carrying out the research, but also being able to show others that you have been” (Robson, 2002, p. 94). Yin (2003) suggested that reliability is best demonstrated by doing the same case over again at another site.

Reliability is an important concept within critical realism because truth is seen as an objective reality that exists independently of our senses. To increase our understanding of what is true, we must test our conclusions and always be open to refutation by further information (Collier, 1994). By conducting a study with reasonable care and repeating the study at two additional sites, the reliability of my study was demonstrated and the strength of my findings was increased.

Within this multiple case study, my goal was to replicate the study at each of the sites to identify whether the results were consistent among all three locations. This approach proposed by Yin (2003) differs from the approach where each site is treated as a sample of the larger population. Yin contended that applying sampling logic to case studies is misplaced because case studies are not the best method for assessing the

prevalence of a phenomenon. Instead, my goal was to compare my findings in the initial study to theoretical propositions, to replicate the same study at two additional sites, and to determine if the conclusions were consistent at each site. Each individual case was treated as a complete study in which convergent evidence was gathered and conclusions were drawn. The matrices of descriptive data collected at each site are included in the Appendix to allow the reader to examine the condensed data and the categories that were formed at each site. The presentation of findings section of the report focuses on the aggregate findings that arose from a cross-case analysis of the data.

A *case study protocol* was developed to provide consistent procedures that were followed within each case. A case study file was developed to house the documents that were collected, observation notes, transcribed interviews, and data display matrices.

Strategies for Protection of Human Subjects

I have completed a training module related the ethical use of human participants in research. This was done through the National Institute of Health's on-line course for the Protection of Human Research Subjects, and a certificate of completion has been filed with the Human Protection Administrator at Oregon State University. Following the approval of this research proposal, application was made with the Institutional Research Board (IRB) at OSU for review and approval to conduct the study. No recruitment or research was initiated until approval was given by the IRB.

During the research study, a written informed consent form was provided to each prospective participant and case study site so he or she could voluntarily decide whether to participate in the research process. Each prospective participant was provided with a written statement that explained the research, the expected duration of participation, and a description of the planned process. Each participant was given the opportunity to ask questions and have those questions answered before being provided with the informed consent form to sign. Finally, I have kept all data regarding the research confidential as agreed to in the informed consent documents. Throughout this research process, I have abided by the standards set forth by the Institutional Review Board at Oregon State University.

CHAPTER 4 – PRESENTATION OF FINDINGS

This chapter provides a description of the findings from the analysis of three case studies conducted at community colleges that used cross-functional collaboration to develop and implement solutions to improve student achievement. Data that was analyzed included transcript text from 31 interviews with college administrators, faculty, and staff; documents; and electronic materials retrieved from college websites. The chapter is organized into three sections. Section one provides a profile of the three community colleges included in this study and describes the instance of cross-functional collaboration explored at each college.

Section two presents the findings associated with the study's three research questions: (a) What does cross-functional collaboration look like at a community college known for strong collaborative work? (b) What organizational factors influence cross-functional collaboration in the community college? and (c) How does college leadership facilitate cross-functional collaboration in the community college? The section begins by providing evidence for the soundness of the data that was collected and analyzed within the study. This offers a foundation for the trustworthiness of the findings associated with the three research questions. The research questions then supply the structure for reporting results from the cross-case analysis conducted for each research question. The information provided in section two describes the cumulative findings of the study that surfaced after individually assessing the information generated through the independent case studies and comparing patterns that existed across all three colleges.

Section three summarizes the overall findings in preparation for the discussion in Chapter 5 that ties specific findings to the literature on collaboration and identifies implications for practice and policy and future research.

College Profiles

This section provides a brief description of each of the three colleges included in this study and information about why each college was selected for inclusion, the people interviewed, and an overview of how collaboration occurred at the college. The purpose of this section is to provide a description of the context in which the cross-functional collaboration at each college occurred. Each college profile is divided according to the

following four subheadings: (a) college and participant selection, (b) program description, (c) collaborative structure, and (d) college impact.

The colleges and participants in this study were assured confidentiality of individual and institutional identity. To maintain that commitment, study participants and the names of the institutions in which they worked have not been cited. The three colleges included in this study are referred to as College A, College B, and College C. Study participants at each institution were assigned a number. Participants are referred to by their assigned number, followed by the letter that identifies their college (i.e., Participant 1A). After the first reference to a participant, all subsequent citations relating to that participant are abbreviated (i.e., Participant 1A is denoted as P1A). Findings supported by documents collected in this study are referenced in a similar manner with an assigned number followed by the letter of the institution (i.e., Document 1A).

At each site, I worked with a primary contact to identify a collaborative effort at the college where staff worked across departmental lines to support student achievement. The selected focus of collaboration at each site was comprised of one or more teams which served as a starting point for exploring cross-functional collaboration at the campus. At times the discussion expanded to include other instances of collaborative work in order to provide greater insight and reflect the breadth of understanding from the participants involved. Table 3 provides demographic data for the three case study sites included in this study.

Table 3

Demographic Features of Case Study Sites

Feature	College A	College B	College C
Focus of Collaboration	Achieving the Dream	First Year Experience	Center for Teaching and Learning
College Location	Northwest	Northwest	Midwest
Unduplicated headcount	4,663	12,932	30,925
Number of employees	374	632	1,233
Type	Public	Public	Public

Location	Rural	Suburban	Suburban
People interviewed	Upper Admin (2) Faculty (4) Dean (1) Directors (3)	Upper Admin (4) Faculty (4) Dean (1) Director (2) Support staff (1)	Upper Admin (2) Faculty (2) Deans (2) Asst. Deans (2) Directors (1)

Note. Numbers in parentheses indicate the number of interview participants in that position.

College A

With an annual enrollment of approximately 4,663 students (1,790 FTEs), College A was one of the smallest community colleges in its state. The college served a large rural area of 4,600 square miles where educational attainment was low (29 percent of adults did not have high school diplomas), per capita income was 30 percent lower than the state's average per capita income, and 17 percent of the population indicate they did not speak English very well. Fifty percent of the student population was Caucasian and 45 percent of the students were Hispanic.

College and Participant Selection

Initial recommendation to consider College A for inclusion in this study was made by a colleague, as well as by staff at a state higher education organization, who perceived that work to improve student achievement was occurring in a collaborative manner across departments at this campus. Further examination of electronic documents available on the college's website and discussion with an administrator at the college revealed a purposeful use of cross-functional teams to develop and implement plans to support student success. The college appeared to make information about the implementation and assessment of plans readily available on the website for review.

College A was selected as a site for this study because of the collaborative work that occurred across departments to increase the success of community college students, particularly those in groups that had traditionally been underserved in higher education. The Achieving the Dream (AtD) initiative recently implemented at the college served as a springboard for collaborative work across departments to support student success. Although other collaborative work also occurred at the college, this initiative was the center of the collaborative work that was focused on student achievement. The

collaborative teams associated with AtD served as the primary focus of the study on College A's campus because of the importance and emphasis this initiative had on the campus.

Ten individuals were interviewed at College A. They were selected by an administrator at the college to provide a range of perspectives about the collaborative work occurring at the institution. The positions of the people interviewed and their relationship to the AtD initiative are shown in Table 4.

Table 4

Participants Interviewed at College A

Position of person interviewed	Relationship to AtD
Faculty Counselor	Led a strategy team
Associate Vice President of Student Services	Served on core team
Faculty – Developmental Studies	Served on a strategy team
Faculty – Mathematics	Served on a strategy team
Faculty – Office Information Technology	Served on two strategy teams
Director of Title V and Family Literacy Programs	Led a strategy team
Director, Prof. Tech Outreach, Advising, Technology	Participated as a college member
Dean of Health and Language Skills	Involved in the work of the team
Vice President of Student Services and Instruction	Served on the core team, provided overall guidance
Director of Student Support Services	Served on the Student Persistence/Achievement Committee

Program Description

In 2006, College A was selected to participate in the national AtD initiative, funded by the Lumina Foundation for Education and KnowledgeWorks Foundation. The decision to participate was based on the college's desire to increase student success, particularly among underserved groups such as low-income students, first generation

college-goers, and students of color (Document 2A). Through their participation in AtD, the efforts of the college were focused on making data-driven decisions and increasing the percentage of students who succeeded in their educational efforts. To evaluate the college's effectiveness at helping students stay in school and achieve their goals, College A tracked the number and percentage of students who accomplished the following:

- Successfully completed the courses they took with a grade of C or higher
- Advanced from remedial to credit-bearing courses
- Enrolled in and successfully completed gatekeeper courses
- Re-enrolled from one semester to the next
- Earned degrees and/or certificates.

The collaborative work centered around AtD was initiated by upper management with attention given to assuring that a variety of functional areas of the college were represented in the planning work that occurred. Faculty members were involved from the initial stages and represented two of the six staff that attended the AtD training in 2006. Immediately following the training, participants began sharing the initiative's philosophy with the campus community including faculty, student government leaders, adult basic education instructors and staff, the maintenance staff, college administrators, and the Board of Trustees.

The Vice President of Student Services and Instruction held regular information sessions that everyone from across campus was invited to attend. These sessions provided opportunity for the college community to hear what was occurring, provide feedback, and become more involved if they desired.

Collaborative Structure

Two initial teams were developed to support the work of the AtD initiative: A core team and a data team. The core team was responsible for developing a vision for AtD work, for overseeing the work to improve student success, and for maintaining a process for college-wide dialog about data findings, goals, and strategies. The data team was responsible for providing in-depth analysis of data to assist the college in decision making and in assessing effectiveness of programs.

The teams were representative of the institution and comprised of the president, the two vice presidents, the director of institutional research, a research analyst, two deans, two program directors, three full-time teaching faculty members, a faculty counselor, and the coordinator of student recruitment and outreach (Document 1A). Upper management was strongly represented on the core team because of the need to align AtD priorities and strategies with the college's strategic plan and resource allocation. Commitment of the president's leadership group was considered essential for institutionalizing and sustaining the activities initiated through the AtD process (Document 2A).

From the initial core team, two priority teams and multiple strategy teams were formed to support the priorities identified through the work of the core team. Figure 1 provides a visual representation of the structure established by the college to support the success of its students through the AtD initiative.

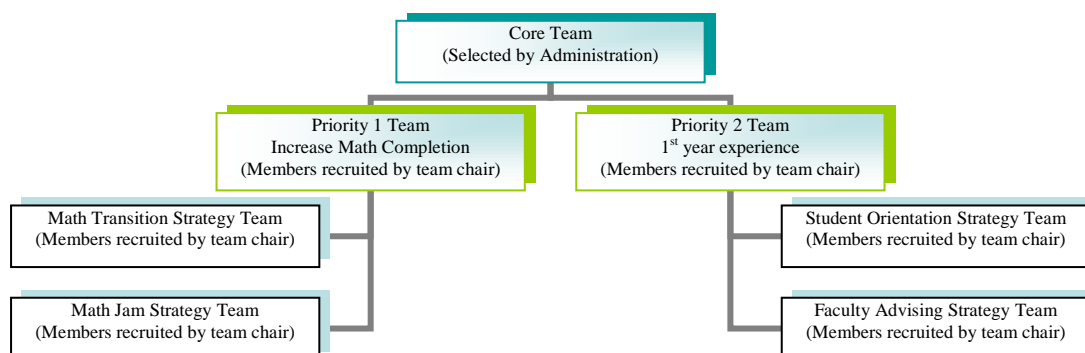


Figure 1. Team structure associated with Achieving the Dream initiative at College A.

Through the initial work of the core and data teams, two priorities were identified for the college to work on: (1) increase successful completion of developmental mathematics courses, and (2) increase retention of first-quarter students by improving the first-year student experience. Team leaders were selected to carry out the identified priorities. The priority team leaders then built their teams by identifying others they felt should be included in the mix to enable things to be done and to provide a breadth of insights from across the campus.

As strategies were developed to support AtD priorities, responsibilities were divided among team members and the breadth of the collaborative work grew as new

groups were formed to oversee each strategy. Two people were identified to lead each team focused around a specific strategy. The leaders of the strategy teams then invited other people from around campus to help them cultivate the strategies and implement their plans.

The leaders of both the priority and strategy teams extended the collaborative reach of the AtD initiative by involving additional people from across campus who had an interest in participating and contributing their insights and ideas. By using contacts and relationships among individuals, the work of AtD expanded to include anyone across campus interested in participating. Some of the new student success strategies that were developed or improved through this process included new student registration and orientation, a review of advising practices, advisor training, and the updating of the college success skills courses.

College Impact

The collaborative work to support student success at College A was largely brought about by the college's decision to participate in a national initiative that provided direction, established reporting requirements, and kept the college focused and on task. The breadth of the task required that people from across campus be involved to contribute to the generation of ideas and the implementation of plans. One participant noted that the college's participation in AtD had initiated the beginning of a culture change to a more collaborative culture (P9A). Through the sustained work of the AtD initiative, the college moved to become more of a data-driven institution, and one that relied on collaboration across departments to identify ways to help students succeed.

As a result of the AtD experience, the college made some structural changes that it intended to maintain to continue the collaborative work to support student achievement:

- (1) The college expanded the institutional research department to enable the continued collection of data to determine if strategies were effective;
- (2) the core and data teams were formally incorporated into standing college governance bodies that oversee the Instructional Council, the Enrollment Management Task Force, and the Assessment Committee;
- (3) continuing agenda items at cabinet and Board of Trustees meetings were expanded to include reference to data and decisions made by the collaborative teams;
- (4)

grant funded positions and activities, which made up almost 50 percent of College A's operating budget, were leveraged to provide additional support to student success strategies; and (5) College A planned to apply for supplemental funding to expand the college's services to students (Document 1A).

The collaborative work that occurred through AtD generated movement and an excitement across campus in several departments about developing strategies to improve student success. More staff members requested data from institutional research staff to support their decision making processes and the institution as a whole became more supportive and interested in building a culture of evidence (Document 4A).

College B

Located in the Northwestern United States, College B was a community college with a comprehensive mission focused on access and opportunity in three main mission areas: (1) the first two years of a university education; (2) career development through workforce education; and (3) basic skills education in many areas, including General Educational Development (GED) and English as a Second Language (ESL). College B served approximately 12,932 students per year, which included a sizeable Hispanic population. Twenty-six percent of the student population had self-identified as Hispanic and 67 percent as Caucasian.

College and Participant Selection

College B was recommended for inclusion in this study by staff at a state higher educational organization because of the work they perceived was occurring in a collaborative manner to support student success. In talking with my primary contact at the college, it was identified that the First Year Introduction (FYI) initiated in 2004 was one of the more collaborative efforts across the college to support student success. FYI was selected as the starting point for exploring collaboration on College B's campus because of the continued involvement of people across campus to support this activity and the evidence of success from their efforts.

Twelve people were interviewed at College B about the collaborative work occurring at the college. The positions of the people who were interviewed and their relationship to FYI are provided in Table 5.

Table 5

Participants Interviewed at College B

Position of person interviewed	Relationship to FYI
Vice President of Student Services	Developed initial plan; oversaw operation
Assistant Professor/Counselor	Served as a seminar leader
Assistant Professor/Counselor	Supported and participated in FYI
Vice President of Administration	Provided financial input and facilities support
Dean of Career and Workforce Ed	Developed and implemented the initial plan
Director of Student Retention & Success	Managed the program
President (former Vice President of Instruction)	Committed financial support
Instructor – Information Technology	Served as a seminar leader
Assistant Vice President for Transfer Education	Provided input; encouraged faculty participation
Assistant Professor – Mathematics	Served as a seminar leader
Director of Early Childhood Education	Assisted with curriculum development
Office Assistant, Student Success & Retention	Provided office support

Program Description

The college talked about initiating a mandatory orientation for new students for several years but experienced limited success and very little enthusiasm. Things changed in 2003 when the Vice President of Student Services and the newly hired Director of Student Success and Retention worked together to propose a new-student orientation which became known as FYI.

The first session of FYI was implemented at College B in the fall of 2004. It was developed as a transition experience that was mandatory for all of the college's first year degree- and certificate-seeking students. The goal of FYI was to assist students in their transition to college so student retention would increase and the number of students on academic probation would decrease. FYI assisted new students in their transition to

college by providing an introduction to college life and preparing them with knowledge that would help them become successful students.

The timing for this project was described by Participant 5B as a “perfect storm” in which several conditions came together all at the same time to help contribute to the successful implementation of the project. First, the president had talked for several years about the desire to have a mandatory orientation of some type to help prepare students for a successful educational experience. Second, faculty had become increasingly disappointed with how ill prepared students were when they entered the classroom. Many didn’t even come the first day with paper and a writing utensil, and faculty felt it was getting worse each year. Third, federal and state legislation related to financial aid eligibility for students provided increased impetus for exploring a way to help students complete their education in a more timely manner. Fourth, The Community College Survey on Student Engagement conducted at the college indicated that student engagement was lower than desired. It was identified that the college needed to do more to help students understand the resources available to them, connect with faculty on an informal basis, and help students develop stronger connections with one another and the college community. And fifth, the Vice President of Student Services committed to make this work and hired someone in the role of Director of Student Success and Retention that she knew could lead the process.

Collaborative Structure

FYI was an example of an effort that began as an idea from upper administration and was then successfully developed and implemented in a collaborative manner. The desire for such a program originated with the college President. The Vice President of Student Services committed to making it happen and took responsibility for developing the structure for the program. She communicated her plans and received input and support from the President and other members of his cabinet before introducing the concept to the rest of the college community. The full commitment of the president’s cabinet was demonstrated by the designation of \$100,000 of instructional funds to support the development and implementation of the project.

Once the proposal for FYI was approved, the president held an all-faculty meeting to let people know the purpose of the project and the commitment of the college to make it successful. The Director of Student Success and Retention then met with small groups and individuals to answer questions, request their feedback, and seek their involvement. As FYI was being developed, bi-monthly updates were given to the college community to keep them informed of where the college was in the development process. Task forces were formed to develop content and implement the logistics. Faculty and staff were recruited to serve as seminar leaders, and training was provided to prepare staff to lead the students in a consistent manner and to prepare them for their college experience. An ongoing process of evaluation and revision was also established to assure FYI remained relevant for students.

From the initial inception of this program, FYI was considered a program that needed strong involvement from all areas of the college if it was going to succeed. Although the project was driven by student services, collaboration across departments occurred from the very beginning as individuals from instruction, student services, and administrative services gathered to develop the details of the experience and build curriculum.

College Impact

The result of this collaborative work was a 20-30 percent increase in student retention and reports by students that they were much more comfortable about college life and expectations (Document 1B). Student email and library use also increased significantly and faculty and staff expressed that students entered class better prepared to succeed. Document 1B explained, “FYI has led to a much more collaborative atmosphere that focuses on student learning and success. It has been a great catalyst for culture change on the [College B] campus.”

College C

Located in the Midwestern region of the United States, College C was the second largest community college in its state. The college operated in a highly diverse service area and served 30,925 students annually. The district served all or part of 26 communities, covered 139 square miles, and had a population of about 400,000. College

C was a member of the League for Innovation in the Community College and was one of 12 colleges selected in 2000 to be a Vanguard Learning College and serve as an incubator for the learning college concept.

College and Participant Selection

College C was originally identified as a potential case site for this study based upon a learning abstract presented on the website of a national higher education organization. The abstract described a comprehensive first-year student support program called the First-Year Experience that was developed through a college-wide collaborative effort focused on helping new students succeed. Discussion with college administrators revealed that College C functioned in a collaborative manner in a large number of areas and that all major projects were developed collaboratively (P1C). While the First-Year Experience for new students certainly provided a strong example of cross-functional collaboration to support student success, it was recommended by the college that I focus on the Center for Teaching Learning (CTL) as the initial point for my research about how collaboration occurs across departments at the college.

Nine individuals were interviewed at College C about cross-functional collaboration to support student achievement. The positions of the people interviewed and their relationship to the CTL are presented in Table 6.

Table 6

Participants Interviewed at College C

Position of person interviewed	Relationship to CTL
Instructor, Communications	Coordinated program that was part of the CTL
Instructor, Sociology	Coordinated program that was part of the CTL
Vice President of Student Services	Supported work of the CTL
Assistant Dean of New Student Retention	Directed the first-year experience
Dean of Academic Development and Learning Resources	Managed the CTL, library, and other areas
Interim Vice President of Academic Affairs	Maintained responsibility for the CTL
Director of Nontraditional Learning	Directed a program within the CTL

Assistant Dean, CTL	Directed the work of the CTL
Dean of Counseling and Advising	Previously directed the work of the CTL

Program Description

The primary role for the CTL was to advance teaching and learning in an environment where innovation was encouraged, supported, and rewarded. The CTL provided professional development opportunities to all college employees so that innovative learning-centered instruction and services could be provided to their students and community. The CTL was a very central entity on the campus, not only for instructors but also for others. Over 160 workshops and other learning opportunities were offered each semester for custodians, groundskeepers, support staff, faculty, all the way up through deans in order to help support the staff's responsibility to have a positive impact on student success. The CTL provided a primary resource for supporting and furthering the college's commitment to being a learning college.

The CTL was part of the academic affairs division, but it also supported the human resources function of providing staff development for all employees within the college. Up until 2006, the work of the CTL was partially funded by a Title III grant. Since that time, funding was provided from the college's operating budget. The work of the CTL was managed by an assistant dean whose primary responsibility was the CTL. The Dean of Academic Development and Learning Resources provided administrative oversight and support for the programs offered through the CTL. The continuous improvement model developed by the college was used to assess the effectiveness of the professional development work of the CTL and to determine which programs had the best attendance and response. The new faculty orientation and mentoring process was also under the CTL, as was online and nontraditional learning.

Collaborative Structure

Participant 2C described the work of the CTL as "collaborative by design" because of the structure implemented within the center. Four committees were developed to provide feedback and input about processes used to deliver professional development opportunities and identify topics for future workshops. The committees were comprised of individuals from across the campus who served as liaisons representing the needs of

the group that they each represented. The structure of the partnerships that guided the professional development opportunities of the campus are visually presented in Figure 2.

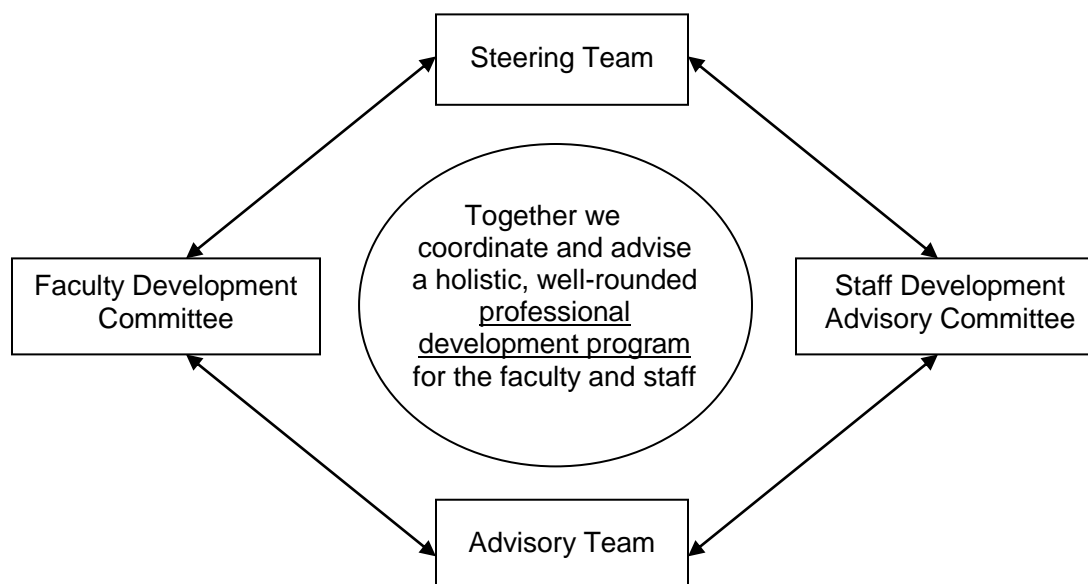


Figure 2: Structure supporting the work of the Center for Teaching and Learning at College C.

Four teams were created to provide guidance for the work of the CTL. The role of the *Faculty Development Committee* was to review full-time faculty requests related to professional development initiatives and to screen nominees for faculty awards. This committee was comprised of 10 faculty representing six different areas of instruction who met twice a month to conduct their responsibilities. The *Staff Development Advisory Committee* was comprised of 14 non-faculty staff members from across the college. This committee met four times a year to provide information and engage in discussion about the training and development needs for support staff, administrative classified staff, and administrative staff at College C. Committee members helped to determine the classes to be offered each semester and worked with the CTL to promote training classes for staff. The *Advisory Team* was comprised of 18 campus leaders who represented specific areas of interest on the campus (i.e., diversity, honors program, non-traditional learning, library, and grant writing). The members of this team served as training resource people, identified resources, and recommended classes that would be of value for the campus

community. The *Steering Team*, comprised of three CTL staff members and an assistant dean, provided the front-line work to develop, implement, and advertize the course offerings. Together, the four committees worked to assure that a full array of approximately 160 classes each quarter was available to faculty and staff seeking professional development opportunities.

The structure established to guide the learning opportunities offered through the CTL was seen to encourage broad participation from the campus community and to be an effective model for producing results. Numerous departments were involved in supporting the work of the CTL by assuring their staff members were contributors and participants in the workshops. For example, the student development department was a contributor to workshops and CTL programming. Student development staff members participated as leaders in many of the workshops and contributed by taking part in workshops as traditional participants.

While the CTL provided an initial basis for the discussion about collaboration at College C, each conversation ultimately turned to the “College C way” and the manner in which people interacted with one another to achieve their common goal of student learning, student development, and student success. Two documents appeared to play a primary role in guiding the collaborative work on campus to support student success: the Promise Statement (Document 4C) and the Eight Expectations of College Staff (Document 5C). Participants I spoke with expressed a common understanding that the purpose of every employee at College C was to support student success. The Promise Statement proclaimed, “We promise to provide a student-centered environment and to focus all college staff and resources on student learning, student development, and student success.” The Promise Statement was located in college publications, on the website, and even painted in ten-inch letters on a classroom wall to remind students and staff alike of the college’s commitment to students. The promise statement was designed to be central to the collaborative work occurring on campus in that it was intended to guide the focus of teams and remind participants of why they were working together to achieve results.

Another document that influenced collaboration at College C was the Eight Expectations of College Staff. In 2001, the president of the college was asked to share his words of wisdom in a leadership workshop with a group of administrators. There were eight points that he presented to them. Participants saw value in the information presented and shared the President's vision with the rest of the college. The eight expectations, summarized in Table 7, provided insight into the leadership style of the president. They showed the values he endeavored to live by and what he expected of others. The eight expectations were incorporated into the life of the college by making them available to all employees via a small wallet size card and an expanded version printed on a full-sized page for mounting on an office wall. The college incorporated the standards in the hiring expectations for new employees and in the evaluation process of continuing employees.

Table 7

Expectations of College Employees Identified at College C

Eight Expectations of College Staff

As professionals, employees in our organization:

1. must be **team players**
 2. should be **risk takers**
 3. should be **self-starters**
 4. must be **positive, upbeat, optimistic**, and able to **set a vision** for his/her area
 5. must be **focused on students**, student learning, and student success
 6. must understand that **communication** is an essential ingredient of **effective leadership**
 7. must be able to **get along with people**
 8. must understand that the use of **power, control, and ego must be avoided**
-

The processes and expectations established at College C provided structures that supported collaboration across departments. The CTL provided a solid base for inquiry about cross-functional collaboration occurring at the college because it housed several

programs that supported student success across campus. Many of the responses received through the interview process focused on factors within the college that impacted the broader college community, and examples extended beyond the work of the CTL. Therefore, the information gathered about cross-functional collaboration at College C had a broader emphasis than what was gathered at the other two institutions.

Summary

Three colleges were selected for inclusion in this study based upon pre-defined selection criteria. At each of the colleges, nine to twelve individuals participated in one-on-one interviews to provide information about how collaboration occurred and the factors that influenced it. A collaborative project selected by the institution served as an initial base for identifying interview participants and providing a context for the questions. The three instances of collaboration described in this section provided examples of how effective collaboration occurred across functional departments to support student success.

Findings in Response to Research Questions

This section describes the findings of my study organized in response to the three research questions: (a) What does cross-functional collaboration look like at a community college known for strong collaborative work? (b) What organizational factors influence cross-functional collaboration in the community college? and (c) How does college leadership facilitate cross-functional collaboration in the community college?

Data analysis for this study included a comprehensive review of interview transcripts and documents. An in-case analysis was conducted for each individual case. Data reduction for each case resulted in the development of electronic data files that contained key points from interview participants loosely arranged by topic. As analysis continued, data was further reduced and brief summary information was displayed for each site in table format according to key themes. A tabular summary of each case analysis is presented in Appendices A, B, and C as part of the chain of evidence.

A cross-case analysis was conducted to organize data into themes that emerged as findings across all three colleges. The information provided in this section centers on the findings generated from the cross-case analysis. Individual case findings are not

presented separately in this report, but are rather dispersed throughout each section to provide examples and deepen insight. By structuring the report around the cross-case analysis, attention is focused on the themes identified across all three colleges and the conditions under which those findings occurred (Yin, 2003). Structuring the report in this manner reduced redundancy in the presentation of findings. It also strengthened the value of the study for other colleges by presenting common themes that may have application at their institutions. By focusing on themes found across all three case studies, the most significant points were identified and the external validity of the study was strengthened. Tables included in each section provide a parallel comparison of information across the three colleges and demonstrate similarities as well as differences among the cases.

The section begins by providing evidence for the soundness of the data that was collected and analyzed within this study. This provides the foundation for the trustworthiness of the findings associated with the three research questions. Focus is then turned to the presentation of findings related to the research questions. Information related to the research questions is organized first by research question, then by themes identified through the cross-case analysis. Examples and quotes from individual participants are included to elaborate on the theme and provide a basis for understanding the study findings.

Evidence of Soundness in Data, Analysis, and Interpretation

This section describes the strategies applied to research findings to ensure soundness in the collection, analysis, and interpretation of data. The data collected through this study was verified through strategies that demonstrated: (a) validity and (b) reliability of the findings. The themes and interpretations that emerged were verified through strategies that demonstrated (a) internal validity and (b) external validity.

Verification of Data

In keeping with the tenants of the post-positivist philosophic approach, the standards of validity and reliability were applied to assure the information gathered provided an accurate picture of cross-functional collaboration.

Validity. Data was considered valid if it provided an accurate representation of the phenomenon being studied. To verify that data collected through this study provided an accurate representation of cross-functional collaboration at the three case sites, three measures of validity were applied: triangulation of data, a chain of evidence, and member checking.

Triangulation of data occurred through the use of multiple sources of data as well as through multiple forms of data. Multiple sources of data were collected through a minimum of nine interviews conducted at each site. Interviewees included people from a range of positions on each campus that provided multiple perspectives. Interviews were tape recorded and typed verbatim to provide an interview transcript that served as the primary source of data for my analysis. Triangulation occurred by comparing information received from multiple participants at the same site. As themes emerged, transcripts were again reviewed to identify: (a) documentation related to the theme, and (b) potential falsification of the theme. Potential falsification of a theme involved first comparing the summary of findings from the individual cases to identify patterns that emerged. If opposing information appeared to exist, transcripts were reviewed to determine if circumstances were present to explain the differences. Only one scenario surfaced where opposing information was found (related to the impact of the physical proximity of departments on collaboration). The opposing perspectives and absence of explanatory circumstances led me to determine there was insufficient information to warrant inclusion of this factor as a theme. Other circumstances existed where a key point by one participant or college lacked multiple sources of evidence. In these situations, the point was not included as a theme in the cross-case analysis, though in some cases the point provided supporting documentation for another theme that emerged.

A chain of evidence was maintained to show the source of data at each site. Transcribed interviews provided an accessible way to check information provided by participants. A system to track participant contributions was implemented to provide an evidence link back to transcribed documents. A chain of evidence was also supported through the inclusion of case summaries in the appendix to provide an opportunity to examine connections between individual case analysis and the cross-case analysis.

Member checking occurred during the interview phase to check for understanding and clarify individuals' comments. Interviews were tape recorded to reduce the risk of incomplete or inaccurate data. I reviewed transcribed files multiple times to confirm statements and perceptions of participants. Finally, a key informant at each site was asked to review the draft findings from the case, as well as the findings from the cross-case analysis to provide feedback about the findings. Data were found to provide an accurate representation of collaboration.

Reliability. Reliability of data was demonstrated through the consistent results produced through separate case studies. Reasonable care was used in conducting the study, and the same study was implemented at multiple case sites. A consistent case study protocol was used at each of the three sites, and the same initial questions were used to guide the semi-structured interview. Though the processes for implementing collaborative teams varied from site to site and features unique to each site arose, several consistent elements arose across the institutions. These elements were categorized into themes that were consistent across all cases. The consistency of data across cases was demonstrated through the parallel comparison of data provided in tables related to each key theme.

Summary. The data collected in this study was found to provide an accurate representation of collaboration across departments to support student success. Through triangulation of data, establishing a chain of evidence, and member checking, the validity of the data was established. The process used for the study was found to provide reliable results across three separate case studies. This was verified using a consistent case study protocol across all three individual case studies.

Verification of Themes and Interpretations

The trustworthiness of the themes that were identified and the resulting interpretation was guided by the standards of internal and external validity.

Internal validity. Internal validity refers to whether the study findings provide an accurate picture of what is being examined. It also refers to whether the conclusions that are drawn from the data can legitimately be made. The use of participant quotations and implementation of a system to track quotes to the transcribed interviews provided

verification that the identified themes presented an authentic representation of cross-functional collaboration. The parallel comparison of information across the three colleges as displayed in section tables served as evidence of internal validity. The consistency of information provided across the three colleges demonstrated the legitimacy of inferences and themes drawn from the data.

External validity. External validity refers to the generalizability of the findings beyond the cases being studied. One of the ways external validity was established in this study was by using a replication approach across the three case studies. By conducting the same study at three unique community colleges differentiated by location, size of the student enrollment, and history of collaboration, the transferability of findings to other contexts was strengthened. Yin (2003) explained that two or three replications of a study are appropriate when the issue being explored does not demand an excessive degree of certainty and external conditions are not expected to produce large variation in the phenomenon being studied (p. 49). This study was limited to three case sites (two replications of the original study) due to time, resources, and characteristics of the study. Because this was an exploratory study that did not require excessive certainty and previous studies had not identified the potential for a large degree of variation to result from institutional differences, the inclusion of three colleges was deemed appropriate. The three colleges that participated in the study included representation of small, medium, and large colleges in the Northwest and Midwest regions of the United States, located in both rural and urban areas. While the three colleges included in the study may not represent all potential types of two-year colleges, the varied characteristics represented in my study provide broad applicability of the findings to other community colleges within the United States.

The findings from this study are thought to be representative of most public community colleges that are either currently utilizing or planning to utilize cross-functional teams at an administrative level to develop and implement plans to increase institutional effectiveness. However, the findings are not representative of colleges engaged primarily in other types of collaborative work such as service learning, integrated instruction, and learning communities. Collaborative activities such as these

typically occur at the instructor or departmental level and may not require the level of administrative involvement that was found in my study. As the cases in my study demonstrated, cross-functional collaboration frequently occurs at the administrative level where decisions can be made and work can occur to impact the effectiveness of the institution (Denison et al., 1996). The differences between cross-functional collaboration and other types of collaboration may lead to different findings in colleges where cross-functional collaboration is not the focus.

To further increase the potential transferability of this study, a detailed profile for each college was provided to show the characteristics and processes of the participating colleges thoroughly enough to permit adequate comparisons with other institutions. In addition, examples and quotes from participants were included for each theme and subtheme to provide sufficient description for readers to assess the potential appropriateness within their own settings. Final conclusions regarding whether the findings are consistent with collaborative experiences at other institutions is left to the reader's assessment.

The external validity of my study was strengthened by the process of comparing the themes that emerged to theoretical propositions identified from literature. The result of this comparison, presented in Chapter 5, demonstrated a general consistency between the findings of my study and the findings of other researcher on collaboration (Kezar, 2001b, 2006; Kezar & Lester, 2009; Mohrman et al., 1995). With minor exceptions, the findings of my study were confirmatory of prior theory described by Kezar (2001b, 2006) and Kezar and Lester (2009). The general comparison of my research findings to the literature also strengthened the transferability of my study, as every theme was validated by parallel findings in the literature.

Summary. The processes implemented to support internal validity within this study included the use of participant quotations for each theme and subtheme, a system to track quotes to transcribed interviews, and parallel comparison of information across the three colleges. The processes implemented to support external validity of the study included replicating the study across three study sites; selection of sites of varied size, location, and characteristics; provision of a detailed profile for each college; and

comparison of themes to theoretical propositions identified from literature. Through these procedures, the reader has the ability to identify the generalizability of the findings to the circumstances at her or his institution. Consistency among the findings of my study and previous research further strengthened the generalizability of my findings to other institutions preparing to utilize cross-functional collaboration to plan and implement projects of importance to the college. An area in which generalization of findings is not recommended is at colleges focused primarily on forms of collaboration other than cross-functional teams.

Section Summary

This section provided a description of the processes applied to ensure soundness in the collection, analysis, and interpretation of data. A variety of methods described in this section were implemented to assure that data was valid and reliable, that findings provided an accurate picture of cross-functional collaboration, and that the study provided a basis to generalize the findings to collaboration theory and practice in community colleges (Yin, 2003). Through strategies that were implemented, the collection, analysis, and interpretation of data was shown to be sufficiently sound. The next sections describe the findings that emerged in response to the three research questions that guided the study.

Research Question #1: What Does Cross-Functional Collaboration Look Like At A Community College Known For Strong Collaborative Work?

This section presents the findings in response to Research Question #1: What does cross-functional collaboration look like at a community college known for strong collaborative work? After a thorough analysis of the data, several themes emerged from across the three case studies that describe the characteristics of cross-functional collaboration discovered through this study. These themes are summarized in Table 8. Each theme is presented in this section with information provided from the individual case studies to expand understanding of the theme. Passages from interview transcripts are included to elucidate concepts and identify distinctions among the colleges.

Table 8

Themes of Cross-Functional Collaboration Across Three Community Colleges Known for Strong Collaborative Work

-
1. Arose from necessity
 2. Primed by upper management
 3. Kept on track by accountability
 4. Guided by a team leader
 5. Supported by committed team participants
-

The five themes are described in the following pages. An explanation of each is provided with examples from the three case studies that were conducted. Quotations from the data are provided when applicable as a way to give meaning to each theme.

Arose from Necessity

At each of the colleges included in this study, collaboration across departments was seen to be essential for accomplishing the goals of the project. This section provides information about: (a) factors that made collaboration necessary, and (b) challenges experienced. Not all planning efforts at the case sites utilized collaborative processes. The decision to work collaboratively across departments depended upon the project and the desired goals (P5B). For the projects that served as the focus of this study, however, collaboration was described by participants as the appropriate and necessary model to plan and implement the project goals.

Factors that made collaboration necessary. Three factors made cross-functional collaboration necessary for the projects explored in this study: (a) the size and breadth of the projects required buy-in and involvement from many individuals, (b) better outcomes were thought to be produced by working collaboratively, and (c) collaboration was expected by an internal or external entity.

The first factor that led the colleges to collaborate across departments was that the magnitude of the project required buy-in and participation from many. Each of the projects observed in this study represented a significant undertaking with a direct connection to the college's mission. The size and scope of the project made it a practical

necessity to gain the support, ideas, and involvement of many in order to accomplish the goals. At College A, for example, the AtD initiative required a five-year commitment from the college to adopt new practices and to function in a manner that would support student retention and success. College B embarked on a large-scale effort to prepare approximately 1,300 students for school during the first fall it was offered, and many others in subsequent quarters. At College C, the CTL implemented over 160 workshops each semester to provide professional development opportunities relevant to all employee groups within the college. Each of these projects was a large undertaking that needed the support and involvement of many. By approaching the projects in a collaborative manner, buy-in from the college community was strengthened. A participant from College C explained the importance of involving those who had a stake in the project:

A person wouldn't want to run and do it himself... Because [if you] bring [your plans] to that next meeting when you haven't engaged the people, they're going to have a million questions and they'll wonder where they were when this decision was made. And there can be resentment.
(Participant 2C)

Planning and implementing projects in a collaborative manner across departments was believed to contribute to greater acceptance and participation from the college community. Participant 1C expressed the perceived importance of involving a broader group in the planning and implementation of the project:

You can't get these projects done if you don't collaborate. We couldn't do it in a silo. There's no way that underprepared students could get the assistance they need if only student development headed it, or only academic affairs headed it. There has to be a cross-functional team in order to do that.

To gain support and involvement at College B, the Director of Student Retention and Success met with individuals and groups from across campus to share ideas and solicit input and support of the project. Collaborative work occurred through group meetings and curriculum teams that developed a product that responded to the concerns that had been expressed by the college community. Establishing a collaborative process from the initial stages of the AtD initiative enabled College A to begin to gain

commitment from the college community. One of the initial team members revealed this about the AtD initiative:

A lot of people were really skeptical about Achieving the Dream... One of the faculty concerns was that this was just going to be something that was going to create a lot of extra work for faculty. "Is this something that the administration is going to dump in our lap and expect us to do?" And when we were satisfied that it wasn't, we wanted to communicate that to other faculty and people involved. And gradually people got involved and I think we have a pretty good group. It's been pretty productive.
(Participant 3A)

A second factor that made collaboration necessary was the belief that developing plans in a collaborative manner resulted in a better outcome. By seeking the perspective of multiple individuals who possessed experience and who understood the various angles of the task, a more comprehensive plan was developed. This led to innovative programs that met the needs of the particular institution and which tended to be compatible with the processes already in place. As a participant at College C explained, "We're all at the table in some form or another when those decisions are being made. So everybody's input is taken into account. With so many brilliant minds working on it, you have nothing to come out of it but quality" (P3C). Another participant from the same college added, "It's a pain in the you know what sometimes. There's a greater front end investment before you get to the results; but the results are genuinely better" (Participant 5C). Participant 6B aptly summarized the need for collaboration when he said, "I think the reason why we do it together is because it's more powerful together than when we work individually." Planning and implementing projects in a collaborative manner across departments was believed to provide outcomes of greater quality and value to the college than would be gained from working independently or within functional departments.

A third factor that made collaboration necessary was that an expectation for collaboration was imposed by either an internal or an external source. At College A, participation in AtD required that two or more collaborative teams were developed to guide the work of the initiative (Document 2A). The structure for instituting AtD was guided by a national organization that provided specific expectations and assigned a coach to help the college establish its processes. By making a commitment to participate

in the AtD initiative, administration committed to functioning in a collaborative manner to accomplish their goals.

At College C, the expectation to function in a collaborative manner was set by the college president. As a result of the president's eight expectations of every college employee and the personal example he provided, collaboration at College C was seen as an expected process. Before action was approved on any project that had multiple stakeholders, project leaders were expected to "get input from all the people in the college... involved in that project on one level or another" (P3C). Participant 8C, an employee at College C for less than a year, added this observation:

When I came here, I was used to (and still am) working alone and not collaborating. I noticed right away that if you wanted to get any of your initiatives completed or implemented, you had to collaborate; it was a requirement that those ideas have to be flushed out with a group of people. Not just the people you're working with, but people from different places.

Colleges A and C were both influenced by a prevailing expectation to utilize cross-functional collaboration to achieve project goals. Although this factor didn't speak to the value that collaboration added to the planning process, it revealed a motivating factor that encouraged the implementation of collaborative processes within these colleges.

In summary, three community colleges known for strong collaborative work implemented cross-functional planning processes because it was viewed as necessary for developing and implementing project goals. Collaboration was not used for all circumstances that required planning at the three colleges; but for the projects that served as the focus of this study, collaboration was seen as the appropriate and necessary model to plan and implement the projects. Three factors led to the perceived necessity for collaboration. First, the size and breadth of the projects required buy-in and participation from many individuals, and cross-functional collaboration provided a means to generate that buy-in. Second, collaboration was seen as a way to produce better outcomes than working independently or in department groups. Third, collaboration was required by an internal or external entity.

Challenges experienced. While support was generally expressed for collaborative processes, challenges were also identified by participants. A major challenge expressed

by participants was the time commitment collaboration required. One participant at College C explained, “Sometimes it can be a little bit frustrating because it takes so long to get anything done, because you’re meeting all the time” (P3C). Another staff member at the same institution expounded,

You’ve got to go through a meeting for every step of the process. [My project] is never going to happen! It’s going to take five years! In the administrator job I had before, I did it myself; everything that I wanted to do, I just got it done. I didn’t have to go through any kind of decision making channels, and I kind of miss that. (P8C)

The added time required for collaboration could have an impact on the quality of the work accomplished. An administrator at College C noted that because of its larger size, the college is involved in a lot of activities and has many priorities. Time is often in short supply, and “sometimes the ability of the organization to address a lot of critical priorities all at once gets compromised by the amount of time people have in their day” (P5C). Time appeared to be a challenge, regardless of the college’s size. College A, one of the smallest colleges in its region, also identified the shortage of time as a factor that made collaboration difficult. An administrator at College A explained, “The challenge with collaboration is the time commitment. Because we’re a small institution, many of us serve on several committees. And it’s hard to wear so many hats and be involved in so many issues” (P9A).

A reason expressed for collaboration being a time-consuming practice was that teams didn’t bring processes to conclusion quickly enough. Participant 10A described it this way, “In education sometimes we pass something around to each other and it just gets beat to death. Everybody wants to add something profound and make a profound statement. I just think that’s the creature that comes into the system at this level.” The words of a staff member at College B further described the challenges that occur because of the pressure of time: “It seems that we start out with a lot of good ideas.... We mutually share the desire to accomplish them, but we’re so busy that the logistics of making it happen can be a nightmare” (Participant 3B).

A second challenge with collaboration was that team participants sometimes became overextended. In describing the impact of collaborative processes on individuals,

an administrator at College C acknowledged, “I think that people are very excited about the work they do, but we can kind of overwork people” (Participant 4C). Another administrator at the same institution expressed that there just weren’t enough hours in the day to be involved in as many things as she wanted to be. She continued that because she wanted to support projects in her role as manager, she was so extended at times that it became difficult. “Sometimes I’m working at home until 11:00 at night trying to respond to emails that I didn’t have a chance to get to that day” (P7C). This problem is magnified when a person, department, or college has not clearly identified priorities. As one administrator put it, “There are a lot of things that could be done, but what needs to be done?” (P5C).

A third identified challenge was navigating the differing viewpoints that occurred when working with diverse groups. Planning across departments required additional effort to understand differing viewpoints and reach consensus. The following account by an administrator at College B provided an illustration:

When you go across college functions in a collaborative approach, you’re likely to get individuals that perhaps think a little bit differently, have a different discipline background, and engage in a different function on campus. It’s not always easy to work in such a diverse group. There needs to be some extra effort to understand how people think, where people are coming from, what is important to them, what their philosophy is, and what’s the right way to help students and work on the behalf of students. Not everybody agrees about what’s the right approach. They might have a common goal of doing what’s best for students, but might not agree on the pathway to get there. (Participant 8B)

In summary, the collaborative work implemented in the colleges studied was not without challenge. The primary challenges identified in this section were the time commitment required to complete projects, the tendency to over-extend participants, and the additional effort required when working with diverse groups.

Section summary. The community colleges included in this study implemented cross-functional collaboration as a necessary process for bringing about the desired results of their projects. While not all college planning occurred through collaboration across departments, the size and scope of the projects explored in this study required the buy-in and input that could be generated through collaborative processes. Collaboration

arose from necessity due to: (a) the need to receive buy-in and participation from the college community, (b) the desire for better results that were available through collaboration, and (c) expectations imposed by an external or internal source.

Collaboration arose from necessity because it provided the vehicle for participation and buy-in from multiple groups, which in turn resulted in quality outcomes, innovative ideas, involvement by many, and project integration within the organization.

While collaboration across departments was viewed as necessary for the projects that served as a base for exploration in this study, it was not without challenges. Three challenges identified by participants were described in this section: (a) collaboration took time, (b) participants could become over-extended, and (c) additional effort was required to understand viewpoints and reach consensus.

Primed by Upper Management

A second theme consistent across each of the study sites was that upper management primed the college for effective collaboration. This occurred as college leaders: (a) established expectations for the college community, (b) established structures to support collaboration, and (c) provided resources to support the collaborative projects. This section provides a description of the expectations, structures, and resources that were provided by upper management to support the work of the collaborative teams. Selected quotations from the data are included when applicable to give meaning to each theme.

Established expectations. In all three colleges, the president and cabinet members were the individuals who set the tone for collaboration across department lines. Upper management established expectations for collaboration as they: (a) expressed support for collaborative projects through words and actions, and (b) modeled their expectations for collaboration. Table 9 provides a parallel comparison of the way upper management at the three colleges established expectations for support of the collaborative project. The parallel format provides a side-by-side display of information with comparable points listed horizontally in the same row. The far left column indicates the type of action described.

Table 9

Upper Management Primed the College for Collaboration by Establishing Expectations

Management Action	College A	College B	College C
Expressed support	<ul style="list-style-type: none"> • Upper management initiated AtD and conveyed the goals and expectations for the project 	<ul style="list-style-type: none"> • President made known his vision for a required new-student orientation, voiced his support, and requested participation by staff 	<ul style="list-style-type: none"> • President conveyed his desire for a collaborative environment both verbally and through the eight expectations for all employees
Modeled expectations	<ul style="list-style-type: none"> • Upper management modeled their expectations 	<ul style="list-style-type: none"> • Upper management modeled their expectations 	<ul style="list-style-type: none"> • Upper management modeled their expectations

At each college included in this study, the college president set the stage for the collaborative project by supporting it publicly. Expectations were conveyed through both words and actions that supported the collaborative projects. At College B it was the president who announced to the college the plans to begin a first year orientation program for new students. He initiated the FYI project, placed it in the context of a full-college effort to support students, and let people know he appreciated the time and work they contributed to the success of the project. Participant 9B explained, “Our president is very clear about what he expects from the school and what direction we’re heading, and he outlines that just perfectly.” The president continued to convey the vision for FYI after it was initiated. He reminded staff that the goal of the mandatory orientation was student success and that it provided a vehicle to change the culture of incoming students so that they “understand what higher education is, understand the commitment that they’re being asked to make, understand what their responsibilities are for their own success, and understand what resources we bring to the table” (Participant 7B).

Together, the president and vice president of College A laid the groundwork for implementation of the AtD initiative. Both were at the forefront from the beginning of the project to let people know what AtD was about, what participation meant for the

college, and what was expected from the college community. Both also participated in the training and served on the core team for the initiative. The vice president then provided the primary leadership role throughout the development of AtD with the president's backing. In addition to supporting AtD through words and participation on the core planning team, the president and his cabinet expressed support for collaborative work by recognizing and supporting the participation of individuals on the collaborative teams. A staff member at College A stated that the president and vice president provided visible support for the work of teams by "giving us time to work," and "when there's a presentation to be made to the board, it's not just made by [the vice president] or me, it's made by the line staff.... That's valuing" (Participant 8A).

Employees at College C also attributed the collaborative culture of the organization to their president. "[The president] particularly deserves credit for the culture of the college, because... it's a situation where that sort of tone is set at the top" (Participant 9C). Another employee explained that collaboration occurred at all levels of the college, "simply because we have a college president who's made it one of his priorities – that you would work in a collaborative environment" (P1C). At College C, the expectation to work in a collaborative manner was institutionalized through the *Eight Expectations of College Staff* introduced by the President in 2001. An excerpt from one of the expectations stated, "Our organization is built around decentralized governance and collaboration. There is a need for individuals to reach across divisions and departments to make the governance model work – the expectation is that this will occur" (Document 5C).

Upper management also established expectations by modeling the characteristics they expected of others. An instructor at College B observed, "The president models what he expects. He works very hard and puts in a lot of time to make connections to help the school and to promote the school" (P9B). An administrator at College C explained that the president lived and modeled what he expected of others. For example, he modeled the focus on student success. "You'll see the president and other administrators pick up trash because they don't want it to be there for the students" (P4C). Another administrator at the same college explained, "One of the things the president will be the

first to say is that this is not about power. This is about service. He has a very humble spirit. It's the way he carries himself, and it's the commitment he expects from other people" (P1C). At College B, the vice president modeled his expectation for collaboration through the open structure of meetings he established. In addition to the on-going meetings about AtD that were open to anyone in the college, he established cross-department integration in weekly update and planning meetings (Participant 2A).

In summary, upper management set the stage for collaboration by establishing expectations for the collaborative work. Expectations were communicated as the presidents and their cabinets voiced approval for the project, explained its importance to the college, and demonstrated support for the work. Through modeling their own commitment to the project, college presidents demonstrated the commitment of the college to the work being performed by the collaborative team.

Established structures. At the colleges included in this study, upper management set the stage for effective collaboration through establishing structures to encourage collaborative activities. The structures that were established included (a) a team structure for developing the project, (b) a process for inviting participation, and (c) an assessment process for evaluating results. Table 10 provides a parallel comparison of the supporting structures upper management established to support collaborative work. The parallel format provides a side-by-side display of college findings with similar actions listed horizontally in the same row. The far left column indicates the type of structure described.

Table 10

Upper Management Primed the College for Collaboration by Establishing Supporting Structures

Structures	College A	College B	College C
Team structure	<ul style="list-style-type: none"> Established a team structure for collaborative work to support AtD 	<ul style="list-style-type: none"> Developed a structure for FYI prior to recruiting collaborative teams 	<ul style="list-style-type: none"> Established a structure for the CTL to support collaborative planning

Participation process	<ul style="list-style-type: none"> Established a process for inviting participation. – open meetings about AtD 	<ul style="list-style-type: none"> Established a process for inviting participation – ongoing input by staff 	<ul style="list-style-type: none"> Established a process for identifying collaborative efforts – annual goal setting process for all employees
Assessment process	<ul style="list-style-type: none"> Established a reporting and assessment process for AtD work 	<ul style="list-style-type: none"> Established an assessment process for FYI 	<ul style="list-style-type: none"> Established an assessment process for CTL effectiveness

At College B, the position of Director of Student Retention and Support was established to work across department lines and implement processes that strengthened the ability of departments to work together to support students. Through the combined efforts of the Director and the Vice President of Student Services, the initial structure of FYI was developed prior to implementing the plan within the college community. At College A, a committee structure was implemented by senior administrators to involve more individuals and solicit the ideas and input from across campus. At College C an annual goal setting process established by upper management was implemented to provide planning guidance and support the college’s expectation for staff to work together to accomplish strategic goals.

The goal setting process at College C provided an example of how upper management set the stage for collaboration through the structures it established. The structural process of developing annual objectives provided staff with the opportunity to identify actions that needed to occur to help support the strategic goals of the institution. On an annual basis, each staff member was asked to identify the goals he or she planned to work on for the year in support of the college’s overall goals. A participant at College C described it this way: “We all write goals here. Every person, every year. And those goals are usually driven by the overarching strategic priorities of the college” (P7C). The form that was completed by each employee provided a place to identify the resources that were needed and the individuals that needed to be involved in order to achieve the stated objectives. An administrator at College C explained, “The spawning of ideas will force

you to identify who should be at the table to talk about this idea, to kind of flesh it out a little bit more, to make sense out of it, and to determine what commitment we can get from you” (P7C). All objectives were summarized and funneled up through the department structure to the President’s cabinet where approval was provided and budget decisions were made to support the plans. At the end of the year, each individual was asked to complete an assessment of the work that was done and set new objectives for the coming year.

In summary, one of the ways upper management set the stage for effective collaboration was through establishing structures that supported collaborative work. The structures described in this section include the team structure used to develop the project, assessment processes for evaluating results, and processes for inviting participation. Through the establishment of structures, the college community was provided an avenue for participation, and processes were put in place to support the continued work of the team.

Provided resources. Through the designation of resources to support collaborative projects, upper management provided the building blocks that enabled projects to succeed. Resources were provided in the form of: (a) funding support, (b) leadership, and (c) training. Table 11 provides a parallel comparison of the resources provided by upper management to support collaboration.

Table 11

Upper Management Primed the College for Collaboration by Providing Resources

Resources	College A	College B	College C
Funding	<ul style="list-style-type: none"> • Provided funding to support additional institutional research support 	<ul style="list-style-type: none"> • Provided funding for new position to support student success efforts 	<ul style="list-style-type: none"> • Provided funding to support CTL staff and approved projects
Leadership	<ul style="list-style-type: none"> • Provided oversight of a vice president 	<ul style="list-style-type: none"> • Hired a Director of Student Retention and Success 	<ul style="list-style-type: none"> • Appointed leaders to head teams

Training	<ul style="list-style-type: none"> • Sent people to AtD training 	<ul style="list-style-type: none"> • Provided training for FYI participants 	<ul style="list-style-type: none"> • Offered faculty and staff training through CTL
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At College A, resources were designated for institutional research support to help meet the information needs of the AtD collaborative teams. “If we need any data, we just ask the assessment department here on campus. They will always be able to dump numbers, either for class or section, or first year experience, or for whatever. They can always generate numbers for us if need be” (Participant 4A).

For the FYI developed at College B, the Vice President for Instruction allocated \$100,000 to support the effort until it could generate the revenue to sustain itself. Funding was also designated by the college to support the new position of Director of Student Retention and Success, the position that spearheaded the collaborative work to support student success. At College C, there was a substantial pool of middle managers and support staff dedicated to support the initiatives that had been developed to support student success. The CTL, the new student orientation, and the new faculty orientation were examples of this.

Leadership resources provided at each college also supported the collaborative work. At College A, it was a vice president who provided oversight for the AtD initiative and who kept the reporting and assessment processes moving forward. It was also a vice president at College B that provided leadership for FYI and oversaw the work of the director hired to implement and maintain the project. At College C, a dean provided direct oversight for the CTL and an assistant dean was hired to manage and direct the day-to-day operations of the center. College C also initiated an intentional process of assigning experienced project leaders and pairing them with less experienced individuals to provide a mentoring situation.

Support for collaborative work was also occurred as training was provided for participants. College A sent a team to AtD training to learn about their responsibilities. They then worked with a facilitator and coach who provided specific guidance as needed. College B established training for participants of FYI to prepare them for the event.

Training set the stage for successful collaboration by providing participants with an understanding of the work to be done.

To summarize this point, one of the ways upper management primed the college for effective collaboration was through providing resources to support the collaborative work. The resources provided by the colleges studied included funding to support the projects, leadership to assure the projects were successful, and training to prepare participants. By providing resources, upper management displayed commitment to the success of the projects and contributed materials to enable the work to get done.

Section Summary. In the three community colleges included in this study, upper management primed the college for effective collaboration. The collaborative projects didn't just evolve on their own; intentional efforts were made by upper management to support the projects and contribute to their success. College leaders set the stage for effective collaborative efforts by voicing support of the project and inviting college involvement, providing college resources to help it succeed, and supplying training to prepare participants for involvement. By setting the stage for the collaborative efforts to succeed, college leaders demonstrated their support of the project and acknowledged its value to the mission of the college. This signaled the importance of the project to the college and informed the college community that it was an effort worthy of their participation. A composite listing of the way upper management set the stage for effective collaboration is presented in Table 12.

Table 12

Composite List of How Upper Management Primed the College for Effective Collaboration

Themes	Mechanisms
Established Expectations	<ul style="list-style-type: none"> ● Expressed support for the collaborative effort ● Modeled their expectations
Developed Structures	<ul style="list-style-type: none"> ● Established a structure to support the work of the collaborative effort ● Established an assessment process for the collaborative effort ● Established a process for inviting participation
Provided Resources	<ul style="list-style-type: none"> ● Provided funding to support collaborative project ● Provided leadership ● Provided training

Kept on Track by Accountability

A third theme consistent across each of the study sites was that accountability kept the collaborative teams on track. This section describes the reporting and assessment structures established at the colleges that facilitated accountability for the collaborative teams. The section includes a description of the accountability processes found at the three colleges and provides transcribed accounts of the impact accountability had on collaboration. The section is organized by two subthemes related to accountability: (a) motivating factors, and (b) supporting structures. A summary of findings and a composite list of points related to accountability conclude the section. Table 13 provides a parallel comparison of accountability processes established at each college. The parallel format provides a side-by-side display of information with comparable points listed horizontally in the same row. The far left column describes the elements in the row.

Table 13

Accountability Processes that Kept the Collaborative Teams on Track

Accountability	College A	College B	College C
Motivating factors	<ul style="list-style-type: none"> • Expectations of an outside AtD coach and facilitator required regular assessment and reports 	<ul style="list-style-type: none"> • Commitment to report results 	<ul style="list-style-type: none"> • Annual college-wide process of assessing results, reporting outcomes, and establishing new goals
Supporting structures	<ul style="list-style-type: none"> • Monthly meetings to report accomplishments and results established by the college 	<ul style="list-style-type: none"> • Regular FYI reports provided to the college community to show assessment results 	<ul style="list-style-type: none"> • Defined committee structure with start and stop dates and specific goals • Ongoing assessment of CTL classes reported on a semester basis

Motivating factors. Whether it was accountability to an outside agency or its own internal processes, the need to assess and report results had an impact on the effectiveness of collaborative teams at each of the case sites. The expectations of an outside coach and facilitator for the AtD initiative required College A to plan, implement, and assess the effectiveness of specific actions implemented to support student success. The timelines and accountability associated with reporting requirements kept the teams on track, involved, and moving forward. An administrator at College A provided this input:

At regular meetings, we ask people to report and be accountable for the project that they're working on. That is driven, I will admit, by the coach and the facilitator that we have come on campus to meet with us two or three times a year. In preparing for their meeting and in following up on their recommendations, things are happening and things are occurring. Each month we have a report that goes to our board of trustees about our progress on student achievement. (P9A)

Internal reporting processes also influenced the effectiveness of the collaborative team. Peer pressure to have work completed within the designated timeframe kept team members on task and moving forward. The collaborative teams supporting AtD met every month and reported back to the larger group about what was done and the related results. A participant at College A described the value of regular and consistent meetings to help keep the team on track:

It holds you accountable. The work might not get done until two days before the meeting, but at least I know I have a date that it has to be done. To me if it's a group thing like that, when you're reporting back and you don't do anything, it's embarrassing like you're letting the whole group down. (P2A)

Through consistent review of target benchmarks, the leader provided motivation to continue to achieve. A staff member at College A described it like this:

The target is always in front of you. You always know what your objectives are. You go back and take a look to see where we are in terms of meeting our objectives; and if we haven't, where did we foul this thing up? What step did we miss? What can we do better? (P10A)

The decision of College B to implement a system of reporting appeared to be effective for holding the collaborative team accountable. College B reported the results

of FYI to the faculty and staff because those who provided input and worked to improve student learning and success wanted to know if their efforts had worked. Participant 1B explained:

All of those people who have issues or viewpoints about what needs to be fixed or improved, we have to go back and show them how it's being improved. We probably assess FYI more than we have assessed anything we've done at this college. We're constantly looking at data.

A participant at College B explained that people continued to participate in the collaborative work because they felt it made a difference for students. "I think a number of instructors believe that it has made a difference for the students, and they support it based on that" (P8B). A staff member at College C further described the impact that patterns of accountability had on the willingness of people to contribute to collaborative work:

When an environment encourages [assessment], people feel more committed to working on the team because it doesn't feel like "Oh, sure... we've done it but we don't really know what's coming from it." When you can say we know it's made a difference, I think people are much more motivated to move forward. (P7C)

Not only were people more committed to the work of the team, the focus of the college also became clearer. An administrator at College A described it this way: "The structures we have implemented as part of AtD have definitely changed the culture of the college. The college is now more intentionally focused on student achievement and aware of how their students are doing" (P9A). Another staff member at College A explained, "ATD is giving us a focus, and it actually is the student now. And that whole focus is getting stronger. Customer service is increasing" (P2A).

Supporting structures. Structures implemented at the colleges created a consistent and ongoing opportunity to report results and inform college staff of the value of their collaborative efforts. The processes of establishing regular meetings for reporting results and establishing target benchmarks have already been mentioned as factors that encourage accountability. This section identifies additional structures implemented to strengthen the accountability of collaborative teams.

Maintaining an annual process of assessing results and setting new objectives for the coming year provided a system of accountability at College C. Every year each division, subdivision, and individual within the college was responsible for writing goals to address one or more of the college's strategic priorities. The planning form required staff members to indicate whom they needed to work with to achieve their intended goals. A calendar drove the structured goal setting, planning, and assessment cycle for the college. The calendar was aligned with the budget cycle and provided an outline of when things were due. The commitment of College C to assess results was described by one staff member as follows:

[College C] is looking for innovation, not just for the sake of innovation, but because of the desire to improve the quality of the student experience. It's looking for things that are going to influence learning, student success, retention, and the quality of the student experience. It's also willing not only to create it, but to assess it. (P7C)

By providing an ongoing and consistent process, the college enabled staff members to know when and how they would report on the results of their efforts. The process also focused the work of the college around goals to advance the strategic priorities and improve student learning.

A defined committee structure was also found to foster accountability. At College C, committees were provided with a goal, a timeline, and a start and stop date.

We found a few years ago that we had these long-standing committees and people were going to committee meetings with no purpose. So they lost interest. It also tended to shut out a lot of new people from coming in because it would be the same people on the committee year in and year out. Now we have short-term goals, and there are some long-term goals which those short-term goals help support. And therefore committees have a start and a stop date. That's critical. (P1C)

Section Summary. A consistent theme among colleges known for strong collaborative work was that accountability structures were established which kept the collaborative teams on track. Motivation to assess results was derived from both internal and external sources. Maintaining accountability through regular assessment and reporting structures was found to keep teams on task and increase the willingness of people to contribute to the collaborative work. When people could see that the

collaborative work made a difference for students, they were more committed to the project. A composite list of the mechanisms that fostered accountability described in this section is provided in Table 14.

Table 14

Composite List of Accountability Mechanisms That Kept Teams on Track

Theme	Mechanisms
Accountability kept the teams on track	<ul style="list-style-type: none"> • Internal or external reporting processes facilitated regular assessment and reports. • Regular reports to the college community kept people informed and involved. • A defined committee structure provided start and stop dates and goals.

Guided by a Team Leader

Another theme consistent across each of the study sites was that the team leader played a key role in the success of the collaborative effort. This section begins with a description of the role of the team leader found to be common across the three colleges included in the study. The section concludes with five observations about the role of the team leader.

Role of the Team Leader. Study participants described the team leader as having a significant impact on the success of the team. This section describes the work performed by the team leader and provides selected quotations from participants to provide insight related to the theme. Table 15 provides an overview of the common functions of the team leader described in this section. These functions are not listed as subthemes; rather, they are interspersed through the section as part of the cumulative description of the role of the team leader.

Table 15

Common Functions of the Team Leader

-
- Took responsibility to move plans forward
 - Sought approval for plans from upper management
 - Identified resources and timelines to support the effort
-

-
- Established effective group processes
 - Provided opportunities for people to participate
 - Maintained responsibility for ongoing success
-

In the three colleges included in this study, one or more leaders took responsibility to provide direction, organize people, and keep processes moving. Sometimes referred to as the “champions” of the project, the leaders took responsibility to do the necessary work to assure the collaborative project was effective. As a staff member at College B expressed, “The collaboration needs a champion that is willing to keep it on the forefront of people’s agendas and show that it’s important” (P5B). At College B, that role for FYI was filled by two individuals: the Vice President for Student Services and the Director for Student Retention and Support.

The Vice President for Student Services at College B provided the leadership and direction to make FYI a reality. She committed to make it happen, assigned a person to develop and implement the project, actively participated in the development of the plans, sought approval from the president’s leadership team, identified resources to support the effort, and communicated plans to the college community. She continued to champion the project after it was established and maintained responsibility for its ongoing success by assuring it had the proper resources and by keeping it in view of the college community.

The individual who took responsibility for the detailed implementation of the project at College B was the Director of Student Retention and Success. He provided direct leadership to the collaborative team, assured the project moved forward according to the established time frame, and contributed to the success of the project. An instructor involved with FYI explained that having the right person in the role of Director of Student Retention and Success was what made FYI work:

He’s just a really extraordinary individual.... He’s the person who brings people together. He has an openness and an ability to listen, and he thinks things through and puts the right people together.... He was enthusiastic and he knew who to involve to make sure that [FYI] would get off the ground and go. (Participant 11B)

Another staff member at the same college further explained that it was not only the commitment and follow through of the leader who drove the process, but also the follow through of the many people who participated on the team.

The success of FYI is directly related to [the Director of Student Retention and Support] and his assistant. [The director] is the dreamer, the creator. [His assistant] is much more of an organizer. She was the one who could identify the steps to take. When you look at FYI, we must remember [the assistant] who was there in the trenches at the very get go. I have a lot of admiration for the work she's done. (Participant 12B)

At College A, the primary person who drove the collaborative team was the Vice President of Student Services and Instruction. He did this through establishing timelines, maintaining the consistency of regularly scheduled meetings, and providing opportunities for people to participate. A participant at College A noted that the vice president "kept after" the process and maintained benchmarks to make sure the overall project was on target:

We have benchmarks and we re-evaluate those benchmarks to see where we're at and make sure we're on target. He keeps coming back to it; he stays true to our objectives and goals and tries to hit those. I don't know how else to explain that one. I think he's very consistent. The target is always in front of you, you always know what your objectives are. (P10A)

In addition to the vice president, a variety of individuals were involved in driving the collaborative work to support AtD at College A. Each team was assigned one or two leaders who took responsibility to move forward the work assigned to them. The team leaders were expected to maintain accountability and meet the reporting and assessment plans that were set. A participant at College A explained:

As much as people look down on having to do reports and provide data, I think the responsibility of having to be accountable by writing reports is a big piece to moving plans forward. Needing to be accountable and show what you're doing is working and how many students you have served and who attended is essential. (Participant 1A)

In many cases collaborative teams at College C were co-chaired by an administrator and faculty member working together in order to distribute the responsibilities. In other cases, it might be two administrators co-chairing a team in order

to represent the departments that have a major involvement with the project. For projects of significant importance to the college, the president appointed individuals to participate on the team.

The fact that the president is the person who has the last say on who serves on the teams is key to moving the work forward. I'm sure that he looks at personalities across campus and says "I need this done; who do I know that will get this done?" And that's who gets appointed to the team. But at the same time you put other people in the pool too so that they will be able to contribute and benefit from the experience. (P1C)

At College C, the team leader was expected to maintain the group through implementing good group processes and "to roll up your sleeves and do the work that you're asking the team to do" (P2C). With the expectation that exists at the college for people to collaborate on all major decisions, there is also the expectation for team leaders to effectively manage the team and implement successful group processes. Participant 6C explained that in general, team leaders at College C...

...do a really good job of guiding the group, dealing out the tasks that need to be done, and leading the discussions to make sure that when we discuss we don't discuss without a result. I've noticed that people have been very effective at doing that and making the meetings more fruitful.

Standard practices at College C provided the expectation for team leaders to drive the work of the team. As Participant 8C described, "At the end of discussion, the team leader pushes for action. Not in a disrespectful or rushing kind of way, but they move us forward. You may not see a list of tasks that they are checking off, but you can feel it." The team leader took responsibility to guide the group toward results.

The ability to follow through with plans was identified as an important trait for team leaders. An instructor at College A explained it this way:

There are always people who talk the good talk but never follow through; and there are people who don't mind taking a leadership position and they actually do the work and get it done. I think it's important to make sure you have enough of those people on the team who actually follow through. (P3A)

Without the commitment of an individual or individuals to take on this role, the collaborative effort was not likely to succeed. An example was provided at one college

of a “great idea” that was of importance to the president that hadn’t yet moved forward because no one had taken direct responsibility for assuring it got done. “The president pulled together a group of people and led a discussion. He's done that in a more substantive way a few times, but it's not regular. So it's still a great idea but nobody's in charge; nobody owns it” (P6A). Another participant at the same college described the low energy and sporadic membership in one collaborative team where the leader didn’t keep the team on task to meet the goals of the group. The team had met for two years with no specific results. The result was frustration at the lack of progress and a feeling that the team was a waste of time (Participant 5A).

In summary, interviews with participants revealed that the team leader was key to effective collaboration. Through the interviews that were conducted, insight was provided about the traits and functions served by the collaborative team leader. Table 14 provided a summary of the common functions of the team leader, and examples and observations were provided in the section to expand insight about the team leader’s role.

Observations about the role of the team leader. From the information gathered through the interview process, five observations about the role of the team leader were identified: (a) the leader of the collaborative team had a significant impact on the task’s success, (b) the leader of the effective collaborative team was both task- and relationship-oriented, (c) responsibility for team leadership on projects of importance to the college was retained by upper management, (d) effective team leaders had an established path of interaction with upper management, and (e) the effective leader moved the work of the team forward. This section summarizes these observations. The first finding is that the leader of the collaborative team had a significant impact on the task’s success. At each of the colleges included in this study, participants attributed success of the collaborative work to the actions and qualities of the team leader. By providing vision for the group, taking responsibility for the results of the team, and working to move plans forward, the team leader moved the team toward success.

A second finding was that the leader of the effective collaborative team was both task and relationship oriented. The task-oriented characteristics identified in effective leaders included consistent follow through, maintaining a meeting structure, moving the

team toward results, and committing the time and energy to make the project work. Relationship-oriented characteristics included implementing good group processes, inviting people to participate, communication with team members, and maintaining team connectivity and participation. Team leaders described as effective by participants had both relationship- and task-oriented characteristics.

The third finding was that oversight responsibility for projects of importance to the college was maintained by someone who was either directly a part of the president's management team or who was assigned by upper management to perform the role. While it may not be practical to have a vice president oversee the work of all major collaborative teams, it is important that the selection of a team leader not be left to chance. For projects that may have a significant impact on the college, it was important to appoint a team leader that upper management could trust to get the work done.

The fourth finding was that effective team leaders had an established path of interaction with upper management in order to seek approval for plans proposed by the collaborative team and request the necessary resources. This could occur through a formal proposal system in place at the college, such as at College C, or through a less formal discussion process with upper administration, such as at College A. If the team leader was unaware of appropriate ways to seek approval from upper management, the work of the collaborative team was likely to stall.

A fifth finding related to the role of the team leader was that the effective leader realized her or his responsibility to move the work of the team forward. The role was not merely to facilitate a group discussion. Team leaders who were seen as effective were those who were able to help the group achieve its goals. By becoming aware of the responsibilities and common functions of a collaborative team leader, individuals may become more effective in the role. Through communicating expectations for the team leader or providing opportunity for a less experienced person to partner with an experienced team leader, as observed at College C, skills could be taught for more effective team leadership.

Section summary. This section presented information related to role of the team leader in establishing effective collaborative teams. Common functions of the team

leader were identified and five observations were made about the role of the team leader: (a) the leader of the collaborative team had a significant impact on the task's success, (b) the leader of the effective collaborative team was both task and relationship oriented, (c) responsibility for team leadership on projects of importance to the college was maintained by someone who was either directly a part of the president's management team or who was assigned by upper management to perform the role, (d) effective team leaders had an established path of interaction with upper management in order to seek approval for plans proposed by the collaborative team and request the necessary resources, and (e) the effective leader realized his or her responsibility to move the work of the team forward.

Supported by Committed Team Participants

The final theme that described cross-functional collaboration at the study sites was the commitment of team participants to support student success through the work of the collaborative team. This section begins with a description of the commitment of team participants at each of the three colleges. Challenges identified by participants are presented next, followed by a summary of key findings. Selected quotations from the data are included when applicable to provide insight related to this theme.

Commitment of Team Participants. The dedication and commitment of team participants was a consistent theme across all three colleges. Depending upon the nature of the collaborative effort, the contribution of the participating staff was often voluntary, added on top of the person's regular work responsibilities. All three colleges relied upon individuals working beyond their day-to-day responsibilities to generate ideas and contribute to the work of the team. Job descriptions at Colleges A and B specified participation on college committees as part of the job requirement (Documents 2B and 6A). At College C, the responsibility to contribute to the collaborative work of the college was supported through the hiring, assessment, and goal setting processes. Though serving on specific committees was voluntary, there was nonetheless potential for employees to become over-extended by taking on too many responsibilities. This held the risk of impacting team effectiveness. At Colleges B and C, mid-level management positions were developed to handle many of the responsibilities of the FYI and CTL

activities. This directed ongoing responsibilities to college staff and enabled efforts to be sustained; however, input and ideas from the college community were still required to support the projects.

College staff described strong commitment to the projects on which they participated. A participant in the AtD initiative at College A explained that commitment to the mission was what drove participation. "I feel that people want to be a part of making it better. And we're about serving students, not about losing students" (P3A). A staff member at the same college noted, "Most of us volunteer to participate because it's something we feel strongly about. One or two might have been asked 'would you do this?' but they've jumped in and done it" (P2A). Although faculty at College B who taught a section of FYI were given an additional teaching contract for the class, much of the college-wide support and involvement surrounding FYI happened as a result of the volunteer contribution of classified and exempt staff from across campus.

Commitment to students and to the college's mission to serve students drove involvement. A director at College A explained, "One of the things that good collaboration takes is people who have an interest and a passion for [the work being done] and who are workers" (P3A). An instructor at College B put it this way,

There's a feeling that this effort really helps students, and I think all of us at the community college are here to help students. I think that's what we do best.... We really get to know our students. We do care about them and want them to be successful. (P11B)

An instructor at College A explained that her reason for participating on two of the AtD strategy teams was related to her work ethic and the whole reason she went into teaching:

I wanted to make the difference and help students be successful. And that's not going to be just me in a classroom. I can't make that happen. It has to be the whole campus; it takes the whole college to help one student be successful. That's my personal belief, so I have to be involved. And it helps me to get to know the campus and those programs that are available to students. (P5A)

Another instructor from the same institution stated, "The people in my group and the leader all have a huge desire for students to succeed, and we all see areas where we are lacking and we want those improved. For me, that's the number one factor that's made it

possible” (P5A). Satisfaction was derived from having a positive impact on students. “It’s kind of funny because you appreciate recognition, and getting a letter [of recognition] from the VP is nice; but it’s much better when you know you’ve made a difference for someone” (P3B). When people viewed the work as valuable, they were willing to participate even when it wasn’t convenient. “FYI happens at our busiest time. But a lot of us do it anyway because it’s so fun. The fun factor is that feeling like you’re making a difference” (P3B).

The community college was described as a service-oriented institution. “The people who are here accept that and buy in on that. It’s not about the money. Those of us who are in education are probably here because of our interest in serving” (P9A). A staff member at College B described the community college as, “a culture of people who inherently do care about students; perhaps even have a similar ethic of care” (P6B).

In summary, participation on teams or committees was an expected part of employment at each of the colleges, but involvement on specific teams was voluntary. Participation on teams to support student success was driven by the commitment of participants to serve students and help them succeed.

Challenges identified by participants. In addition to the challenges of time, over-extension of participants, and working with differing viewpoints that were discussed earlier in this chapter, additional challenges surfaced that had an impact on staff participation. The challenges described in this section include organizational structures, lack of information, and having the right mix of people on the team.

Organizational structure was identified by participants as a hindrance to participation for some employees. One way structure was described as hindering collaboration was through the employee’s understanding of her or his role and responsibilities within the organizations. Participant 5B explained, “If I’m structurally put into a certain position to represent a certain side of the house, we’ve got competition rather than cooperation. The biggest barrier I’ve seen for other collaborations have been structure.”

Structures on campus can unintentionally exclude people. Sometimes it’s simply a matter of not thinking about others who should be involved (Participant 7A). A staff

member at College B contributed, “I think that a lack of knowledge about who does what sometimes can be an inhibitor” (P11B). Another participant at the same college added, “I think sometimes people’s titles inhibit collaboration. It brings hierarchy within that department and I think that stymies some things and creates negative spots” (P12B).

A staff member at College A referred to the differing class schedules between academic courses and vocational courses as a structural barrier that made it hard to include everyone because of the difficulty in finding a time to meet (P4A). At College B, the Union was identified as providing a structural barrier. A participant explained, “Classified employees are qualified to do some of the portions of FYI, but we can’t really get them involved unless we’re willing to pay them overtime. That really limits their participation. We instead get exempt staff to fill in because they don’t have the same restrictions” (P6B).

Lack of information provided a second challenge for participant involvement in collaborative projects. If people didn’t know why something was happening or what the changes were, they were not likely to support the effort. A participant at College B explained that when people don’t buy in to new ideas, it’s typically “because they don’t know about it. They’re just not informed. They may dig in their heels a little bit. Information’s powerful” (P12B). A staff member at College C explained that failing to communicate information was often unintentional. She continued that it was everyone’s responsibility to help assure information was communicated. “There may be people that represent the same need on the committee, but in that instance only one of them is chosen to serve on the team. That one needs to bring the information back to the remainder of the group” (P2C). A participant at College A provided the following comments about the importance of receiving information about collaborative work occurring at the college:

There are people who need to be part of the conversation that are not part of cabinet or instructional council. We need to look at ways for college staff to partake in the information that's shared at those levels too. We need to see what issues are important to that group. I'm wondering if we are all on the same page. I'm from the student services side, and I'm curious at cabinet, what are the things that are driving them to make the decisions they make. What are they talking about these days? I really couldn't find the meeting minutes on line. So how are we getting

information? How do we get that information more directly? How do we collaborate in a faster way? (P1A)

A third challenge for participants on collaborative teams was having the right mix of people on the team. A participant at College C explained, “It all starts with people. Regardless of how good a process is put into place or what your objective may be, it all depends on the people who are put in the mix” (P1C). There were times that one or more team members were not be able to work effectively with people who offered differing viewpoints or get along with teammates. On those occasions, “Teams may have to be reestablished because they didn’t work the first time” (P1C).

This section identified three challenges that could impact a person’s opportunity to participate on a collaborative team. The challenges identified include organizational structures, lack of information, and having the right mix of people on the team. Three additional challenges described at an earlier point in the chapter were time, over-extension of participants, and the additional effort required when working with people of diverse viewpoints.

Summary of key findings. The first observation from the information provided in this section was that participation on committees or teams was an expected part of the job at each college; however, involvement on specific teams was voluntary. In most cases, the additional time and work that resulted from participating on a collaborative team was on top of the person’s primary work responsibilities and no additional remuneration was provided.

A second finding was that commitment to students and the college’s mission to serve students was what drove participation on teams. Participants expressed strong feeling about the value of the work to help students succeed and their desire to be part of that work.

A third finding was that challenges exist that can hinder or limit participation. The challenges identified in this section include organizational structures that make it difficult for some to participate, the lack of information so people don’t know what is occurring, and having the right mix of people on the team to function effectively.

Summary

The purpose of this section was to present information and findings related to the first research question: What does cross-functional collaboration look like at a community college known for strong collaborative work? The information in this section was derived from a cross-case analysis of three case study sites. In response to the research question, five main themes arose as consistent across all studies:

- Collaboration arose from necessity. Collaboration provided the vehicle for participation and buy-in from multiple groups, which impacted the quality of results.
- Upper management primed the college for effective collaboration. By voicing support of the project, providing college resources, and supplying training to prepare participants for involvement, college leaders demonstrated their support of the project and acknowledged its value to the mission of the college.
- Accountability kept teams on track. By maintaining accountability through regular assessment and reporting structures, teams remained on task and the college community saw the impact of the team's efforts.
- The team leader was key. Findings in this section revealed the major role the team leader had on team success.
- Participants were committed to the task. Commitment to the success of students was what drove participation on teams.

Table 16 provides a summary representation of the key findings related to Research Question #1: What does cross-functional collaboration look like at a community college known for strong collaborative work? An "X" was used to indicate the colleges where the specific factors were identified.

Table 16

Summary of Cross-Functional Collaboration at Three Community Colleges

	College A	College B	College C
Arose from necessity			
<ul style="list-style-type: none"> • Size of the project required buy-in and input from many 	X	X	X

• Collaboration was expected by an internal or external source	X	X	X
• Better results were attained by collaboration	X	X	X
• Challenges were identified	X	X	X
○ Time commitment required	X	X	X
○ Over-extension of participants	X		X
○ Negotiating diverse views		X	
Primed by upper management			
• Established the expectation to work collaboratively	X	X	X
○ President expressed support	X	X	X
○ Upper management modeled their expectations	X	X	X
• Established structures to support collaboration	X	X	X
○ Team structure	X	X	X
○ Assessment process	X	X	X
○ Process for inviting participation	X	X	X
• Provided resources to support the collaborative project	X	X	X
○ Funding to support collaborative project	X	X	X
○ Leadership	X	X	X
○ Training	X	X	
Kept on task by accountability			
• Internal or external reporting expectations facilitated regular assessment and reports	X	X	X
• Regular reports kept people informed/involved	X	X	X
• A defined committee structure provided start and stop dates and goals			X
Guided by a team leader			
• The leader had an impact on the task's success	X	X	X
• The leader was both task and relationship oriented	X	X	X
• Leadership on important projects was responsibility of upper management	X	X	X
• A path for interaction with upper management provided way to seek approval and resources	X	X	X
• The leader was responsible to move the work of the team forward	X	X	X
Supported by committed team participants			
• Participation on committees or teams was part of job expectations, but involvement on specific teams was voluntary	X	X	X
• Commitment to students and the mission to serve students drove participation on teams	X	X	X

• Challenges to participation existed			
○ College structure	X	X	X
○ Lack of information	X	X	X
○ Right mix on the team			X

Research Question #2: What Organizational Factors Influence Cross-Functional Collaboration in the Community College?

This section presents findings related to the central question of this study: What organizational factors influence cross-functional collaboration in the community college? Following a thorough cross-case analysis of three independent case studies, six overarching factors were identified. The graphical representation presented in Figure 3 displays the overarching factors identified through this study that influenced collaboration. They include: (a) an environment of support, (b) common vision, (c) processes, (d) resources, (e) accountability, and (f) recognition. This section is organized by the six subheadings that represent the factors identified in Figure 1. Each subheading is further divided by key points that organize the information and provide illustration of the factors in relationship to the community colleges that were studied. Underlying mechanisms that provided an influence on the factors are identified.



Figure 3. Organizational factors that influenced cross-functional collaboration in the community college.

Environment of Support

The environment in which a person worked impacted that person's willingness to go beyond the expected job responsibilities to take on something more. At each of the colleges included in this study, participants identified a supportive environment as one of the factors that enabled the college to engage in collaboration across functional departments. The actions described at the colleges can be aligned within three categories: (a) respect for differing viewpoints, (b) opportunity for people to participate, and (c) an open and encouraging atmosphere. This section addresses each of these categories and provides examples of the actions implemented at each college that contribute to an environment where collaboration was strong. A parallel comparison of the factors identified at each case site related to an environment of support is provided in Table 17. The parallel format provides a side-by-side display of college findings with comparable examples listed horizontally in the same row. The far left column indicates the category described. Areas that are blank indicate that a similar example was not identified at that institution. The presence of individual examples identified at some institutions and not at others portrays the variance found among the colleges. Variation among examples demonstrates distinctive efforts related to the category at the left and does not detract from the relevance of the theme.

Table 17

Factors That Contributed To an Environment of Support

Categories	College A	College B	College C
Respect for differing viewpoints	<ul style="list-style-type: none"> • Differing viewpoints were welcome 	<ul style="list-style-type: none"> • Innovation was encouraged 	<ul style="list-style-type: none"> • Innovation was encouraged through the 8 expectations
Opportunity for people to participate	<ul style="list-style-type: none"> • Open meetings held regularly to involve interested individuals • Multiple means of communicating plans and results 	<ul style="list-style-type: none"> • "Missionary visits" to departments and individuals • Multiple means of communicating plans and inviting participation 	<ul style="list-style-type: none"> • Intentional efforts to involve new people in collaborative work

		<ul style="list-style-type: none"> • Feedback continuously sought from the college community 	<ul style="list-style-type: none"> • Input actively sought from everyone touched by a project • Start and stop date for committee work
Open and encouraging atmosphere	<ul style="list-style-type: none"> • Open door among staff and administration • Longevity of staff and president • Focus on student success 	<ul style="list-style-type: none"> • Open door among staff and administration • Longevity of staff • Focus on student retention and success 	<ul style="list-style-type: none"> • Open door among staff and administration • Longevity of staff and president • Focus on student success as committed by the promise statement • Departments supported those who had direct contact with students

Respect for differing viewpoints. To generate ideas and new solutions through a collaborative effort, the three community colleges in this study sought to maintain an environment where ideas were considered and contributions were respected. A staff member at College B explained the value of welcoming input from a broad range of individuals: “The more diversified you get as far as the people you bring to the plate to make a decision, the broader the ideas” (P12B). Participants from all three colleges expressed the need for innovation and differing viewpoints. The president at College B expressed his expectation that staff at his college “focus on problem solving with an entrepreneurial spirit” (P7B). When people thought outside of the box and looked for solutions focused on building the capacity of the people they served, the institution was more likely to be able to figure out how to connect, make things happen, solve problems, and accomplish the goal (P7B).

A staff member at College A described college administrators as very open to new ideas. “When we have a new idea of how we want to do something, they are very

supportive. They trust the fact that those of us working with students know what the need is” (P1A). An instructor at College C described a similar environment:

It seems as though the culture of the college is one that’s very accepting of ideas and dialogue. It just seems natural here. I’ve never had anybody shoot me down. Even if something wasn’t exactly the best idea, there’s always constructive criticism, constructive feedback... I have never felt discouraged by the administration. People are encouraged to be creative. It’s not a stifling environment at all. We have really good people. (P9C)

In summary, participants from the three community colleges included in this study described a college environment where there was a respect for differing viewpoints. This was demonstrated through the desire for new ideas and the encouragement of staff to think outside of the box. Administrators modeled the expectation for open dialogue and innovative solutions. By respecting differing viewpoints, college leaders contributed to an environment of support.

Opportunity for people to participate. Opportunities were provided at each college for people to participate in collaborative work to support student success. As one staff member explained, “you don’t have to fight your way into a meeting” (P2C). College leaders actively sought ways to involve the broader college community and implemented strategies such as providing broad invitations for people to participate, communicating plans through multiple means, actively seeking input from the college community, and establishing manageable committee structures with specific goals and start and stop dates. This section describes the opportunities provided at each college for staff to participate in collaborative processes to support student success.

At College A, staff members were invited to participate in areas that interested them. The first opportunity to become involved occurred when someone expressed interest in a project or was asked by one of the team leaders to serve on a team. With the team structure developed to support the AtD initiative, team leaders were encouraged to recruit participants to assist in accomplishing specific goals. This provided greater potential for individuals not typically involved on a collaborative team to be invited to participate. In addition to the opportunity to participate on a team, college staff were encouraged to attend regularly scheduled update sessions designed to keep the college

informed about AtD work and to gather feedback. Email and newsletter announcements informed people of the meetings and invited the participation of anyone who was interested. An administrator at College A explained, “Our attempt is to include everyone in some kind of forum or group meeting where they can talk about their programs, express their interests, desires, ideas. Everyone is welcome” (P9A).

At College B, planning sessions for FYI were open to anyone interested in participation. For this project, one-on-one work was conducted throughout the year to identify people’s areas of interest and connect those interests to potential involvement with FYI. In the initial development stage, the Director of Student Retention and Success went on what was called “missionary visits” to each department to present information and gain more intimate feedback from them about plans. The director talked with numerous groups across campus that didn’t necessarily need to be communicated with just to assure that everyone knew what was going on. “The missionary visits and one-on-one conversations with faculty were a key factor in getting them to sign up to participate” (P5B). The current Director of Student Retention and Success continued to meet one-on-one with faculty and staff to encourage their participation with FYI.

I have a lot of meetings with faculty members and I spend a lot of time getting to know faculty on a one-on-one basis. I have to ask “what are their passions” then I find opportunity for them to apply that toward the work of FYI. That’s how I’m able to get people involved. (P6B)

Administration at College C intentionally provided ways to bring people into collaborative work. Through strategies like the new faculty orientation process, workshops available through the CTL, inservice days, and the learning college day, “faculty and others in the college are working together to think about things in a broader way, not just about things that are happening in the classroom” (P4C). “Learning dialogues” were conducted periodically with groups of individuals to talk about how to promote student learning inside and outside of the classroom. The intentional effort to bring people into collaborative work extended to specific projects at College C. In some instances, people volunteered to be on a team; and in some instances they were handpicked to represent the areas that needed to be included. “But on every occasion they got an invitation to participate. It’s not a ‘you must.’ It’s always an invitation” (P1C).

Frequently, newer people were asked to join a team with people who had been there a long time and had a lot of experience. This added new ideas to the mix and provided an opportunity for new people to learn more about the college. The strategy described earlier of implementing short-term goals, as well as start and stop dates for all committees, provided an opportunity for more people to participate if desired.

This section described the opportunities provided at the three colleges for staff to participate in the collaborative efforts to support student success. Broad invitations were issued for people to participate on work teams or discussion groups, project plans were communicated through multiple means in order to keep people informed and involved, input from the college community was actively sought, and start and stop dates for committee work were established to make participation more defined and to get more people involved. By providing opportunity for involvement and encouraging participation by many, the colleges contributed to an environment which welcomed the contribution of individuals.

Open and encouraging atmosphere. The colleges involved in this study provided an open and encouraging environment for faculty and staff. This section describes the factors identified at the individual colleges that contributed to an open and encouraging environment.

An instructor at College C described the open environment he experienced at the college:

In my experience, the dean is a very down to earth, approachable individual. I feel like I can go in and have the dean's ear for a little while; you can speak to him, you may not wind up coming to a complete agreement for whatever the issue is, but still you feel like the door is open. I think that's something. When you have enough of those deans around the campus, I think it's something that makes faculty feel appreciated. And I think that encourages more interaction and collaboration and such.
(P9C)

The concept of all doors being open was present at all three colleges. A staff member at College A explained, "Anyone any time can go into any of the administrator's offices.... There isn't a closed door on this campus" (P8A). The vice president at the same site further elaborated, "You don't need an appointment to come to my office. You can just

come and talk with me. If I'm in my office, I'll talk with students, faculty, staff, and anyone that comes to the door" (P9A).

A statement by the president at College B reinforced the concept that a supportive environment contributes to the collaborative potential within an organization: "I think collaborations fall apart when the relationship isn't strong, when people are not allowed, or willing, to talk about problems when they arise and take care of them rapidly. Mountains can be built out of mole hills pretty easily" (P7B).

The encouraging environment described at College C was one that allowed ideas to flow upward from the front lines of the organization:

Administration is interested in student success, and they are interested in good ideas. You can go to your dean and say, "I have this idea" and explain why it benefits students and why it would be a good idea at the college. I think you've got a pretty good chance of having your idea approved, provided that it's feasible in various regards. (P9C)

An additional factor that contributed to a supportive culture was longevity of employees and administrative staff. A staff member at College A explained that the culture of the college was one of support provided to everybody individually, "from the newest custodian to the part-time employee" (P8A). Longevity contributed to this culture. "I think we are special because we have so many people that have been here so long. And we carry that commitment of caring all the way through" (P8A). Longevity of the president and upper administration contributed to a supportive environment in part because of the stability and familiarity that it provided. All three colleges had the benefit of functioning under a president with over 13 years of leadership at the same institution. Although the current president at College B had been in the position for only a year, he followed a long-term president. The current president also had a long history at the college in his own right, first as an instructor, then in progressively responsible positions, including vice president of instruction.

A consistent focus on student success contributed to a supportive environment. The promise of College C to "provide a student-centered environment and to focus all college staff and resources on student learning, student development, and student success" (Document 4C) impacted the way employees viewed their role with the college.

Before plans were implemented, College C staff members were encouraged to ask the question, “How does it benefit students” (P2C)? A staff member described the unified focus on student success that guided the work of College C: “We walk the talk, and people are very proud about working here. They know that they do good work.... They are proud of the work because they know the student is the center of the work” (P4C). The consistent focus on student success served to align the College around a common understanding of their work. The result was that departments understood the importance of their work to support students, whether or not they had direct contact with the student. As one employee explained, the focus was on providing services to students and supporting those who interacted directly with students. “From the reprographics department to the secretaries in the departments, everybody asks what do you need, how can we help you, or how can we best do this?” (P6C).

This section described the open and encouraging atmosphere that existed at the colleges included in this study. Factors that contributed to the positive atmosphere included open door access to administrators, characteristics of supervisors, focus on student success, the flow of ideas upward from the front line, and the longevity of upper administrators. By fostering an atmosphere that encouraged open communication and positive interaction, college leaders contributed to the overall environment of support.

Summary. A cross-case analysis conducted across three colleges identified six factors that influenced cross-functional collaboration in the community college. The first factor identified in this study was an environment of support. Colleges developed an environment of support by respecting differing viewpoints, providing opportunities for people to participate in collaborative work to support student success, and establishing an open and encouraging atmosphere. This section provided examples of actions and attitudes demonstrated at the colleges that led to these findings. Table 18 provides a composite list of the mechanisms that contributed to an environment of support at the three colleges.

Table 18

Composite List of Mechanisms That Contributed to an Environment of Support

Composite Themes	Composite Factors
Respect for differing viewpoints	<ul style="list-style-type: none"> • All ideas were considered and respected • Innovation and creativity were encouraged • Administrators encouraged ideas and dialogue
Opportunity for people to participate	<ul style="list-style-type: none"> • Leaders sought ways to involve the broader college community • Plans communicated through multiple means • Actively sought input • Start and stop date for committee work
Open and encouraging environment	<ul style="list-style-type: none"> • Open door among staff and administration • Longevity of staff and president • Ideas flowed upward • Focus on student learning • Departments supported those who had direct contact with students

Common Vision

The second factor identified across the three case studies as having an influence on collaboration in the community college was a common vision. This section first provides a description of the processes implemented at three colleges that served to focus the vision of the college around the collaborative effort to support student success. It is followed by a summary of findings related to developing a vision. Table 19 provides a parallel display of the mechanisms found to contribute to a common vision at each college.

Table 19

Mechanisms That Contributed to a Common Vision

College A	College B	College C
<ul style="list-style-type: none"> • Plans and goals for AtD were communicated through a variety of ways • Vision and goals for AtD were maintained by VP through regular follow up and meetings 	<ul style="list-style-type: none"> • Purpose of FYI was widely communicated • Vision and goals for FYI were maintained by director through planning, reporting, and publications 	<ul style="list-style-type: none"> • Plans for CTL were communicated • Vision and goals for the CTL were maintained through publications and active reminders by director

<ul style="list-style-type: none"> • Assessment results were reported • Cross-institutional dialog occurred to generate a common understanding 	<ul style="list-style-type: none"> • Assessment results were reported • Cross-institutional dialog occurred to inform, generate ideas, and focus the college 	<ul style="list-style-type: none"> • Assessment results were reported • Annual goal setting by individuals, departments, and divisions to generate plans and focus the college
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Mechanisms that supported a common vision. A staff member at College B explained, “it’s the vision that originally generated support for the project.” One of the factors that facilitated successful collaboration across departments was assuring that people knew why the college had undertaken the work. College leaders at each institution made the purpose and goals of the project clear to the college community. At College A and College B, where implementation of the collaborative project was fairly recent, the vision for the endeavor was initially set by the college president who publically announced the college’s commitment to engage in the project and informed staff of its purpose. This initial start was followed by additional meetings, announcements, written communication, and marketing tools that described the project and explained the intended purpose. As a staff member at College B explained, “You have to sell your vision to the institution” (P12B).

One of the key components to this information campaign was providing a theoretical base for why the college chose to engage in the activity. At College B, college leadership made a point to share research with the college community that showed the value and purpose of establishing a mandatory first-year orientation program for students. The Vice President for Student Services provided statistics and data about the impact first-year orientation programs have had at other colleges around the nation and explained the purpose of the project in terms that showed direct correlation with specific issues facing the college. One participant at College B described the vice president’s presentation about FYI in the following way:

She was savvy about what this means to the whole campus. She brought research from other colleges about retention, etc. and how we might approach it in a unique way. So people I think were excited about being part of something that was new. (Participant 2B)

College B administrators explained the purpose and goals of FYI as part of the vision setting process and were committed to sharing results with the college community.

At College C, the purpose for the CTL was clearly published on the website for the college community to see. Staff could identify a clear connection between the role of the CTL and the college's mission to serve students. The CTL director kept the vision refreshed and active in the minds of college staff by maintaining a visible presence on campus, providing continuous opportunity for individual involvement, and regularly distributing materials related to the mission of the CTL and current class offerings. The director actively presented a vision for the CTL that was interconnected with the overall college mission.

At each college, goals for the collaborative teams were set prior to inviting people to participate to accomplish the task. At College A, the goals for the AtD initiative were established by an initial administrative group that served to focus the AtD work at the college. That same group took responsibility for tracking the results of the collaborative efforts and focusing the work on the stated goals. Upper management monitored the college's progress in meeting the AtD goals in a consistent, ongoing manner (P10A).

At College C where cross-functional teams were used for every major project (PIC), administration set specific goals and a timeline for every committee. An annual process was established to allow individuals, divisions, and departments set goals that supported the college's mission and strategic plan. The planning stage of a collaborative project was led by an individual, such as the Director of the CTL or the Director of Student Retention and Success, or it left to the collaborative team to develop the details. In either situation people with ideas, energy, and a desire to be involved participated to support the plan development and brought the plans to fruition.

At College A, the detailed plans for how goals were to be accomplished were the responsibility of the collaborative team. A staff member explained that the goals of the committee were clear, but the details and plans were open for development by the committee (P5A). At College B and College C, the director of the project facilitated the planning and involved others in the decision making and implementation of the plans.

Summary of findings. Establishing a common vision required an intentional effort. Examples provided by all three colleges demonstrated how individuals put considerable time and energy into identifying the purpose of the project, clarifying goals, and establishing a plan before the vision was ever shared with the rest of the college community. It also took work to communicate the vision in a way that was relevant, understandable, and accepted within the college community. People were more willing to participate and contribute their time and energy when they saw the goal, knew the project had the support of the college, and felt their contribution was of value to students and to the college mission. Without the work behind the initial vision, goals, and plans, there would have been more potential for failed efforts and wasted time. Once the collaborative project was underway, work was needed to maintain the momentum and keep the work of the collaborative team fresh and alive. For each of the projects that served as a base for this study, people really worked at maintaining the vision and direction of the collaborative projects. As one administrator explained,

A lot of it is persistence. You know, having a vision and understanding the direction you want to go in; then having the ability to know the steps you have to take and taking them every day. If you let up for a moment, it might not go exactly the way you want. You need to make sure that you get a collection of people around you that bring something to the table for the kinds of effort that need to be done so that the project keeps going in the direction you want. (P8B)

The cross-case analysis conducted for this study identified common vision as one of the factors that influenced cross-functional collaboration in community colleges. This section provided examples and key points that demonstrated how college leaders established a common vision for the collaborative projects of importance to the college. Table 20 provides a composite display of the mechanisms that contributed to a common vision.

Table 20

Composite List of Mechanisms That Contributed to Common Vision

Theme	Composite Factors
Common Vision	<ul style="list-style-type: none"> • The purpose, goals, and plans were widely communicated • The vision was maintained by an administrator through ongoing reporting and information sharing • Assessment results were reported • Cross-institutional dialog occurred to generate a common understanding

Established Processes

In order to support effective cross-functional collaboration, processes that encouraged the involvement of individuals and allowed ideas to enter the organizational pipeline were established. By establishing processes that supported involvement of the college community, ideas were generated from the ranks and the spectrum of campus involvement was broadened. A staff member at College C explained that while the college did need to provide some leadership and direction, it also had to “get ideas and input from people at all levels of the organization and get buy in from them; get them excited about certain pieces of it, then move forward with it.” (P4C).

This section presents information about the processes established at the three case sites to support collaboration. Processes were established: (a) for ideas to enter the pipeline, and (b) for approval and support. Following a discussion of each of these tasks, a summary of findings is provided for the section. Examples from the colleges are provided and quotes are included to provide context and interest. A parallel comparison of the factors that contributed to an established process for collaboration at each college is presented in table 21. The parallel format provides a side-by-side display of college findings with comparable factors listed horizontally in the same row. The far left column indicates the category described. Areas that are blank indicate that a similar factor was not identified at that institution. The presence of individual factors identified at some institutions and not at others portrays the variance found among the colleges and does not detract from the relevance of the theme.

Table 21

Factors That Contributed To an Established Process for Generating Participation

Processes	College A	College B	College C
For ideas to enter the pipeline	<ul style="list-style-type: none"> • Team structure established to allow new solutions to be generated from the ranks • Open meeting to encourage participation and idea sharing 	<ul style="list-style-type: none"> • Missionary trips and one-on-one discussions to seek input and involvement • Processes occurred to seek input from individuals • Innovation and problem solving expected at all levels of the organization 	<ul style="list-style-type: none"> • Ongoing goal setting process where individuals, departments, and divisions generate ideas and goals • Input sought from a broad range of people for every project • Culture and established processes enabled innovative ideas to be submitted for approval and funding
For approval and support	<ul style="list-style-type: none"> • Consistent meeting and reporting structure to approve plans and monitor results • Established defined reporting and assessment process for team goals 	<ul style="list-style-type: none"> • Line of communication through the vice president provided approval process 	<ul style="list-style-type: none"> • Established approval process • Utilize a defined process for collaborative projects with clear goals and start and stop dates • Hiring and assessment processes supported collaborative work

Processes for ideas to enter the pipeline. The need to establish processes to support collaborative efforts was related to the question of whether collaboration started

from the top and worked its way down through the organization, or whether it started within the ranks and worked its way up. Though participants in this study saw a strong influence by management on the success of collaborative projects, they also recognized that effective collaboration required commitment and ideas from all parts of the organization. A staff member at College B explained that collaboration could occur both ways (from the top down and from the bottom up), “But if it doesn’t have the elements of both, the collaboration isn’t going to occur.... You need a grassroots effort with a top down priority” (P5B).

Comments provided by participants demonstrated the interrelationship between management and staff in the development of a collaborative effort:

- To be successful [collaboration] has to happen at all levels. You don’t want to lose the excitement you can get at the bottom, because those are the folks that have the direct interaction with students all the time. They’re the ones who know. [Some ideas] come from them and they bring it up the ladder, and you provide support and do some shaping of that and determine what we can actually do and have the resources to do. [Other ideas] come from the top and go down; or it comes from the middle, the director level or the dean level. Part of the success comes from making the commitment that we’re going to move forward (P4C).
- I suspect that [collaboration] occurs from the top down by people who have a vision of that. But at the same time from a pragmatic standpoint, it’s never functional until it comes up from some spot. (P10B)
- It takes a catalyst to get it going, but you can’t do it alone. (P4C)
- I have seen the most inspiring collaboration coming from the bottom and trying to work its way up. You look at the FYI, and it really started from the top with the VP, the dean, and the president. (P6B)
- I think it’s both. I think there’s a culture that has been built up over time, so it’s easy to go from the bottom up and the top down. Our president expects that. The faculty are also interested in having that happen. (P8B)

A point drawn from these comments was that ideas to help the collaborative work succeed may be generated from various points within the college. Processes that enabled

ideas, creativity, and participation to flow from the ranks was an important contributor to a project's success.

To involve staff at College B, a quarterly review process and an ongoing planning process were implemented to seek input from the college community and allow ideas related to FYI to be brought forward and approved. Opportunity was provided throughout the development process for ideas to flow from the ranks, and this was something that continued in order to fine tune and improve the experience for students.

To meet the expectations of the AtD initiative and expand the college's ability to involve people in the work of the initiative, College A implemented a committee that invited participation from people across the campus. A process was developed where team leaders sought participation of individuals interested in the work being performed by the strategy team. As plans were developed, the core team provided approval and committed college resources to support the work of the strategy team. The college found the team process effective and expressed the intent to maintain the structure beyond the AtD project.

At College C, employees were encouraged to share perceived needs and ideas for improvement with their supervisor. If the idea required involvement of the greater college community, the idea was conveyed to upper administration where next steps were determined. If further planning needed to be done, the idea was sent back out to the ranks to identify potential solutions and provide a proposal for addressing it; the proposal then returned to the vice presidents for approval, support, and resources to move forward within the ranks.

The examples provided in this section revealed the importance the colleges placed on generating ideas and participation from the college community. By providing processes for ideas to enter the pipeline, the potential for innovation and involvement of the college community was strengthened.

Processes for approval and support. Participants at College C described a history of working collaboratively and supporting ideas that arose from the front lines of the institution. Processes were in place to enable project ideas to be considered for approval and funding.

One process implemented at College C that supported collaborative work was the practice of submitting annual objectives. Each year every staff member was asked to complete a Continuous Improvement Objective Report (CIOR) which provided opportunity to present ideas and commit to achieving a goal. Through this process, every employee offered input and assumed responsibility for supporting the objectives of the college. The form provided a place to list the objectives, measurement techniques, resources needed, people who needed to be involved, and the intended results. Through this process, management became aware of areas of need that the college was not addressing and was able to provide support to address the issues identified by staff. Staff at all three colleges were encouraged to provide ideas and proposals to their supervisor for consideration.

The hiring and assessment processes implemented at College C described earlier also supported collaboration by focusing on the Eight Expectations of College Staff. A process implemented for collaborative teams that provided clear goals and specific start and stop dates strengthened collaborative work. A calendar drove the goal setting, planning, and assessment cycle for the college, providing a structured environment within which collaborative teams could function. The calendar supplied an outline of when things were due and provided opportunity for the budget to support specific needs of identified projects.

Summary of findings. Establishing processes to encourage involvement and allow ideas to enter the pipeline was identified as common theme across the three colleges included in this study. Processes established at the colleges focused not only on generating ideas and involvement from staff, but also on providing approval and support for ideas that arose. Collaborative projects were seen as needing the approval and support of upper management, as well as the dedication and hard work of individuals from across campus. This section provided examples of how administration at three colleges established the means for ideas to flow up from the ranks and to determine where resources should be allocated. The processes established at the colleges to support cross-functional collaboration are summarized in the composite list provided in Table 22.

Table 22

Composite List of Factors That Contributed To an Established Process for Generating Participation

Process	Composite Factors
For ideas to enter the pipeline	<ul style="list-style-type: none"> • On-going structure established to generate ideas and involvement from the ranks • Innovation and problem solving was encouraged • Process provided to seek input from a broad spectrum of the college
For approval and support	<ul style="list-style-type: none"> • Process established to approve plans • Defined process for reporting team goals and effectiveness • Hiring assessment processes supported collaborative work

Resources

A fourth factor which influenced effective cross-functional collaboration was the availability and allocation of resources. A finding of this study was that the resources of leadership, funding, and time influenced cross-functional collaboration. A parallel comparison of resources identified at each case site to support collaboration is provided in Table 23. The parallel format provides a side-by-side display of resources with comparable examples listed horizontally in the same row. The far left column indicates the type of resource described, and a blank area indicates that a similar factor was not identified at that institution.

Table 23

Resources That Contributed to Cross-Functional Collaboration

Resources	College A	College B	College C
Leadership	<ul style="list-style-type: none"> • Institutional researcher provided to support AtD information needs • Administration initiated and supported AtD 	<ul style="list-style-type: none"> • Director of Student Retention and Success supported FYI continuation • Administration initiated and supported FYI 	<ul style="list-style-type: none"> • Associate Dean designated to support CTL continuation • Administration supported the work of the CTL
Funding	<ul style="list-style-type: none"> • Grant funding attained to support AtD 	<ul style="list-style-type: none"> • Operating funds committed to support FYI 	<ul style="list-style-type: none"> • Operating funds committed to support FYI

			<ul style="list-style-type: none"> • A substantial “middle” organization supported plans
Time	<ul style="list-style-type: none"> • Time provided to participate 	<ul style="list-style-type: none"> • Time provided to work out the kinks 	<ul style="list-style-type: none"> • Time provided to participate

Leadership. One of the resources provided in the community college to support collaboration was leadership. At two of the colleges, one or more positions were established to support the collaborative work surrounding the particular project. At College B, a Director of Student Retention and Success was hired to oversee FYI. At College C, an Associate Dean was hired to manage the work of the CTL, under the direction of the Dean for Academic Development and Learning Resources. The CTL also housed nine additional staff who supported the varying responsibilities that fell under the CTL’s domain. These positions reflected a strong commitment of the college to support the work of the project, an understanding of the amount of work involved in sustaining a major effort, and a desire to continue the good work occurring through these collaborative efforts.

At College A, the leadership responsibility for collaborative teams was assigned to current employees who served as co-leaders for their group. A commitment of time and energy was made by team leaders to plan and implement activities to meet their intended goals. Leadership was also provided by the Vice President who oversaw the work of the teams and maintained reporting and assessment structures. Even in the colleges where a position was created to oversee the project, the college maintained the responsibility to champion the project and assure it continued to meet its intended objectives and serve the needs of the college.

College leadership also impacted collaboration by assuring that the right person was in the right position for the task. A staff member at College C commented that administration did a quality job of identifying people with the work. The college intentionally hired individuals who were able to provide leadership, work in a collaborative manner, and guide collaborative projects. As she explained,

You don't just appoint the man [*sic*] from across the street to be the captain of the Titanic. You've got to get some true talent in here; the people who can think through, the people who can engage others on an interpersonal level. I think people can be trained. Leaders can model what they believe and they can impart that to the people. But it does take some talent around the table. People who don't know what to do from step to step to step can be a liability for the team. (P2C)

An administrator at College B echoed the thought that, "It boils down to hiring the right people with the willing attitude" (P2B). Getting the right person in the position took work; it didn't happen on its own. In reference to leadership for FYI, an administrator at College B noted, "it's been a real effort to keep the right people in the right place" (P8B). A participant at College A also expressed the importance of getting the right people in the right place: "You have to hire good folks. And some people drop off along the way because they don't fit. And that's better for the organization, but it's hard to do that" (P9A).

Funding. The commitment of financial resources to support a project was another factor that influenced effective collaboration. Without resources to support the staffing and implementation of plans, efforts could cease to continue. An administrator at College C noted that the college had a good tax base and a growing population in its district so it had "the resources to do the job" (P5C). With those resources, the college was able to "spend a lot of time on staff development and new faculty orientation, things like that. So there's a high quality of personnel involved" (P5C). The college also supported a sizeable "middle" organization comprised of staff that provided services to those who had direct contact with students. The ten staff that supported the CTL were an example of the staffing that developed to support the projects that impacted student success.

Financial resources attained through grants had a significant impact on cross-functional collaboration at College A. Through the grants associated with AtD, the college developed new structures that relied on collaborative work and focused on a culture of evidence. A participant at College A indicated that grant funding sometimes introduced additional challenges when specific outcomes identified by the funder conflicted with the direction the college determined would provide a better opportunity

for the students (P8A). At Colleges B and C, funding for FYI and the CTL was provided from the colleges' operating budgets.

Time. The resource of time was a factor identified as having an impact on collaborative efforts. At College C, time was specifically viewed as a resource the college contributed to make sure the team was successful. For example, if a faculty member was asked to participate on a team which required a significant amount of time, they were given the ability to request a substitute for their class. Classified staff were given time away from their regular responsibilities. Through these actions, the college demonstrated a commitment to the project and conveyed the message that the task was important and administration wanted you there (P1C).

College B also identified time as a resource that contributed to effective collaboration. A staff member explained that one of the things the previous president taught and the current president carried forward was the understanding "that if we're making super big changes, we can't get that done in a quarter. Sometimes it takes is a whole six, nine months or more to get something done" (Participant 4B). In addition, you don't implement a project only once then move on. "You need to understand that it's going to take a few years to work out the kinks.... There needs to be support staff and funding to actually keep it going" (P3B).

Summary of findings. The cross-case analysis conducted for this study identified the dedication of resources as one of the factors that influenced cross-functional collaboration in community colleges. Administration provided support by committing the resources of leadership, funding, and time. Each of the colleges dedicated staff to lead or support the work of the collaborative project. Funding was identified to carry out the work of the teams, and time was provided for people to participate and to work out the kinks of the project. This section provided examples of the resources allocated at the three colleges to support the success of the collaborative project. Table 24 presents a composite list of resources that were provided.

Table 24

Composite List of Resources That Contributed to Cross-Functional Collaboration

Process	Composite Factors
Leadership	<ul style="list-style-type: none"> • Staffing provided to lead the project or provide support • Administration supported the work of the project
Funding	<ul style="list-style-type: none"> • Grant or operational funds committed to support the project • Substantial “middle” organization developed to support plans
Time	<ul style="list-style-type: none"> • Time provided to participate

Accountability

A fifth factor found to influence effective cross-functional collaboration was the college’s commitment to accountability. Each of colleges involved in this study valued accountability and each made a commitment to assessing and reporting results. Consequently, the colleges developed structures to maintain accountability. This section describes the impact accountability had on the colleges and identifies mechanisms that were implemented to support the accountability for collaborative work. Information in this section is provided according to the college’s accountability to students, staff, leadership, and assessment. Table 25 provides a parallel comparison of actions to support accountability at each case site.

Table 25

Factors That Supported Accountability

Factors	College A	College B	College C
Accountability to students	<ul style="list-style-type: none"> • Purpose of AtD was to improve student success 	<ul style="list-style-type: none"> • Purpose of FYI was to improve student success 	<ul style="list-style-type: none"> • Purpose of CTL was to improve student success through quality instruction and service • Published promise statement
Accountability to staff	<ul style="list-style-type: none"> • Provided ongoing reports of progress and results 	<ul style="list-style-type: none"> • Publish overall results in graphical format • Commitment to follow up on concerns 	<ul style="list-style-type: none"> • Provided ongoing reports of progress and results

Accountability to leadership	<ul style="list-style-type: none"> • Monthly reports to Board of Trustees 	<ul style="list-style-type: none"> • Update reports to the Board of Trustees 	<ul style="list-style-type: none"> • Update reports to the Board of Trustees • Annual report of institutional effectiveness
Accountability through assessment	<ul style="list-style-type: none"> • Ongoing assessment of AtD results 	<ul style="list-style-type: none"> • Ongoing assessment of FYI 	<ul style="list-style-type: none"> • Ongoing assessment of CTL and annual assessment of objectives • DRIVE model to guide group processes and project development

Accountability to students. The colleges within this study viewed accountability to students as their primary responsibility. To that end, the colleges actively sought to keep the college's mission at the forefront of their work. The promise statement to students that guided planning and decision making at College C provided an example of that focus. The intentional focus on student success consequently had an effect on the culture of the institution. A staff member at College A explained that the structures implemented as part of AtD have "definitely changed the culture. The college is now more intentionally focused on student achievement and aware of how our students are doing" (P9A). Another staff member at the same institution noted that AtD "is giving us a focus, and it actually is the student now. And that whole focus is getting stronger. Customer service is increasing" (P2A). A staff member at College C explained that plans came to fruition when the college focused on the mission. "I think you have to go back to the fact that it's really not about me. It's about what we are here for, and that is to serve students. We just need to keep that in mind" (P3C). Another participant from the same college elaborated, "We're here about the student. The student is our primary function. So we're not getting caught up in different nuances or territorial problems. At the end of the day, what does it have to do with what the students will learn?" (P2C).

In this section, accountability to students was demonstrated through the participants' repeated reference to student learning and success. The emphasis placed on student success and the assessment processes that were implemented to measure the impact of their efforts on student retention and success together resulted in changes that influenced the culture of the institution.

Accountability to staff. Study participants explained that collaborative teams were also accountable to staff for effective results because staff members were part of the support system responsible for making the efforts successful across campus. Staff awareness and support was important for improving college efforts and helping information flow to students. Each of the colleges made an intentional effort to keep staff informed, assure their ideas were heard, and respond to their concerns. At College B, for example, faculty members expressed concerned about whether they would hear whether the FYI effort was successful. The FYI team therefore made a point to give feedback to constituent groups on a regular basis. "All of those people who have issues or viewpoints about what needs to be fixed or improved, we have to go back and show them how it is being improved" (P1B).

Accountability to staff included seeking input about what needed to be changed, as well as providing feedback about the outcome of the project. "Throughout, and even now, we constantly ask people for their feedback. We have been open to tweak it, change it, modify it, try new things over the whole history of FYI" (P5B). At College C, assessment was an integrated part of each activity and project in order to gather feedback from participants and identify ways to make the work more effective. In the CTL, for example, assessment occurred at the end of each class, as well as periodically through the year, to assure the appropriate mix of classes was being offered (P2C).

Communication about plans and results was an ongoing process at each college. Information was communicated through one-on-one conversations, group information sessions, newsletters, publications, emails, written reports, oral announcements, and web sites. It was a factor that each college continuously worked to maintain in order to keep staff and others aware of what occurred and how they could participate. All three colleges attempted to make the work of the collaborative teams transparent to the college

community so everyone knew what was occurring. At College A, for example, everyone was invited to sit in on planning and reporting meetings. Information was also shared with the board of trustees, and meeting notes were posted on line. “We also have a spot on the website where we post the different things we're doing. We've also talked about them at faculty in-service and other staff meetings” (P2A). The college “made a real effort to have things opened in that way and we’re using technology to our advantage” (P3A).

This section described the accountability to staff members that was present at the college. Accountability to staff was demonstrated as leaders sought input about what needed to be changed and provided feedback about the outcome of projects. To remain accountable to staff members, team leaders and college administrators maintained ongoing communication with the college community to keep them informed and up to date about the plans and results of the collaborative efforts.

Accountability to college leadership. Collaborative teams were also accountable to the college leadership for achievement of desired results with the resources that were entrusted to them. Ongoing reports to the Board of Trustees occurred at each of the colleges included in this study. At College A, for example, college staff prepared a monthly report for the Board of Trustees that provided information related to the college’s progress on student achievement. It identified actions that occurred and the resulting impact. College B and C described providing information to the Board of Trustees when information was available in order to keep them informed.

Accountability to college leadership was demonstrated through regular, ongoing reports to the Board of Trustees to keep them informed of developments related to major college initiatives. Reporting accountability indicated the level of importance the collaborative projects had within the colleges.

Accountability through assessment. Structures were implemented to provide greater accountability through assessment. Being willing and able to assess the outcomes of a project provided an integral part of effective collaborative efforts. Practices that were implemented to support assessment included the establishment of student tracking processes, regular reporting of results, data driven decision making, and meeting

structures that focused on results. A staff member at College C explained that the institutional research staff was relied upon heavily for providing information to guide decision making and for tracking program effectiveness. For example, the institutional researcher at College B provided graphs to visually display the effectiveness of FYI. “You have to know if it’s working. And if people don’t have that information, the results are just antidotal or personal opinion” (P2B). A participant at College A indicated that the college tracked and reported the results of most everything they did to improve student success. “What I like about it is that it is data driven; so if we’re saying retention is a concern, we’ve got to find out not just where we’re having problems but what are we doing that works” (P3A). Another staff member at the same college explained, “The reporting keeps us engaged in the process. You have to report; you have to do it” (P9A). At College B the college was “constantly looking at data” related to FYI. “We’ve probably assessed FYI more than we have assessed anything we’ve done at this college” (P1B).

College C’s willingness to assess the work of the college was demonstrated through the DRIVE model it implemented for new projects. DRIVE stood for Define, Review, Implement, Evaluate, and Integrate. It was a model used not only by strategic priority teams, but also to support the teamwork that occurred across campus. The model was used to encourage continuous improvement and to help the college be more data driven in its decision making (P4C).

In summary, each college that participated in this study had implemented procedures that enabled them to assess the effectiveness of their actions on student success and retention. Accountability was established as assessment practices were implemented in a structured, ongoing manner. Assistance from the institutional researcher was key for tracking data and identifying program effectiveness.

Summary of findings. The colleges’ commitment to accountability was a unifying theme across all three institutions included in this study. Accountability was discussed in terms of accountability to students, staff, and college leadership. Assessment was the process that enabled accountability to occur. Accountability to students was visible through the commitment of participants to student success. By focusing on the

assessment of student achievement, the culture of the college was described as changing to a more student-centered environment.

Accountability to staff was present because of the role of the college community in supporting the collaborative projects. Accountability to staff included seeking input about what needed to be changed and providing feedback about project outcomes. Ongoing communication occurred to keep staff members informed about plans and the impact of actions on student success. Accountability to college leadership was demonstrated through regular, ongoing reports to the Board of Trustees concerning the college's effectiveness in supporting student success. By implementing assessment processes, the colleges in this study were able to identify the effectiveness of their actions on the success and retention of students. Table 26 provides a composite list of the assessment practices implemented at the colleges.

Table 26

Composite List of Factors That Supported Accountability

Accountability to students	<ul style="list-style-type: none"> • Developed projects that supported student success • Published promise statement to students
Accountability to staff	<ul style="list-style-type: none"> • Provided ongoing reports of progress and results • Committed to follow up on concerns
Accountability to college leadership	<ul style="list-style-type: none"> • Made regular reports to the Board of Trustees • Provided annual report of institutional effectiveness
Accountability through assessment	<ul style="list-style-type: none"> • Provided ongoing assessment of results from collaborative projects • Developed DRIVE model to guide group processes

Recognition

Recognition was the sixth factor identified across all three case sites as a contributor to effective collaboration. It was through recognition that individuals felt appreciated for the time and energy they expended beyond their daily responsibilities. Recognition served to remind participants of the importance of the work they participated in and acknowledged that others were aware of the contribution they made. Recognition contributed to collaboration because it was one of the factors that encouraged people to participate. This section describes how recognition of participants on collaborative teams

occurred at each case site. Table 27 provides parallel comparison of the methods implemented at each college to provide recognition of participants.

Table 27

Methods Implemented to Provide Recognition of Participants on Collaborative Teams

College A	College B	College C
<ul style="list-style-type: none"> • Recognition and appreciation expressed publicly • Recognition provided through email, newsletter, website, individual thanks • Participants introduced and asked to report at trustees meeting 	<ul style="list-style-type: none"> • Recognition and appreciation expressed publicly • Recognition provided through email, hand-written notes of thanks, college publications • “Celebrate excellence” moment provided at Board of Trustees • Nominated for and received national “shared journey” award 	<ul style="list-style-type: none"> • Recognition and appreciation expressed publicly • Recognition provided through website, annual book of accomplishments, individual thanks • Periodic presentations made to the trustees • Nominated for and received national “shared journey” award • Committees appointed by administration

All three colleges recognized individuals within their college for special achievements, employment longevity, and contributions to the college community. They also all publically and privately recognized the work of individuals who contributed to the work of collaborative teams focused on student success. At College B, the college took the opportunity to recognize collaborative participants in several ways. Through a “celebrating excellence” moment held during every Board of Trustees meeting, the people involved in FYI were recognized by the Board at various times. The college held an FYI celebration and “invited everybody that had ever been involved in FYI, because we’ve all done it together” (P5B). Small tokens of appreciation were given to those who participated, and a hand-written thank you card was sent each quarter to those who contributed to the success of FYI. A participant at College A remarked, “It’s very important to acknowledge people. I think the most important thing we can do is say ‘thank you’ to people, and be very quick to be thankful for their contributions” (P5B). In

addition to the internal recognition given to participants of FYI, the project also received national recognition by being a recipient of the Terry O'Banion Shared Journey award presented by the National Council on Student Development (NCSD).

College A also made a point to intentionally recognize and appreciate individuals who participated on a collaborative team. One way the college honored participants was to invite them to be the ones to provide information to the Board of Trustees and explain the results of their work. Recognition was also publicly given by the president and the vice presidents at staff meetings and other gatherings for the work staff members were doing as part of the AtD initiative. Appreciation was shown through individual praise, emails, letters, recognition in the newsletter, certificates of appreciation, and inviting someone to report successes. As one staff member described, "We're pretty good here about patting people on the back. We share success stories whenever we can" (P2A).

At College C, the work of collaborative teams was publicly recognized as important. One way that occurred was through publicly introducing at college events those who served as project coordinators and committee members. Team participants knew the work they did was important because they were a sanctioned committee on the campus and people from across campus were willing to give time to help support the team's work. As one project coordinator explained, she received continued support "in the form of volunteering from all levels – administrative down to instructional, across curriculums, across disciplines" (P6C). A staff member at College C revealed the college's focus on recognizing individuals by the following comments:

[College C] does a really phenomenal job of actually encouraging collaboration because they put out a book at the end of the year of all the people who have done things. It's a really nice glossy book. It has people's pictures, and they give awards for leadership and even support staff for what they've contributed. So I think that [College C] does a really good job of encouraging and celebrating when the things come together and work. They show people and model that behavior and say "ok, this is how this works." (P3C)

Annual awards provided an ongoing way for College C to recognize the contribution of individuals. An award that had recently been added to the list of recognitions was called "innovation of the year." This award was developed to recognize

individuals and teams who implemented a creative idea, process, or project to support the work of the college. The CTL oversaw the annual award process. A student retention website developed by the college provided recognition for creativity and collaboration to support students through its “be the star, make a difference” recognition. Two people or teams were selected each month, the strategy they implemented was posted on the website for people to see, and a picture of the award winners were posted with stars around the frame to celebrate their accomplishment. The institutional research department also published a document each year that listed the contributions that individuals and teams made to support student success through the year.

In this section, recognition was identified as an important aspect of successful collaborative efforts because it provided a way to appreciate and thank staff for their participation. The colleges included in this study recognized the importance of recognition for encouraging participation, and they implemented processes to acknowledge work performed and celebrate accomplishments. A composite list of methods implemented at the colleges to provide recognition for participants of collaborative teams is provided in Table 28.

Table 28

Composite List of Methods Implemented to Provide Recognition of Participants

Participants were recognized	<ul style="list-style-type: none"> • Recognition and appreciation expressed publicly • Recognition provided through email, website, hand-written notes, college publications, and other methods • Participants made presentations to the Board of Trustees • Received formal recognition through national award • Committees were specifically appointed by administration
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Section Summary

This section presented information related to the second research question explored through this study: What organizational factors influence cross-functional collaboration in the community college? From the cross-case analysis that was conducted, the following six factors were identified as having an influence on cross-

functional collaboration: (a) an environment of support, (b) common vision, (c) processes, (d) resources, (e) accountability, and (f) recognition.

The first factor identified to have an influence on collaboration was an environment of support. Colleges developed an environment of support by respecting differing viewpoints, providing opportunities for people to participate in collaborative work to support student success, and establishing an open and encouraging atmosphere.

Establishing a common vision was the second factor identified. To establish a common vision, time, and energy was given to identify a purpose, clarify goals, and establish a plan before the vision was shared with the rest of the community. Communication was key for conveying the vision in a manner that made it relevant, understandable, and accepted within the community.

The third factor that supported cross-functional collaboration was the development of processes to encourage participant involvement and allow ideas to enter the pipeline for approval and funding. The colleges in this study developed processes to both encourage the generation of ideas and provide a route for them to be considered for approval and funding.

The fourth factor that contributed to collaboration was the commitment of resources to support the collaborative project. Resources of leadership, funding, and time were provided to support the work of teams. Leadership was provided through dedicated staff to lead or support the work of the collaborative project. Funding was identified to carry out the work of the team, and time was provided for people to participate and to complete the work of the project.

Accountability was the fifth factor implemented across all three colleges to support collaboration. Accountability was discussed in terms of accountability to students, staff, and college leadership. Assessment was the process that enabled accountability to occur. By implementing assessment processes, the colleges in this study were able to identify the effectiveness of their actions on the success and retention of students. Student retention and success increased and the culture of the college was described as changing to a more student-centered environment.

The sixth factor identified as supporting cross-functional collaboration was recognition. Recognition served to remind participants of the importance of the work they participated in and acknowledged that others were aware of the contribution they made. It was through recognition that individuals felt appreciated for the time and energy they expended beyond their daily responsibilities.

Through examining the six factors identified across all three colleges, a greater understanding was gained of the way colleges brought collaborative plans to fruition. Table 29 provides a summary representation of the key findings related to Research Question #2: What organizational factors influence cross-functional collaboration in the community college? An “X” was used to indicate the colleges where the specific factors were identified.

Table 29

Summary of Organizational Factors That Influenced Collaboration at Three Community Colleges

	College A	College B	College C
Environment of Support			
Respect for differing viewpoints	X	X	X
• All ideas were considered and respected	X	X	X
• Innovation and creativity were encouraged	X	X	X
• Administration encouraged ideas and dialogue	X	X	X
Opportunity for people to participate	X	X	X
• Leaders sought ways to involve the broader college community	X	X	X
• Opportunity for many to be involved	X	X	X
• Open meetings	X	X	X
• One-on-one conversations to invite participation		X	
• Learning dialogues			X
• Start and stop dates for committees to allow more to participate			X
Open and encouraging atmosphere	X	X	X
• Open door access to administrators	X	X	X
• Longevity of upper management	X	X	X
• Ideas flow upward from the front line	X	X	X
• Focus on student learning	X	X	X
• Departments supported those who had direct contact with students			X

Common Vision			
• Assessment results were reported	X	X	X
• The vision was maintained by an administrator through ongoing reporting and information sharing	X	X	X
• The purpose, goals, and plans were widely communicated	X	X	X
• Cross-institutional dialog occurred to generate a common understanding	X	X	X
Processes Established			
For ideas to enter the pipeline			
• On-going structure established to generate ideas and involvement from the ranks	X	X	X
• Innovation and problem solving was encouraged		X	X
• Process provided to seek input from a broad spectrum of the college	X	X	X
For approval and support			
• Process established to approve plans	X	X	X
• Defined process for reporting team goals and effectiveness	X		X
• Hiring assessment processes supported collaborative work			X
Resources Provided			
Leadership			
• Staffing provided to lead the project or provide support	X	X	X
• Administration supported the work of the project	X	X	X
Funding			
• Grant or operational funds committed to support the project	X	X	X
• Substantial “middle” organization developed to support plans			X
Time			
• Time provided to participate	X	X	X
Accountability			
Accountability to students			
• Purpose of projects was to support student success	X	X	X
• Published promise statement to students			X
Accountability to staff			
• Provided ongoing reports of progress and	X	X	X

results			
• Commitment to follow up on concerns		X	
Accountability to college leadership			
• Regular reports made to the Board of Trustees	X	X	X
• Annual report of institutional effectiveness			X
Accountability through assessment			
• Ongoing assessment provided of the results of the collaborative projects	X	X	X
• Developed DRIVE model to guide group processes			X
Recognition			
• expressed publicly	X	X	X
• provided through email, website, hand-written notes, college publications, and other methods	X	X	X
• Participants made presentations to the Board of Trustees	X	X	X
• Received formal recognition through national award		X	X
• Committees specifically appointed by administration			X

Research Question #3: How Does College Leadership Facilitate Cross-Functional Collaboration in the Community College?

This section presents findings in response to Research Question #3: How does college leadership facilitate cross-functional collaboration in the community college? The section focuses on the way the president and other top-level administrators at the three study sites facilitated collaboration. Through analysis of the data, several themes emerged. The key themes found across all three cases showed that college leaders influenced collaboration by: (a) contributing to an environment of support, (b) establishing the project as a college priority, (c) implementing processes that facilitated collaboration, (d) involving the right people, (e) providing clear direction and goals, and (f) owning responsibility for effective functioning.

The role of college leadership in facilitating cross-functional collaboration was found to be closely connected with the factors that support collaboration. Selected examples and quotations included in this section demonstrate the impact of upper management's involvement in the success of cross-functional teams. The figure presented

earlier in response to Research Question #2 has been updated in this section to include the role of college leadership in facilitating effective collaboration within the institution. It's through the guidance and direction of college administration that factors supporting collaboration were implemented. Figure 4 provides a visual representation of the relationship of leadership to effective collaboration.



Figure 4. The relationship of college leadership and organizational factors on cross-functional collaboration in the community college.

While not every project is completed in a collaborative manner, the nature and size of the projects included in this study led to the utilization of cross-functional teams to accomplish the intended goals. Upper management was seen to influence the success of the projects through the factors described in this section. Some of the information presented in this section is closely related to the information presented in response to Research Question #2. In areas where similarity exists, new insights from college participants are provided to increase understanding, and the topic is addressed from the perspective of the role of college leadership in facilitating collaboration. Each subsection begins with a table that provides a parallel comparison of activities identified

at the three colleges related to the theme. Each subsection ends with a composite listing of the activities identified through the section. The section summary located at the end of the section provides a cumulative table of the findings generated through the section.

Contributing to an Environment of Support

The first way that college leadership facilitated cross-functional collaboration was through establishing an environment of support. Throughout this study, participants attributed the environment in which collaboration occurred to the attitudes and actions demonstrated by the college president and other executive leaders. Participants indicated that upper administration contributed to an environment of support as they: (a) set the tone through the attitudes they displayed, (b) modeled the behavior they expected, (c) provided a visible presence on campus, and (d) sought ideas and input from others. Table 30 provides an overview of the way senior administrators were found to contribute to an environment of support.

Table 30

Actions Through Which Upper Management Contributed to an Environment of Support

	College A	College B	College C
Set the tone	<ul style="list-style-type: none"> • The president set the tone through attitudes and actions displayed • Upper management recognized the work of individuals • Leaders sought to continuously improve 	<ul style="list-style-type: none"> • The president set the tone through attitudes and actions displayed • Upper management recognized the work of individuals • Leaders sought to continuously improve • “Can do” attitude among top administrators 	<ul style="list-style-type: none"> • The president set the tone through attitudes and actions displayed • Upper management recognized the work of individuals • Leaders sought to continuously improve
Modeled behavior and expectations	<ul style="list-style-type: none"> • President modeled collaboration • Senior admin. worked collaboratively 	<ul style="list-style-type: none"> • President modeled collaboration • Senior admin. worked collaboratively 	<ul style="list-style-type: none"> • President modeled collaboration • Senior admin. worked collaboratively

	<ul style="list-style-type: none"> • Cross-representation sought for administrative team meetings 	<ul style="list-style-type: none"> • Had “whole team” attitude 	<ul style="list-style-type: none"> • Cross-representation sought for administrative team meetings • Had “whole team” attitude
Visible on campus	<ul style="list-style-type: none"> • Was visible on campus 	<ul style="list-style-type: none"> • Walked around campus and talked to people 	<ul style="list-style-type: none"> • Was visible on campus
Sought ideas and input from others	<ul style="list-style-type: none"> • Sought diverse ideas to support planning and decision making 	<ul style="list-style-type: none"> • Actively solicited input and perspectives from people across campus 	<ul style="list-style-type: none"> • Expected input to be sought from everyone involved

Set the tone. The president was described by numerous participants as the person who “set the tone” for the college through the attitudes and actions he displayed (P2A, P8A, P9A, P4B, P12B, P1C). A staff member at College C described her belief that it was the college president that enabled collaboration to occur:

I think it’s in large part our president. I really do. He has that type of spirit. I mean, he’s the best. He’s just very honest, he’s just very down to earth. He says things like “You know there are gonna be some hiccups and we just need to work together and get this done.” And that’s just his spirit; his collaborative spirit. (P3C)

Another staff member at the same institution explained,

We’ve had for 13 years a great president who is a reasonable and caring person. He has written objectives that look at the sensibility of doing your work and doing it in a kind and gentle way and in a respectful way. He has eight expectations, and those eight expectations drive the backbone of the college. (P7C)

The eight expectations of all employees described by several participants provided an indication of the president’s leadership style. The eight expectations revealed insight about what the president saw as important, the values he strove to live by, and the

expectations he had for others (P1C). A participant at college C described the president like this:

He really walks the walk in terms of asking what an organization needs in order to be collaborative. He's a CEO that values that. You need a CEO that values collaboration if it's going to happen. I think he does, and I think that's why you have collaboration here. (P5C)

The president also set the tone by recognizing the work of individuals and acknowledging milestones. An example of this was provided by a staff member at College C:

[The president] has a recognition dinner that he hosts every year for employees. And then the following morning he has a faculty and staff continental breakfast and people can come by to shake his hand so he can have an opportunity to say, "thank you for the work that you've done." You get an anniversary card from him on the anniversary of your employment and a birthday card from him on your birthday. He makes it as personable as possible. (P1C)

Modeled collaboration. Through modeling collaboration, college leaders demonstrated the type of interaction they expected to occur throughout the college. Staff at each of the three sites described positive interaction among upper administrators and collaboration across administrative units. An instructor at College B explained, "I really feel like collaboration is being modeled for us... I see senior administrators working collaboratively. They also have a very collaborative attitude and they work to develop collaborative relationships with other institutions" (P9B). One of the administrators at the same site explained that the executive team had, "a 'whole team' attitude. We ask 'what's it going to take to get this done?' If it isn't something we can do now, should we do it effective fall quarter so that we can work through those bugs and discuss after we've done all of our groundwork? Then we go for it" (P4B). At College C, a staff member described the importance of having the president model the values and priorities he has for the college:

[The president] is probably the greatest advocate of students than anybody at the college. When you see that and you model that and then you have other people that model that as well, then you know what your work is about. (P4C)

Visible on campus. Upper management also established an environment of support by being visible on campus. At College B, an instructor described how the president visited departments to see how things were going and to visit with staff (P2B).

The president at the same site explained:

Mostly, I want people to know that I like them and that I'm concerned about them and I'm interested in their success... You can't have the person not know who the president is. I've had different faculty members who've come from other places be kind of surprised when I come to their offices to shake hands and say "How are you doing? Anything you need? What's interesting in your life?" And listen to them talk about the class they teach. I'm just interested and curious about everything. More than anything else, people need to know that the institution at every level is supportive of their efforts. Unless I get out and demonstrate that, then it's all talk.

A staff person at College C described the president at her college as someone who was "very, very visible on the college campus, and participates, and is available as often as he possibly can for other activities on campus. So he understands and lives/models what he expects of others to do" (P1C). Another employee at the same college explained, "Collegiality begins at the top. It has already been happening, so it inspires us to do it too. It's a clear expectation to jump on board and support things" (P2C).

Ideas and input sought from others. An environment of support was strengthened as college leaders sought ideas and input from people across the campus. College leaders who facilitated an environment of support were seen to value the input of others and trust their ability to generate ideas. An administrator at College A explained, "You have to value what others have to offer in order to collaborate as equals; and not collaborate the way that some people collaborate where all they do is tell you what to do and you do it" (P8A). A staff member at College B explained, "I really see [the president] as being one of those people who puts people together. He really values people's input and it makes a big difference in your day to day" (P11B). And at College C, "There's this idea that all doors are open. If you have an idea, you are encouraged to communicate it to your chair or your dean or another dean" (P6C). An environment where people feel free to express ideas was considered essential because it's all too easy to fall into a rut where "the status

quo becomes what we do.... So you need to always have people around who... question ‘why do you continue to do it that way?’” (P6A).

Summary of findings. The first way upper management was found to influence collaboration was through the environment of support they contributed to. The president was seen as the person who set the tone for the college through the attitudes and actions that were displayed. By modeling collaboration and other behaviors, the president and senior administrators demonstrated the type of interaction they expected to occur throughout the college. Being visible on campus contributed to an environment of support by strengthening interactions and displaying support for the work of individuals. Finally, upper management contributed to an environment of support as they sought ideas and input from people across the campus. Table 31 provides a composite list of the actions identified for each of these factors.

Table 31

Composite Listing of Actions Through Which Upper Management Contributed to an Environment of Support

Composite Themes	Composite Actions
Set the tone	<ul style="list-style-type: none"> • The president set the tone through attitudes and actions displayed • Upper management recognized the work of individuals • College leaders sought to continuously improve • “Can do” attitude among top administrators
Modeled behavior and expectations	<ul style="list-style-type: none"> • President modeled collaboration • Senior administrators worked collaboratively • Cross-representation was sought for administrative team meetings • Displayed “whole team” attitude
Visible on campus	<ul style="list-style-type: none"> • Was present and visible on campus
Sought ideas and input from others	<ul style="list-style-type: none"> • Actively sought input and perspectives from people across campus

Establishing the Project as a College Priority

The second way that college leadership facilitated cross-functional collaboration was by establishing the project as a college priority. At each of the colleges included in this study, the president’s commitment to the project and to staff working in a collaborative manner to achieve the goal was cited as an important key to an effective

effort. Table 32 identifies ways in which upper administration demonstrated the project was a college priority. The parallel comparison provides a side-by-side display of actions described by study participants. Areas that are blank indicate that a similar factor was not identified at that college. The presence of individual factors identified at some institutions and not at others portrays the variance found among the colleges and does not detract from the relevance of the theme. Since no subthemes are designated in this table, row titles are unnecessary at the far left and have therefore been omitted.

Table 32

Actions that Established the Project as a College Priority

College A	College B	College C
<ul style="list-style-type: none"> • Announced the project to college 	<ul style="list-style-type: none"> • Announced the project to the college 	<ul style="list-style-type: none"> • Spoke publicly about the work of the CTL
<ul style="list-style-type: none"> • Communicated importance of the project 	<ul style="list-style-type: none"> • Communicated importance of the project 	<ul style="list-style-type: none"> • President approved projects and assigned people who would get the job done
<ul style="list-style-type: none"> • Provided the necessary resources 	<ul style="list-style-type: none"> • Provided the necessary resources 	<ul style="list-style-type: none"> • Communicated importance of the project
<ul style="list-style-type: none"> • Provided the necessary resources 	<ul style="list-style-type: none"> • Provided the necessary resources 	<ul style="list-style-type: none"> • Provided the necessary resources
<ul style="list-style-type: none"> • Hired additional staff to support AtD 	<ul style="list-style-type: none"> • Hired someone to lead the FYI process 	<ul style="list-style-type: none"> • Provided a staff of nine people to support the CTL
<ul style="list-style-type: none"> • Appointed a vice president to oversee and lead the process 	<ul style="list-style-type: none"> • Consumed a moderate amount of a vice president's time 	<ul style="list-style-type: none"> • Appointed an associate dean to manage the work
		<ul style="list-style-type: none"> • Required participation from everyone with a stake in the project

Established as a priority. At Colleges A and B, the college president initiated the project by announcing it at an all-staff meeting and explaining its importance to the college. This was beneficial to the collaborative project because it demonstrated the importance of the effort and people knew that it was supported from the top (P9B). In addition to the support provided by the president, an administrator at College B explained

that “Having both the VP of Instruction and Student Services agreeing that this was a priority” impacted the success of this collaboration (P5B). Their joint support “broke the silo between those two structures” (P5B).

A participant explained that at College C, “collaboration occurs on all levels. This is simply because we have a college president... who’s made it one of his priorities – that you would work in a collaborative environment” (P1C). The president formally called people to work together through both written expectations and his ongoing challenge to the college community. By talking about the projects that were undertaken and taking part in assigning team participants, the president demonstrated the importance of the task and identified it as a priority. The provision of financial resources as described in earlier sections provided an additional signal to college staff that the project was a priority of the college.

Summary of findings. The second way that college leadership facilitated cross-functional collaboration was by establishing the project as a college priority. Projects were recognized as a college priority through the verbal and financial support provided by upper management and the emphasis on working in a collaborative manner. Table 33 provides a composite list of factors that signaled the importance and priority of a project. Table 33

Composite Listing of Factors That Identified the Project as a College Priority

Establish the project as a college priority	<ul style="list-style-type: none"> ● Approved projects and assigned team participants ● Communicated the project and its importance ● Appointed people to get the job done ● Designated resources as needed ● Elucidate the expectation for working together to accomplish the task
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Implementing Processes That Facilitated Collaboration

The third way college leadership facilitated cross-functional collaboration was through implementing processes that facilitated collaboration. This section describes processes implemented by upper management that facilitated collaboration. Table 34 provides a side-by-side display of the processes implemented by college leaders with comparable factors listed horizontally in the same row. Since no subthemes are

designated in this table, row titles are unnecessary at the far left and have therefore been omitted.

Table 34

Processes Implemented by College Leadership to Facilitate Collaboration

College A	College B	College C
<ul style="list-style-type: none"> • Team structure implemented to extended campus involvement • Consistent assessment and reporting process • Recognized the work of individuals and teams • Cross-divisional representation at meetings 	<ul style="list-style-type: none"> • Structure implemented that required ongoing involvement of college community • Planning and review structure to maintain ongoing work • Recognized the work of individuals and teams 	<ul style="list-style-type: none"> • Annual planning process facilitated thought about who should be involved • Clear and consistent process for planning and assessing work • Recognized the work of individuals and teams • Cross-divisional representation at meetings • Approval structure sent major projects to the president for review and approval • Hiring and evaluation practices developed to support collaboration • Structured process for leading group work

Processes implemented. Each college included in this study implemented structures that facilitated cross-functional collaboration. The types of processes that were implemented included committee structures to expand staff involvement, reporting structures that encouraged completion of assigned tasks, an annual planning and assessment cycle, hiring and evaluation practices, and a structured process for leading group work. College leadership took an active role in assuring that processes were in place to allow people to work together to develop innovative ideas and problem solve the challenges they faced. At College A, upper administration was instrumental in

developing a committee structure that extended planning, implementation, and reporting responsibilities to strategy teams. The “meet, discuss, do” structure supported bringing the team's plans to fruition (P9A).

People who are responsible for specific priorities or strategies within those priorities have branched out and identified other committees and recruited members to help complete the task. And so each one of the groups has expanded; each one of the core team members is responsible for another group that's working on a strategy for improving student achievement and retention. That's the way it's working. (P9A)

An administrator at College A described the process as being effective for generating new ideas and involving more people. “Assigning responsibility and letting people run with it were key.... Until we did that we were kind of floundering” (P2A).

At College C, structured processes were put in place by upper management to seek ideas and input from the college community. An annual goal setting process invited every person on staff to identify ways to help meet the strategic priorities of the college. Staff could also develop a proposal for a new idea and send it through their supervisor to the president’s cabinet for review and action. The president’s leadership team met to review and approve proposals generated by college staff. If the proposal was approved, the leadership team identified next steps to help make the project successful.

Hiring processes were refined to influence collaboration. All three colleges focused on hiring and retaining employees that were student focused and willing to work together to assist the student with learning. “We try to put all of that together both in the hiring and then on a daily basis in committees” (P8B). An instructor at College C noted that the ability to collaborate was even mentioned in the employment advertisement posted in the Chicago Tribune. The interview process further enforced collaboration as a necessary job skill; then during new faculty orientation, the theme of collaboration was “heard over and over again” (P6C). The same instructor explained this about the hiring process:

We’re looking for someone we want to work with for the next 50 years of our career here at [College C]. Someone who is going to be collegial and who’s going to be willing to work with others, not necessarily for a reward or recognition, but because that’s the thing that’s going to best benefit our students in the long run. (P6C)

A staff member at College A explained that the president and vice president influenced the effectiveness of collaboration by hiring people who they perceived would provide good customer service. He added,

I think they do a good job when they do higher and fill people in positions, so that when they come onboard they understand that they will work across the board with departments, and have a central theme – that we're here to service students. That's the tone I noticed when I got here. (P10A)

Another process developed by college leaders to support collaboration at College C was the DRIVE model for project leadership described in an earlier section that was used to keep projects on task and moving forward. Through implementation of this model, administrators supported the work of the team, focused on data-driven decision making, and encouraged continuous improvement.

Guidance by college leadership to maintain a consistent reporting process was also key to facilitating effective collaboration. At Colleges A and B, it was a vice president who maintained a consistent reporting process and assured the college was moving ahead with the work of the college. All three colleges maintained a regular reporting process with the Board of Trustees to keep them informed of progress on major projects. End of year reports to the community also helped to maintain accountability and encourage completion of work.

Summary of findings. The third way college leadership facilitated cross-functional collaboration was through implementing processes that facilitated collaboration. Processes that were implemented included committee structures to expand staff involvement, reporting structures that encouraged completion of assigned tasks, an annual planning and assessment cycle, hiring and evaluation practices, and a structured process for leading group work. College leadership took an active role in assuring that processes were in place to allow people to work together to develop innovative ideas and problem solve the challenges they faced. Table 35 provides a composite list of processes implemented by college leaders to facilitate collaboration.

Table 35

Composite Listing of Processes Implemented by College Leadership to Facilitate Collaboration

Processes implemented that facilitate collaboration	<ul style="list-style-type: none"> • Established a structure to encourage collaboration and involve people • Implemented a structure for ideas from the ranks to enter the pipeline and move forward for review and approval • Provided a reporting and assessment process • Integrated the expectation for collaboration within the hiring and employee review processes • Provided a structured process for leading group work
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Getting the right people involved

The fourth way college leadership facilitated cross-functional collaboration was through involving the right people in the collaborative process. This section provides findings related to: (a) how upper management got the right people involved, and (b) the qualities identified as important for the team leader. The section concludes with a summary of findings that includes a composite list of general findings. A parallel comparison of how college leaders got the right people involved in the collaborative process is provided in Table 36.

Table 36

Parallel Comparison of How College Leaders Got the Right People Involved in Collaboration

College A	College B	College C
<ul style="list-style-type: none"> • A vice president took the leadership • Identified initial people who needed to be involved • Expanded involvement to include more front line staff 	<ul style="list-style-type: none"> • A vice president championed the project • Hired “right” person to lead the process • Involved people to plan sessions 	<ul style="list-style-type: none"> • Team leader appointed by the upper management • Intentionally involved people with insight and ability • People given opportunity to learn team processes

How Upper Management Got the Right People Involved. At all three sites, college leadership played an active role in assuring the “right” people were involved in the collaborative projects. Time and attention were given to assure that people with the skills and ability to complete the work were assigned the responsibility to lead the collaborative team. At College B the vice president responsible for the development of FYI explained, “You have to have the right people. When I developed the office of Student Retention, I knew the person I wanted in there. He has a way of saying something and everyone goes, ‘Yeah, that’s right,’ and they just want to follow him” (P1B). At College A, specific individuals were selected by upper management to serve on the core and data teams for the AtD initiative. Upper management also appointed the initial strategy team leaders, who then recruited additional people to serve on the teams. A vice president at both College A and College B maintained oversight and leadership responsibilities for the projects that were involved in this study.

Attention was given to committee development at College C to assure that people who could help bring about results were at the table. The president had the final selection of team leader and participants for many of the projects implemented at the college.

Many times people are appointed based on their position on the campus or the need to do a couple of things: get people who have been here a long time with a lot of experience and also to try to mix that group with newer people because that’s the way of developing new people on campus, by letting them sit in and participate on projects so they can learn more about the college. (P1C)

People were appointed from different divisions, subdivisions, departments, and employee groups to serve on teams. “And in that way we get a wide perspective of views, and you also get buy in from across campus” (P1C).

In summary, college leaders at all three institutions played an active role in assuring the “right” people were involved in the collaborative projects. Time and attention was given to assure that people who could complete the work and help bring about results were included on the team. This was done through appointing team leaders, intentionally involving people with insight and ability, and expanding involvement to include front-line staff.

Qualities identified as important for the team leader. Participants of this study indicated that the traits of the team leader were important for effective collaboration across departments to occur. This section describes the traits according to the following categories: (a) willingness to drive the process, (b) application of good interaction skills, (c) being strong leader, and (d) implementation of effective group processes.

Ability and willingness to drive the process. One of the traits of an effective team leader was the willingness and ability to “drive” the process, to take responsibility for the progress, effectiveness, and completion of the team goals. This required someone willing to do the necessary work to keep the team on task and the project moving forward (P3A, P2C). A staff member at College C explained that the team leader needed to take personal responsibility for the success of the team (P3C). A participant at College A referred to this as, “Acceptance of responsibility for the good of the whole institution” (P9A).

Persistence was described as a trait that contributed to a person’s ability to drive the process to completion. The team leader needed persistence to navigate the challenges and move forward to make the project happen (P8B). A leader of FYI at College B explained his experience navigating the challenges:

At a previous institution I worked at, they had a collaborative committee that... had met for two years and nothing had happened. And they were all frustrated about it. It wasn’t getting any traction whatsoever. So I had to learn from those failures on how the system kills things.... They would pilot something like learning communities, find great results for it, then it would just die. And so knowing some of the pitfalls organizationally on how all projects die, I just navigated the group around those things. (P5B)

Persistence was needed for team leaders to navigate the challenges that arose; it was also needed to enable the project to continue and become part of the ongoing operation of the college. A participant at College B reminded that for many projects, “You don’t just do it once. You need to understand that it’s going to take a few years to work out the kinks” (P3B).

Application of good communication skills. An effective team leader also was seen as someone who interacted with people in a positive and productive manner (P9A). The team leaders described by participants in this study maintained open communication, valued participation and input from group members, and listened to feedback. A staff

member at College B described the team leader of FYI as someone who was “not a domineering type of person. He’s very calm. But I think he had the ability to get the right people into the right jobs with the right vision, the right tasks, and make it happen” (P10B). Another participant explained, “The person heading up the First Year Introduction is a great listener. He didn’t go into departments saying that we’re going to do this and we’re going to do it this way. He has a demeanor that’s so accepting of people’s ideas and he really facilitates input. . . . People would do stuff for him” (P3B). A participant at College C echoed the need for the team leader to be a good listener: “The leader needs to hear people. People will respond to you if you listen to them, whether or not you agree” (P3C).

Another identified trait of an effective team leader was that the person communicated through actions as well as words. The team leader was expected to function as a participant as well as a leader. As a participant at College C explained, the leader should not be too busy to roll up her or his sleeves and do the work that he or she was asking the team to do. There’s no big I’s and little U’s (P2C).

Being a strong leader. Being a strong leader was the third trait identified for an effective team leader. A strong leader was seen as someone who provided a vision, displayed determination, took bold steps, and was willing to take risks. The team leader needed to be able to set the vision for the team. He or she therefore needed to be able to see the overall goal and how it related to the work of the college (P2A). In describing the vice president who initiated FYI at College B, a participant explained, “She believed in it wholeheartedly. She was also savvy about what this means to the whole campus. She brought research from other colleges about retention, etc. and how we might approach it in a unique way” (P2B).

A staff member at College B explained that a good team leader not only had to have vision, but needed to be able to “know the steps you have to take to make that possible” (P8B). At College B, a leader that was viewed as effective was described as someone who had a larger vision of the college’s responsibility. The team leader of FYI realized that student retention was everyone’s responsibility, and he viewed his role to be one of setting up systems that would enable it to occur. He explained, “I had to make

sure I was out there expanding the view of student retention” (P5B). A participant at College B attributed the success of FYI in part to, “the vision of an individual who had good ideas and knew how to get people to implement them. He was a visionary in that sense, but at the same time, he was practical. He got the right people to be able to do the right jobs (P10B).

Boldness and determination was seen as a necessary trait for the team leader in order to negotiate the challenges and commit to moving ahead even when conditions weren't perfect. In describing FYI, a participant at College B noted, “Until there was a strong leader, it didn't happen. And that's pretty much my experience.... When I say a strong leader, I'm not necessarily taking about someone that inspires, but someone that's just determined” (P3B). Another participant at College B explained that it was the boldness of the leaders of FYI that brought that project to fruition, because “there were a lot of people who said, ‘this is too fast. We can't do it by this fall. Because there's too much at stake, and it's too expensive, and we just can't do it.’ But they said we're going to do it. And so I think that's what made it work” (P10B). The leaders were also willing to take a calculated risk. At College B there was a risk that the college could lose students and FTEs could drop if students were upset about participating in a mandatory orientation for first-year students.

Implementation of effective group processes. Implementation of effective group processes was also identified as a trait of a good team leader. Team leaders were expected to put in the time necessary to organize the effort and hold meetings that were productive and worthwhile (P2C). Processes were expected to be implemented to keep the team on task and moving forward. A participant at College A described the work of an effective team leader who provided good communication with the team, brought the group to specific results, maintained consistent follow up, and moved plans forward once they were made (P5A). The team leader was expected to implement processes that would help the team stay on track and move forward to accomplish goals.

Summary. Participants across the three colleges indicated that the characteristics of the team leader impacted the effectiveness of the team. No participants expressed uncertainty about the importance of the team leader for team effectiveness or bringing a

project to completion. The characteristics identified by participants as important for the team leader to possess include the following: (a) be willing to drive the process, (b) utilize good communication skills, (c) be a strong leader, and (d) implement effective group processes.

Summary of findings. One of the ways upper management facilitated cross-functional collaboration was through involving the right people on the collaborative project. This section first identified what upper management did to get the right people involved on the project. It was followed by the identification of team leader characteristics described by participants as important for an effective team.

To involve the right people on the large-scale teams examined in this study, upper management selected or approved the person who would lead team leader. At two of the colleges, a vice president maintained overall responsibility for the results of the team. Upper management also intentionally involved people on the team who had the insight and ability to accomplish the team's goals. Involvement on the team was then expanded to include front-line staff that had knowledge and an understanding of how plans would impact the student and college operations. Opportunity was provided for newer staff to participate at one college in order to enable them to learn from the process.

Characteristics of the team leader were found to have an impact on the effectiveness of the collaborative team. The first characteristic identified through the study was that the leader needed to be willing and able to "drive" the process. This meant the leader would be willing to do the necessary work to keep the team on task and the project moving forward. A second characteristic of an effective team leader was that they utilized good communication skills. This involved interacting with people in a positive and productive manner, valuing ideas from group members and the college community, and hearing what others had to say. Being a strong leader was the third characteristic identified as important for an effective team leader. Strong leadership was seen to include providing a vision, displaying determination, taking bold steps, and accepting reasonable risks. The ability to implement good group processes was the fourth characteristic seen as important for team leaders. The team leader was expected to organize the team process and hold planning sessions that kept the team on task and

moving forward. Table 37 provides a composite list of the actions taken to get the right people involved on the collaborative project and the characteristics identified as important for an effective team.

Table 37

Composite List of Actions and Qualities Identified for Involving the Right People

Got the right people involved	<ul style="list-style-type: none"> • Selected or approved the team leader • Intentionally involved people with insight and ability • Expanded involvement to include front line staff • Provided opportunity for newer staff to learn team processes
Qualities of the effective team leader	<ul style="list-style-type: none"> • Willing to drive the process • Utilized good communication skills • Was a strong leader • Implemented effective group processes

Providing Clear Direction and Goals

The fifth theme related to Research Question #3 was that college leaders influenced collaboration by providing clear direction and goals. Table 38 provides a parallel comparison of the means through which colleges provided direction and goals for the collaborative teams.

Table 38

Parallel Comparison of Direction and Goals Provided by College Leadership

College A	College B	College C
<ul style="list-style-type: none"> • Overall goals set by the core team • Strategy teams given specific responsibility to work on 	<ul style="list-style-type: none"> • The preliminary structure for the project was developed prior to involving others • Specific assignments were given to teams to develop content 	<ul style="list-style-type: none"> • Strategic priorities to focus on during the year were set by upper management • Teams received clear goals and timeline

At each case site, upper management took responsibility for providing overall goals or direction for collaborative projects that had college-wide importance. At College A, it was a team comprised of several individuals including the president and two vice presidents that set the initial direction and plans for the AtD initiative. Through the work of the team, two priorities were identified that would focus the work of the college over the next five years. At College B, the initial vision for FYI was set by the college president. It was through the subsequent work of the Vice President for Student Services that more detailed plans emerged and a clearer vision for the project was formulated. Clear direction and goals were set for the project prior to involving the broader college community in the collaborative work required to make the project succeed. The vice president continued to maintain oversight for the project to monitor results and assure it continues to meet the goals of the college. At College C, direction for the CTL was the responsibility of a dean who oversaw the work of the department and provided direction and goals for the services it offered. Table 39 provides a composite list of the direction and goals provided by college leadership.

Table 39

Composite List of the Direction and goals Provided by College Leadership

Provided clear direction and goals	<ul style="list-style-type: none"> • Established overall goals and structure for the project • Provided teams with specific goals and responsibilities
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Owning the Responsibility for Effective Functioning

The sixth theme related to Research Question #3 was that college leaders owned the responsibility for the effective functioning of the collaborative work. Due to the size and strategic importance of each of the projects explored in this study, upper management retained the ultimate responsibility for the projects' effectiveness. Each of the projects represented an effort that was either already integrated into the ongoing operations of the college or which was expected to become part of the college's ongoing operations. Upper management therefore had an interest in assuring the project's success and maintaining a level of responsibility for its continued effectiveness. Table 40 provides a parallel comparison of the way the colleges maintained responsibility for the effective functioning of the collaborative teams.

Table 40

Parallel Comparison of College Leadership's Responsibility for the Collaborative Project

College A	College B	College C
<ul style="list-style-type: none"> • Approval and support for AtD came from the president's cabinet • Vice President responsible for AtD initiative process and results • Committed funding to support AtD plans • Established and maintained an assessment and reporting structure • Reported progress to the Board of Trustees 	<ul style="list-style-type: none"> • Approval and support for FYI came from cabinet • A champion for FYI existed at the cabinet level • Committed funding and hired someone to lead the FYI process • Ongoing assessment and reporting of results • Reported results to the Board of Trustees 	<ul style="list-style-type: none"> • Projects and proposals approved through the president • A dean provided direct oversight for the work of the CTL • Committed funding and hired personnel to achieve the CTL goals • Established annual goal setting and assessment process • Reported activities and participation as requested

Upper management accepted the responsibility for the effectiveness of its collaborative projects through the processes it developed and the oversight it maintained. Responsibility for the work of the collaborative team was initially accepted when upper management approved the proposal for the project and committed funding to support the development of the plans. At College A and College B, a senior administrator maintained responsibility for the project's development and continued to actively monitor and assess the work that was occurring and the impact it had on student success. The CTL at College C was a well-established program that functioned effectively as one of the ongoing departments of the college. Oversight for the CTL was provided by the Dean of Academic Development and Learning Resources, who reported to the Vice President of Academics. Through these oversight structures, the outcomes of the collaborative work were reviewed, and upper management received the input it needed to support or redirect the team as needed.

Upper management also maintained responsibility for the success of the collaborative team through the reporting and assessment processes it implemented. Through these processes, senior administrators were able to allow the work of the teams to occur with little intervention, yet still monitor the effectiveness of the team's efforts. This enabled innovation and problem solving to occur from the front lines of the organization without direct involvement from senior managers. Including the collaborative projects in reports to the Board of Trustees demonstrated the importance upper management placed on the success of the project. By committing to report progress and results to the administrative board, college leaders demonstrated their commitment to the project and the ownership they have assumed to assure its success.

In summary, at each of the colleges included in this study, upper management took responsibility for the effective functioning of the collaborative team developed to support student success. Responsibility was maintained through providing approval and support for the project, appointing a senior administrator to oversee the work of the team, and establishing processes that provided for ongoing assessment and reporting of results. Responsibility for success was further displayed through the commitment of resources and personnel to perform the work of the team. Table 41 provides a composite list of the actions that enabled senior administrators to oversee the work of the collaborative projects while allowing for innovative solutions and creative ideas to be generated from the front line of the organization.

Table 41

Composite List of Upper Management's Responsibility for the Collaborative Project

Owned the responsibility for effective functioning	<ul style="list-style-type: none"> • Project approval and support provided by upper management • Assign accountability for success to responsible administrator • Committed funding and personnel • Maintained an assessment and reporting structure • Report results to the Board of Trustees
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Section Summary

This section presented information related to the third research question explored through this study: How does college leadership facilitate cross-functional collaboration in the community college? The section focused on the way the president and other top-level administrators facilitated collaboration. From the cross-case analysis of the data, six key themes emerged. The themes identified across all three cases indicated that senior administration influenced collaboration by: (a) contributing to an environment of support, (b) establishing the project as a college priority, (c) implementing processes that facilitated collaboration, (d) involving the right people, (e) providing clear direction and goals, and (f) owning responsibility for effective functioning.

The first theme identified through analysis was that upper management facilitated cross-functional collaboration by contributing to an environment of support. This occurred as senior management: (a) set the tone through the attitudes they displayed, (b) modeled the behavior they expected, (c) provided a visible presence on campus, and (d) sought ideas and input from others.

The second theme found across all three colleges was that upper management facilitated cross-functional collaboration by establishing the project as a college priority. Projects were recognized as a college priority through the verbal and financial support provided by upper management and the emphasis on working in a collaborative manner.

The third theme that emerged from the cross-case analysis was that upper management facilitated collaboration by establishing processes to support the work of the collaborative team. The types of processes that were implemented included committee structures to expand staff involvement, reporting structures that encouraged completion of assigned tasks, an annual planning and assessment cycle, hiring and evaluation practices, and a structured process for leading group work.

Getting the right people involved in the collaborative process was the fourth way senior administrators influenced the effectiveness of the collaborative teams. Time and attention was given to assure that people who could complete the work and help bring about results were included on the team. This was done through appointing team leaders, intentionally involving people with insight and ability, and expanding involvement to

include front-line staff. The qualities of the effective team leader identified in this section include: (a) being willing to drive the process, (b) utilizing good communication skills, (c) being a strong leader, and (d) implementing effective group processes.

The fifth theme identified through analysis was that upper management facilitated cross-functional collaboration by providing clear direction and goals. This occurred as senior administrators established the overall goals and structure for the project prior to extending involvement to the college community. Providing teams with specific goals and responsibilities also facilitated effective team planning and collaboration.

The sixth theme found across all three colleges was that upper management facilitated cross-functional collaboration by owning the responsibility for its effective functioning. Upper management didn't leave the success of the collaborative team to chance. They owned the responsibility for success by appointing a senior administrator to oversee the project, committing resources and personnel to support the project, maintaining a reporting structure, and reporting progress to the Board of Trustees.

Together, the themes provided in this section demonstrated the commitment upper management made at each college to assure the processes, people, and resources were in place to support a successful collaborative effort. Table 42 provides a summary representation of the key findings related to Research Question #3: How does college leadership facilitate cross-functional collaboration in the community college? An "X" was used to indicate the colleges where the specific elements were identified.

Table 42

Summary of How College Leadership Facilitated Cross-Functional Collaboration at Three Community Colleges

	College A	College B	College C
Contributed to an environment of support			
• Set the tone	X	X	X
• Modeled behavior and expectations	X	X	X
• Visible on Campus	X	X	X
• Sought ideas and input from others	X	X	X
Established the project as a college priority			
• Approved projects and assigned team participants			X
• Communicated the project and its importance	X	X	X
• Appointed people to get the job done	X	X	X

• Designated resources as needed	X	X	X
• Conveyed the expectation to work together to accomplish the task	X	X	X
Implemented processes to facilitate collaboration			
• Established a structure to involve people	X	X	X
• Implemented a structure for ideas from the ranks to enter the pipeline and move forward for review and approval	X	X	X
• Provided a reporting and assessment process	X	X	X
• Included the expectation for collaboration in the hiring and employee review processes			X
• Provided a structured process for leading group work			X
Got the right people involved			
• Selected or approve the team leader	X	X	X
• Intentionally involved people with insight and ability	X	X	X
• Provided opportunity for newer staff to learn team processes			X
• Expanded involvement to include front line staff	X	X	X
• Qualities of the effective team leader			
○ Willing to drive the process	X	X	X
○ Utilized good communication skills	X	X	X
○ Was a strong leader	X	X	X
○ Implemented effective group processes	X	X	X
Provided clear goals and direction			
• Established overall goals and structure for the project	X	X	X
• Provided teams with specific goals and responsibilities	X	X	X
Owned the responsibility for effective functioning			
• Project approval and support provided by upper management	X	X	X
• Assign accountability for success to responsible administrator	X	X	X
• Committed funding and personnel	X	X	X
• Maintained an assessment and reporting structure	X	X	X

Summary of Presentation of Findings

This chapter presented an overview of the findings as they related to the three research questions: (a) What does cross-functional collaboration look like at a community college known for strong collaborative work? (b) What organizational factors influence cross-functional collaboration in the community college? and (c) How does college leadership facilitate cross-functional collaboration in the community college? In keeping with case study methods, data analyzed included interview transcripts and documents. The interviews conducted for this study served as the primary source in which the findings were based. Thirty-one interviews were conducted with faculty, staff, and administrators from across three colleges. Interview participants were involved with collaborative work across functional departments to support student success. Documents examined included college reports, pamphlets, internal publications, descriptive documents from the website, and information summaries. The profiles of the community colleges in the first section of this chapter described the context in which collaboration occurred across departments to support student success. Section two presented the findings associated with the three research questions that guided this study. The themes and subthemes identified in response to the research questions were summarized in detail at the end of each related section; they are also explored more fully in the Summary and Discussion section provided in Chapter 5. To lessen redundancy, only the primary themes identified through this chapter are reiterated here.

The findings associated with Research Question #1 revealed five general themes that described the context of cross-functional collaboration in the community college. The themes of cross-functional collaboration that emerged across the three colleges indicated that collaboration: (a) arose from necessity, (b) was primed by upper management, (c) was kept on track by accountability, (d) was guided by a team leader, and (e) was supported by committed team participants. The findings associated with Research Question #2 were graphically displayed in Figure 3. The organizational factors found to influence collaboration included: (a) an environment of support, (b) common vision, (c) processes, (d) resources, (e) accountability, and (f) recognition. The findings associated with Research Question #3 focused on the way the president and other top-

level administrators facilitated collaboration. The themes that emerged across all three cases showed that college leaders influenced collaboration by: (a) contributing to an environment of support, (b) establishing the project as a college priority, (c) implementing processes that facilitated collaboration, (d) involving the right people, (e) providing clear direction and goals, and (f) owning responsibility for effective functioning.

In Chapter 4, I have presented the findings from my research on cross-functional collaboration in the community college to support student success. In the following chapter, I will describe the findings in relationship to existing literature, discuss implications of the findings to practice, and suggest recommendations for future research on the topic of cross-functional collaboration in the context of higher education.

CHAPTER 5 – DISCUSSION AND IMPLICATIONS

In this study, I explored cross-functional collaboration in the community college that occurred with the intent of supporting student success. The purpose of the study was to identify factors that influence cross-functional collaboration in the community college and to provide insight into how college administrators can facilitate effective collaborative work across departments on their campuses. This chapter provides a summary and discussion of the findings of my study in relation to the literature review. It also identifies implications for practice and policy, makes recommendations for future research, and concludes with final thoughts related to cross-functional collaboration in the community college. A summary of the primary themes identified in Chapter 4 is integrated within the text to enable comparison of study findings to the material presented in the literature review.

Summary and Discussion

This section discusses the findings to the three research questions in relation to the literature reviewed in Chapter 2 and other literature thought to be relevant. The three research questions of my study were:

- 1) What does cross-functional collaboration look like at a community college known for strong collaborative work?
- 2) What organizational factors influence cross-functional collaboration in the community college?
- 3) How does college leadership facilitate cross-functional collaboration in the community college?

Findings were shown to have both agreed and contrasted with previously published works as described in the literature review. Critical realism provided the philosophical perspective for this post-positivist study, and the research method utilized was a multiple, instrumental case study that was replicated at three community colleges. The data collected and analyzed included interviews with 31 participants, documents, and relevant written and electronic materials. This section is structured according to the three research questions that guided the study. For each research question, study findings are compared to current literature, first through an examination of the propositions identified

for each question, followed by a discussion of the literature in relationship to the overall findings presented in Chapter 4. The section concludes with comments concerning the uniqueness of cross-functional collaboration as it relates to the findings.

Research Question #1: What Does Cross-Functional Collaboration Look Like at a Community College Known for Strong Collaborative Work?

The colleges in this study each provided a unique instance of cross-functional collaboration that served as the initial point of inquiry within the case. The cross-case analysis revealed themes of how cross-functional collaboration occurred at the three institutions. Five general themes emerged that described the context of collaboration across departments to support student success. Two propositions drawn from the literature were also identified for consideration as part of this study. This section provides a discussion of the findings associated with Research Question #1 in relation to the literature review. This section is divided into two components: (a) study findings in relationship to the propositions drawn from the literature, and (b) study findings in relationship to the literature in general.

Findings Related to the Propositions

Two propositions drawn from the literature review in Chapter 2 were related to the research question, “What does cross-functional collaboration look like at a community college known for strong collaborative work?” This section compares findings from my study to the propositions related to Research Question #1.

Proposition #1.1 – Cross-functional collaboration occurs within the community college by interlaying additional responsibilities on top of the regular structure of the organization, rather than by restructuring. Over all, the findings of my study did not support this proposition. In many cases, the time and work that resulted from participating on a collaborative team was in addition to the person’s primary work responsibilities and no additional remuneration was provided. However, there were also circumstances where departments were formed or people were hired to support the work of the collaborative team. At College A, for example, the collaborative teams functioned almost exclusively on a volunteer basis where people added team responsibilities on top of their ongoing work assignments. Aside from an institutional researcher who was hired

to support the work of the collaborative teams, staff members rearranged their daily responsibilities and schedules in order to be able to participate on the teams. At College B, a person was hired in the position of Director for Student Retention and Success to guide the FYI process. A great deal of volunteer time was required by people to make the project a success, but it would not have gained the sustainable traction necessary to continue quarter after quarter without the restructuring that occurred within the organization to support the project. The CTL project that served as a springboard for my questions at College C also relied upon restructuring by the college that provided staffing to organize and maintain the CTC functions. However, the classes and workshops conducted through the CTL were led largely by people who volunteered their time to share their expertise with others in the college. The collaborative processes implemented for all major projects within the college were also conducted on a volunteer basis where participants interlaid the team responsibilities on top of their regular tasks. To enable this, a substantial “middle” organization had developed to provide support and services to those who had first-hand contact with the students.

The finding that restructuring occurred to support the cross-functional collaboration at community colleges differs from my initial expectation. It correlates, however, with Kezar’s (2006) findings that restructuring occurs within higher education to support collaboration. The level of restructuring that occurred at the colleges in my study appeared to depend upon the type and length of project that was supported by the collaborative team. Denison et al. (1996) indicated that though cross-functional collaboration can take many forms, it is most often structured as working groups which are designed as an overlay to an existing organizational structure. Though this was not found to be the case in my study, it may very well be true in other types of collaborative work. A degree of restructuring appeared to be necessary in the collaborative efforts I examined because the projects represented large-scale, sustained efforts that were expected to become part of institutional operations. Other types of collaborative work within the community college (such as collaborative teaching, service learning, learning communities, or planning teams) may not experience the same level of restructuring to support team efforts. Mohrman et al. (1995) identified that the nature of the work being

performed is a key determinant of the form that a team will take. It should not be interpreted that restructuring of positions is required in order for effective collaboration to occur in all cases.

In summary, Proposition 1.1 was not supported by my study because instances were identified where restructuring occurred to accommodate collaboration. Both organizational restructuring and the motivation and participation of volunteers were implemented at each college to achieve the cross-functional collaboration that occurred. In cases where responsibilities were added on top of an already existing workload, participants found ways to reorganize their time to accommodate participation. This finding correlates with Kezar's (2006) finding that restructuring occurs within higher education to support collaboration.

Proposition #1.2 – Effective collaborative teams actively manage information distribution and communication with the larger institution. The findings from my study did not support this proposition.

Proposition 1.2 was based upon the contention of Denison et al. (1996) that the way in which teams manage communication with the larger organization has an impact on the success of the team. In the colleges I examined, communication of project plans was, indeed, an important aspect of informing and involving the college community; however, it didn't appear to be a universally essential element for team effectiveness. While the three teams that served as the starting points of my inquiry made a point to maintain regular communication with the larger college community, other team examples provided by participants indicated that some teams didn't place a significant emphasis on communication. For example, the strategy teams that were part of the AtD initiative at College A did not all make a point to communicate results to the larger college community. In some of the cases, the responsibility for communicating project plans and effectiveness was assumed by someone else in the organization, such as the institution researcher or the vice president who provided oversight for project goals. There was broad acknowledgement that communication was an important aspect of a college's buy-in of project plans, but consistency among teams to facilitate that collaboration was not observed.

In summary, the findings of my study did not support Proposition #1.2 because: (a) responsibility for communication was not always assumed by the team, and (b) communication was not widely identified as a factor that influenced the effectiveness of the collaborative work. This finding provides a contrast to the assertion of Denison et al. (1996) that team success is impacted by the way in which teams manage communication with the larger organization. Though the comments of Denison et al. do not apply to every situation examined in my study, they were applicable to some of the collaborative efforts that were described.

Summary. Neither of the propositions reviewed in this section were supported by the findings of my study. Though some areas of agreement were found as the propositions from literature were compared to study results, there were also areas of conflict. Examination of Proposition 1.1 showed that collaborative work occurred at the colleges through both interlaying new responsibilities on top of the current workload, as well as by restructuring staff responsibilities. Though this result differs from the observation of Denison et al. (1996), it supports the findings of Kezar (2006) that suggest restructuring be implemented to support collaboration in higher education.

The distribution and communication of information was not consistently identified as an essential element for team effectiveness across the three colleges. Therefore, the findings of the study did not support Proposition 1.2. Several instances were identified where communication with the larger community was handled by a senior administrator or someone else in the institution who championed the project. Though participants didn't identify good communication by the team as an essential element for effectiveness, the benefits of communication with the broader college community were recognized.

Comparison of Study Findings to the Literature

The findings associated with Research Question #1 revealed five general themes that described the context of cross-functional collaboration in the community college. The themes that emerged across the three colleges showed that cross-functional collaboration: (a) arose from necessity, (b) was primed by upper management, (c) was kept on track by accountability, (d) was guided by a team leader, and (e) was supported

by committed team participants. This section compares each of these themes to the literature related to collaboration.

Arose from necessity. The cross-functional collaboration examined through this research focused on college-wide projects designed to support student success. As such, the work of the teams impacted people from numerous departments across the college and held potential to result in considerable change for the institution. The projects described in my study were implemented in a collaborative manner because collaboration across departments was perceived as the most effective method for achieving the input and involvement necessary to make the projects successful. Collaboration was not applied simply to do things in a collaborative manner; it was implemented because it provided an effective way for the college to achieve the desired results.

Review of the literature affirmed that collaboration is an appropriate tool when it provides the best alternative for solving a problem or advancing a shared vision. It should not be implemented simply for the sake of doing things in a collaborative manner (Gray, 1989; Hansen, 2009; Mohrman, et al., 1995; Kezar & Lester, 2009). Mohrman, et al. (1995) proposed that teams should not be established simply because there is a need for things such as quality and innovation; a team should only be established when a team structure is the best way to achieve the integration required to accomplish the strategic goals. The needs of the situation should drive the selection of collaboration as the appropriate tool for problem solving, planning, and implementation of collective plans. Hansen (2009) explained that collaboration should only be used when it is expected to provide better results than would otherwise be achieved. The types of projects identified by Hansen as benefiting from collaborative work include those where new services, greater client satisfaction, and better-run organizations were being sought (p. 26). Each of these reasons fit the type of need being sought by the community colleges included in my study.

The theme of collaboration arising from necessity was examined in this section in relationship to the literature. The literature is consistent with the points related to this theme. Collaboration is not considered the end in itself, but rather the means to an end

that should be implemented only when it is expected to provide results that could not otherwise be achieved.

Primed by upper management. At each of the colleges included in this study, upper management set the stage for effective collaboration by establishing expectations for the college community, developing structures to support collaboration, and providing resources to support the collaborative projects. By setting the stage for the collaborative efforts to succeed, college leaders demonstrated their support of the project and acknowledged its value to the mission of the college. The responsibility of upper management to set the stage for collaboration was echoed by Mohrman et al. (1995) who identified that for a collaborative team to function effectively, management needs to establish a context where direction can be provided and where barriers are reduced. Three management processes in particular were identified by Mohrman et al. as important for integrating collaborative work with the rest of the organization – direction setting, information distribution and communication, and decision making (p. 171). These processes correlate with my findings of the way upper management set the stage for collaboration. College leaders played a significant role in the success of the projects described in my study as they publicly supported the projects, explained the purpose and value of the project for students, modeled expectations, established structures to support the collaborative work, and provided resources.

Other research also supported the finding that setting the stage for collaboration is an important element for successful collaboration. Gratton and Erickson (2007) explained, “at the most basic level, a team’s success or failure at collaborating reflects the philosophy of top executives in the organization” (p. 103). Kezar (2001b) found that college administrators set the stage for collaboration through strategies such as providing visible support, defining clear goals and objectives, setting expectations, and establishing processes for accountability. One way upper management set the stage for effective collaboration was through establishing processes and structures that supported collaborative work. Kezar and Lester (2009) referred to this type of structure as *integrating structures* and contended that without them collaborative activities would fail. Integrating structures were proposed as necessary because they contribute to an

environment that enables effective collaboration to occur. Though several of the examples of integrating structures that Kezar and Lester cited were not present in my study (i.e., the establishment of a central unit for collaborative initiatives, creation of centers and institutes across campus to foster collaboration, and the revamping of accounting, computer, and budgetary processes [p. 123]), integrating structures were none-the-less employed at the community colleges I studied. The integrating structures found through my study to support collaboration included the development of team structures, processes for ideas to enter the pipeline, reporting processes, hiring and assessment processes, and open meeting structures. These factors served to remove barriers, contribute to the effectiveness of collaborative work, and develop a sense of priority within the college community related to collaborative work.

Kezar and Lester contended that higher education institutions need to reorganize in order to support collaborative approaches to learning, research, and organizational functioning (p. 59). At the community colleges included in my study, organizational structures were developed or reorganized as part of a natural process to support student achievement. The end goal was not to foster collaboration, as in Kezar and Lester's study, but rather to function more effectively to meet the goals of student success. Senior managers implemented integrating structures to help set the stage for effective collaboration.

This section revealed that upper management's role in setting the stage for collaboration is a supported theme in literature. Senior administrators impact collaboration's success by reflecting a collaborative philosophy, providing visible support for the collaborative work, and implementing structures that support the collaborative effort.

Kept on track by accountability. Another theme that surfaced through my study was that accountability structures were established to keep the collaborative teams on track. Accountability was achieved through regular assessment and reporting processes. Maintaining accountability for collaborative work was also a theme found in the literature. Hansen (2009) stated that accountability, "is especially important in collaborative organizations because of the tendency to hide behind the collective" (p.

157). He emphasized that the accountability of both management and participants facilitate effective collaborative teams. Managerial accountability was identified by Kezar (2001a) as one of the reasons for engaging in collaboration between student affairs and academic affairs departments.

Establishing processes to keep teams on task and to hold the college accountable for results was a theme consistent with the literature. Accountability measures were established to keep both the collaborative team and the college moving forward to achieve the established goals.

Guided by a team leader. The results of my study revealed that the team leader was seen to play a key role in the success of the collaborative effort. Multiple studies articulate the important role the team leader plays in the productivity and accomplishments of the team. According to Laszlo, Laszlo, and Johnsen (2009), research suggests that the leader's behavior has a powerful and pervasive role in determining team success. Through the style and processes implemented by an effective team leader, intrinsic motivation can be enhanced and team effectiveness can grow. Zaccaro, Heinen, and Schuffler (2009) support this view in their contention that "Team leadership is essential for team effectiveness" (p. 83). Zaccaro et al. articulated three core functions of the team leader – setting the direction for team action, managing team operations, and developing the team's capacity to manage their own problem-solving processes (p. 95).

The research conducted by Jassawalla and Sashittal (2006) also identified that collaboration was impacted by the function and choices made by the team leader. In particular, team leaders seemed more effective in fostering collaborations when they took initiative to: (a) buffer the team from organizational challenges, (b) encourage risk taking and tolerate failure, and (c) coach team members to share information and seek input from others before making decisions (p. 14). Gratton and Erickson (2007) revealed that in groups that had high levels of collaborative behavior, the team leaders "clearly made a significant difference" (p. 106). Gratton and Erickson's study indicated that the most productive and innovative teams were led by people who were both task- and relationship-oriented. This is a concept discussed further in relation to Proposition 2.2.

The team leader's impact on the success of the collaborative effort was a theme echoed in the literature. The leader's actions, attitude, and follow through provide a powerful role in impacting team success.

Supported by committed team participants. At each of the colleges included in my study, team participants were committed to supporting student success through the work of the collaborative team. Participant commitment to student success and the goals of the project played a significant part in the success of the collaborative work. Review of the literature revealed a strong relationship between cross-functional team effectiveness and team members' perceptions of the task (Denison et al, 1996; Holland, Gaston, Gomes, 2000; Sawyer, 2007). By knowing that their contribution was important to the work of the college, participant commitment was strengthened, which contributed to higher team effectiveness (Denison et al, 1996). The work of Jassawalla and Sashittal (2006) also supports the finding that team effectiveness is strongly influenced by the participants. The specific participant-related factors they identified included the propensities to change, cooperation with others, and attributing trust to others (p. 13). Laszlo, Laszlo, and Johnsen (2009) identified that employee commitment is one of the important pre-requisites for being able to carry out the job. Highly committed employees are more willing to contribute the time and energy required for the organization or a project to survive.

Literature supports the theme that commitment to the task by team participants impacts the success of the collaborative work. This has implications for team selection and for assuring that the goals of the collaborative project are clearly understood and aligned with the mission and priorities of the college.

Summary. A comparison of study findings to existing literature revealed both contrasts and similarities. One of the differences that surfaced related to whether effective collaborative teams actively communicated their plans and work with the larger community. Though a portion of the teams focused on communicating results and opportunities with the rest of the college community, this was not a consistent theme. In some of the cases, a person external to the team served to keep the college informed about team accomplishments and results. The literature also identified elements of

collaboration that were not found within my study. Kezar and Lester (2009) described specific forms of integrating structures found through her study of four-year institutions (such as the restructuring of accounting, computer, and budgetary processes) that were not present in the community colleges selected for my study. Instead, other forms of integrating structures took priority to enable collaborative work to move forward.

My findings related to Research Question #1 were consistent with the literature in several areas. The finding that collaboration arose from necessity is in line with the view expressed through the literature that collaboration should only be implemented when it is expected to provide better results than would otherwise be achieved. The literature also supported the finding that upper management played an important role in setting the stage for effective collaboration through the support and direction they provided. Finally, the importance of the team leader and the commitment of participants to the team's success were supported through the literature on collaboration.

*Research Question #2: What Organizational Factors Influence
Cross-Functional Collaboration in the Community College?*

This section provides a discussion of the findings associated with Research Question #2 in relationship to the literature review. To provide an overview of study findings in relationship to the literature, the section is divided into two components: (a) study findings in relationship to the propositions drawn from the literature, and (b) study findings in relationship to the literature in general.

Findings Related to the Propositions

Two propositions drawn from the literature review were related to the research question, "What organizational factors influence cross-functional collaboration in the community college?" This section compares findings from my study to the propositions related to Research Question #2.

Proposition #2.1 - Both cultural and structural factors influence cross-functional collaboration. The research conducted for my study supported this proposition. Proposition 2.1 arose from Kezar's (2001a) findings related to academic and student affairs collaborations. Kezar's report revealed that although respondents believed their college used cultural approaches more often than structural strategies, both structural and

cultural strategies were found to be critical for creating effective collaboration on campus.

The findings generated through my study revealed the implementation of both cultural and structural strategies across the three community colleges. The cultural strategies that surfaced included vision setting, planning across departments, publicizing project results, and staff training. The structural approaches included setting expectations, reporting procedures, organizational planning, development of new positions, and accountability structures. In keeping with Kezar's (2001a) report, senior administrative support was also seen as an important factor for success at the community colleges included in my study. Administrative support was key to accessing resources for collaboration, communicating a vision for the work to be done, signaling institutional priority, and hiring staff aligned with leadership philosophy. In the next section, the concept of cultural and structural strategies is discussed in detail.

Proposition #2.2 – Cultural factors have more influence on cross-functional collaboration than procedural/structural factors. Based upon the factors identified across the colleges included in my study, Proposition #2.2 was not supported by the findings of my study. Both cultural and procedural/structural factors influenced effective collaboration at the colleges, and procedural/structural factors were described more frequently than cultural factors.

The findings from Kezar's (2001b) study described in Chapter 2 served as the basis for this proposition in which cultural factors were aligned with Kuh's seamless change model and procedural/structural factors were aligned with the planned change and restructuring models. As explained in Chapter 2, Kuh's seamless change model focused on inter-relational factors that alter values through strategies such as generating enthusiasm for institutional renewal, creating a common vision of learning, developing a common language, fostering cross-functional dialogue, examining the influence of student cultures on student learning, and focusing on systematic change. The planned change model focused on the instrumental role leaders play in creating change by providing support, planning, strategy, clear goals and objectives, setting expectations, demanding accountability, use of expertise, incentives, staff development, and marketing

and promotion of change. The restructuring model focused on reengineering organizational departments and reporting structures to provide for better coordination and organizational functioning.

Table 43 provides a comparison of the results of my study with the research conducted by Kezar (2001b). The items listed in the far left column are the organizational factors that emerged from my study in response to Research Question #2 as factors that influenced cross-functional collaboration across the three community colleges. A description of the factors is provided in Chapter 4 in response to Research Questions #1 and #2. An “X” was placed in the appropriate column to indicate whether the factor fits within Kuh’s seamless change model, the planned change model, or the restructure model.

Table 43

Relationship Between Current Findings and the Change Models Examined by Kezar (2001b)

Strategies Identified at Colleges A, B, and C	Seamless Change Model	Planned Change Model	Restructure Model
Environment of Support	X		
Common vision*	X		
Processes to facilitate collaboration		X	
Resources		X	
Accountability*		X	
Recognition	X		
Leadership*		X	
Clear expectations		X	
Structures – new positions or organizational departments			X

*Denotes a factor found by Kezar to be either critical or extremely important for supporting collaborative change.

Review of the findings of my study in relationship to Kezar’s (2001b) study identified the following similarities and differences:

Similarities

- Strategies within the planned change model were found in Kezar’s study to be most commonly implemented. Table 43 demonstrates that the majority of factors implemented in the current study were also related to the planned change model.

- Kezar (2001b) noted that senior administrative support and leadership was by far the most often cited strategy for success. This supports the finding of my study that senior administrative support is central to the success of collaborative efforts.
- Kezar identified that institutions that combine inter-relational elements of the seamless change theory and the managerial elements of the planned change theory experience the most success. The three colleges featured in my study for their successful collaborative work demonstrated elements of both theories in the results that were produced.
- Restructuring was not found by Kezar to be sufficient to alter the environment enough for people to embrace collaboration. In my study, some organizational restructuring occurred to provide for better organizational functioning, but it was not described by participants as a factor that influenced collaboration.

Differences

- Three factors identified by Kezar (2001b) as critical for successful collaboration (generating enthusiasm, cross-institutional dialogue, and staff development) were not identified as separate themes within my study. Aspects related to generating enthusiasm and cross-institutional dialogue were identified in the comments of participants across the three institutions and were incorporated in the discussion related to creating an environment of support (Research Question #2). The factor of staff development was included in the discussion related to training resources provided (Research Question #2).
- Kezar (2001b) identified that Kuh's model is most closely aligned with collaboration success (p. 71). This conclusion was based upon a statistical comparison of the number of very successful collaborations on campus and the number of change model strategies identified in each category. The number of successful collaborations at each college was not measured through my study. A basis has therefore not been established for comparison between my study and this finding by Kezar.

Overall, the results of my study are consistent with the findings of Kezar's (2001b) study of organizational models and facilitators of change described in Chapter 2.

Both the inter-relational factors provided through Kuh's model and the leadership factors provided through the planned change model were found to support effective implementation of collaborative processes. The findings of Kezar's study identified that the more campuses used strategies from Kuh's seamless change model or the planned change model, the greater the number of successful and very successful collaborations that occurred (p. 70).

Summary. One of the propositions related to Research Question #2 was supported by the findings of my study, and the other was not. Comparison of my findings to Proposition 2.1 revealed that both cultural and structural strategies were important for creating effective cross-functional collaboration on campus. The cultural strategies that surfaced included vision setting, planning across departments, publicizing project results, and staff training. The structural approaches included setting expectations, reporting procedures, organizational planning, development of new positions, and accountability structures. Senior administrative support was also identified in both the literature and my research as an important factor for successful collaboration.

The premise of Proposition 2.2 that cultural factors have more influence on cross-functional collaboration than structural/procedural factors was not supported by the results of my study. Both cultural and structural factors influenced effective collaboration at the colleges I studied, and structural/procedural factors were identified more frequently than cultural factors. This finding does not negate the importance of cultural factors, nor does it disprove the findings of Kezar (2001b). The focus of Research Question #2 was to identify factors that influenced collaboration; it was not structured to measure the level of effect of the various factors that were identified. Examining the impact of cultural versus structural/procedural factors on cross-functional collaboration in the community college is a potential area for future research.

Comparison of Study Findings to the Literature

Research Question #2 explored the factors that influenced cross-functional collaboration at the community colleges included in my study. The findings associated with Research Question #2 were graphically displayed in Chapter 4, Figure 3. The organizational factors found to influence collaboration included: (a) an environment of

support, (b) common vision, (c) processes, (d) resources, (e) accountability, and (f) recognition. This section compares findings from the literature review to the factors identified in response to Research Question #2.

Environment of support. A central factor found in my study to influence cross-functional collaboration was an environment, which provided opportunity and support for collaborative activities to occur. At the colleges included in my study, an environment of support was facilitated in part by the actions of college leaders and others that respected differing viewpoints, provided opportunities for people to participate in collaborative work, and contributed to an open and encouraging atmosphere. Mohrman et al. (1995) noted that the organizational context in which a team worked appeared to be, “the overwhelming determinant of whether a team functioned effectively in accomplishing its goals” (p. 34). In addition, many factors that prevent effective collaboration from occurring were found by Mohrman et al. to be factors that could be reduced or negated by upper management. Factors such as a lack of consistent direction, inconsistent goals, and shifting resource commitments are factors external to the team that have a negative impact and that can be addressed by upper management. The findings of Kezar (2001b) also support the theme that an environment of support is necessary for effective collaboration to occur. Kezar found that cultural factors such as creating a common vision, developing a common language, and generating enthusiasm for institutional renewal had a significant impact on the number of effective collaborations that occur at a college.

The finding that an environment of support influences cross-functional collaboration is consistent with literature. Literature reminds that environmental factors can either encourage or inhibit effective collaboration and therefore is worthy of the attention of upper management.

Common vision. A second factor found through my study to impact collaboration was common vision. A common vision for the collaborative efforts was established as college leaders identified the purpose of the project, clarified goals, and established a plan to share with the rest of the college community. Guarasci (2001) noted that a clear vision establishes a set of responsibilities for campus leadership and staff (p. 107).

Among the fundamental things Glaser (2005) identified as necessary for a leader to do to support the work of the group was alignment of the team and focus on the vision (p. 70). The research of Kezar and Lester (2009) also identified a shared vision and sense of purpose as important for creating an environment in which collaboration can occur. However, my study varies from the findings of Kezar and Lester in the object of the common vision. The findings of my study described the development of a common vision to help further the goals of the project being undertaken by the collaborative team. Senior administrators were instrumental in informing the college community of the purpose of the work and the value the project held for the students they served and the college as a whole. Kezar and Lester's focus was on the development of a common vision for functioning in a collaborative manner. They encouraged the conscious development of a shared vision and sense of purpose around why collaboration is a good idea. They proposed that a sense of priority regarding collaboration be developed and that specific direction and logic for undertaking the work of collaboration be provided (Kezar & Lester, 2009, p. 61). The difference is related to the focus of the two studies. While I examined one type of collaborative effort (cross-functional collaboration for the purpose of student success) that occurred in a community college setting, Kezar's research encompassed various aspects of collaboration that occurred in comprehensive four-year institutions.

In summary, review of the literature affirmed the importance of a common vision for supporting collaborative work. A difference exists between the vision focus identified through my research and the vision focus identified in another study. In both cases, a common vision was seen as essential for enabling collaborative work to succeed.

Processes. The establishment of processes to support collaborative work was another factor found through my study to facilitate collaborative work. The processes that were established focused not only on generating ideas and involvement from staff, but also on providing approval and support for ideas that arose. The implementation of processes to support collaboration was shown in the literature to be important for supporting high quality, effective practices (Mohrman et al., 1995, p. 298). Establishing processes to support collaborative work enabled teams to focus their time on

accomplishing goals rather than on figuring out procedures to follow. The management functions described by Kezar (2001b) illustrated some of the processes that support collaborative efforts in higher education. Literature concurred with the finding that processes established to support collaborative work have the ability to influence effectiveness.

Resources. The dedication of resources was also found in my study to influence cross-functional collaboration. The resources of leadership, funding, and time were provided by college administration to support collaborative efforts. Mohrman et al. (1995) explained that the designation of resources by upper management impacts the success or failure of a collaborative team. The study conducted by Kezar and Lester (2009) also identified the importance of a college to allocate resources to support collaborative projects that enable the institution to meet its strategic plan. Barott and Raybould (1998) reminded that schools often operate under conditions of scarcity. There is rarely enough time, attention, or money to support all of the ideas that surface within the institution. The work of collaborative teams is initiated and maintained at a cost (Barott & Raybould, 1998); upper management must therefore make decisions related to the allocation of people and funding for a project based on a college-wide perspective of the organization's needs. A common source of team failure is the loss of resources required along the critical path of the work (Mohrman et al., 1995, p. 207). Therefore, a path of communication between the team and upper management is necessary to assure the resources needs of the team are communicated. Mohrman et al. (1995) reminded that "Team needs must be voiced, not left to chance in the belief that they will be perceived by some sort of management omniscience" (p. 219).

The dedication of resources to support collaborative work was a theme consistent with literature. Management's allocation of resources to support the collaborative effort signals the importance of the work, provides affirmation to team members of the college's commitment to the project, and provides the people and funding necessary to carry out plans.

Accountability. Another factor found to influence collaboration was the college's commitment to accountability. Accountability was identified in terms of responsibility to

students, staff, and college leadership. The issue of accountability for collaborative work was also found in literature. Much of the literature was focused around the responsibility of higher education to increase institutional effectiveness as demonstrated in part by student retention and success (Bourassa & Kruger, 2001; Hirsch & Burack, 2001; U.S. Department of Education, 2006). Also found within the literature was discussion of the ways individuals and teams are held accountable for collaborative work (Kezar & Lester, 2009; Mohrman et al., 1995). While this is a different emphasis than what arose in my study, it has an impact on collaborative work and warrants future consideration. Accountability, as described in my study, was focused on outcomes and achievement of plans.

Accountability is a theme consistent with the literature. A commitment to measure, assess, and report results influence the collaborative work of the team. Aligning measures to the mission of the college and to the demonstration of student retention and success provides both team members and the broader college community an understanding of the purpose and importance of the work.

Recognition. The sixth and final factor found to contribute to effective communication was recognition of participants. Recognition served to remind participants of the importance of the work they participated in and acknowledged that others were aware of the contribution that was made. Recognition of participants was discussed in the literature as it related to reward systems for employee performance. Rewards such as recognition were described in literature as having a positive impact on employees' satisfaction with work in general (Bragg, 2000; Mohrman et al., 1995, p. 231). Kezar and Lester (2009) explained that rewards are very significant for enabling collaboration, noting that rewards enable collaboration because they demonstrate for employees that the institution is willing to create support to meet its mission. Kezar and Lester explained that one of the most fundamental ways to reward people for collaborative work is by creating opportunities through restructuring the tenure, promotion, and staff evaluation requirements or by providing start-up funds that never existed before. Recognition was the only reward consistently identified to support cross-functional collaboration at the colleges included in my study. Bragg (2000) noted that

informal praise and recognition is more effective for increasing employee morale than more formalized reward systems.

The concept of recognition as a factor that influences cross-functional collaboration was consistent with the literature. Recognition is one form of reward for work beyond a person's regular responsibilities. It signals appreciation for commitment and action to support the work of the college and acknowledges that others were aware of the contribution that was made.

Summary. The factors identified in my study as having an impact on cross-functional collaboration were also identified in the literature as contributing to effective collaboration. The factors described in this section included an environment of support, common vision, processes to support collaborative work, resources, accountability, and recognition.

*Research Question #3: How Does College Leadership Facilitate
Cross-Functional Collaboration in the Community College?*

This section provides a discussion of the findings associated with Research Question #3 in relationship to the literature review. As was the case for the previous two research questions, to provide an overview of study findings in relationship to the literature, the section is divided into two components: (a) study findings in relationship to the propositions drawn from the literature, and (b) study findings in relationship to the literature in general.

Findings Related to the Propositions

Two propositions were established in response to the research question, "How does college leadership facilitate cross-functional collaboration in the community college?" The propositions drawn from literature for this research question were: (a) Senior administrators in the community college influence collaboration at their institution through both interpersonal and managerial processes, and (b) the leader of the effective collaborative team is both task and relationship oriented. The findings of my study in relation to these propositions are discussed in this section.

*Proposition #3.1 – Senior administrators in the community college influence
collaboration at their institution through both interpersonal and managerial processes.*

This proposition was supported by the findings of my research. At each of the colleges included in my study, the college president and other senior administrators played a significant role in the success of the collaborative teams. Upper management's involvement through both interpersonal and managerial processes was central to the development and success of the collaborative projects described in the study. Huxham and Vangen (2000) described the managerial influence of leaders as occurring through the structures, processes, and people they support. The interpersonal influence exerted by senior administrators was described by Eckel, Green, and Hill (2001) to occur through the way leaders approached problems, the attitudes they displayed, their dispositions, and the commitments they made. Table 44 identifies the managerial and interpersonal influences that study participants attributed to senior administrators at the colleges included in my study.

Table 44

Interpersonal and Managerial Processes Attributed to Senior Administrators

Interpersonal Processes Implemented by College Leaders	Managerial Processes Implemented by College Leaders
<ul style="list-style-type: none"> • Established the vision • Modeled collaboration • Conveyed expectations • Demonstrated values • Respected the ability and contributions of staff • Provided encouragement • Took a long-term perspective on change • Displayed a welcoming attitude 	<ul style="list-style-type: none"> • Provided resources • Implemented standard operating procedures • Established initial project plans • Established mechanisms for people to work together • Established reporting structures • Provided opportunities for participation by many • Brought the right people to the table • Accepted risk

The findings in response to Proposition 3.1 demonstrate that upper management played an important role in supporting effective cross-functional collaboration through both interpersonal and managerial processes. Senior administrators functioned as the “designers, stewards, and teachers” responsible for establishing mutual goals that were well defined and that focused on student success (Kinzie and Kuh, 2004). As Crow (1998) described, senior administrators created a context through both interpersonal and

managerial processes where leadership by others was encouraged and where skills and potential in others was cultivated.

Proposition 3.2 – The leader of the effective collaborative team is both task- and relationship-oriented. This proposition was supported by my research. Collaborative teams were influenced not only by senior administrators, but also by the actions and qualities of the person selected to lead the team. Gratton and Erickson (2007) noted there has been much debate about the most effective style for leading teams. While some propose that a relationship-oriented leader is most appropriate in complex teams, others propose that task orientation provides greater effectiveness because it allows for clear objectives, clear direction, and a focus on accountability. Results of the study conducted by Gratton and Erickson (2007) concluded that both styles were important for team leadership and that the most productive, innovative teams were typically led by people who were both task- and relationship-oriented. A study conducted by Smart (2003) reinforced this view through the finding that leaders who perform multiple leadership roles in a more balanced or complex manner are perceived to be more effective than leaders who are perceived to place primary attention on only one or two leadership roles.

To examine the data from my study in relationship to Proposition 3.2, a visual display of information collected from interviews was developed. Table 45 lists the four primary traits of team leaders that were identified in Chapter 4: (a) willingness to drive the process, (b) application of good interaction skills, (c) being strong leader, and (d) implementation of effective group processes. The bulleted points below each trait provide additional information gathered from transcribed documents. An “X” was placed in the appropriate column to designate whether the action reflected a task-oriented or relationship-oriented behavior. The best fit for each theme was determined by comparing my findings to examples and descriptions of each category provided by Strang (2004) and Yukl, Gordon, and Taber (2002).

Table 45

Task-oriented and Relationship-Oriented Behaviors Attributed to Team Leaders

	Relationship Behavior	Task Behavior
Drove the process		
• Moved plans forward once they were made		X
• Took personal responsibility for the work of the team		X
• Took care of the details		X
• Created a structure for participation		X
• Developed an action plan for the project		X
Applied good interaction skills		
• Kept people informed	X	
• Maintained connectivity and participation	X	
• Communicated with team members	X	
• Built strong rapport with college community	X	
• Applied good listening skills	X	
Displayed strong leadership		
• Brought group to specific results		X
• Consistent follow through		X
• Conveyed a vision for the work of the group		X
• Communicated with the college community		X
• Kept the team on track		X
Implemented effective group processes		
• Set the agenda		X
• Provided structure for the meetings		X
• Moved the team toward action		X
• Sought input and involved everyone in the discussion		X
• Brought the group to specific results		X

This comparison shows that leaders of the collaborative teams influenced collaboration through both task-oriented and relationship-oriented behaviors. This is consistent with the literature that holds both interpersonal skills and managerial processes to be important for influencing effective collaboration (Gratton & Erickson, 2007; Kezar, 2001b & 2004; Smart, 2003).

Summary. The propositions associated with Research Question #3 were both found to be supported by my study. Senior administrators and team leaders alike applied

a variety of skills to impact the success of the collaborative efforts at their colleges. Throughout my study, both interpersonal behaviors and managerial actions taken by senior administrators to support collaborative efforts rose to the forefront of discussion. In the colleges included in my study, it was through the managerial processes that cross-functional collaboration to support student achievement began to occur. While interpersonal processes encouraged and validated the work of the teams, participants questioned whether the collaborative work would continue if the structures were not in place to facilitate collaboration or if the follow up was not there to examine results. The work of Kezar (2001b, 2004) suggested that interpersonal behavior of college leaders might have a greater influence on collaboration's effectiveness than managerial behavior. While this was not found to be the case in my study, it is an area for needed further exploration. No evidence arose through my study that interpersonal behavior had a greater impact on collaboration than managerial actions. However, a strong interpersonal tie existed at each of the three colleges between senior administrators and the rest of the college. This was evident through comments that demonstrated trust, mutual respect, and confidence in the abilities and actions of the college's leaders. The environment of support, found to be a central factor in effective collaboration, relied heavily upon the interpersonal interaction among upper management and college staff. Without the trust and respect that contributed to an environment of support, it was unlikely that the processes implemented would have been effective (Kezar, 2004).

Comparison of Study Findings to the Literature

The findings associated with Research Question #3 focused on the way the president and other top-level administrators facilitated collaboration. The themes that emerged across all three cases showed that college leaders influenced collaboration by: (a) contributing to an environment of support, (b) establishing the project as a college priority, (c) implementing processes that facilitated collaboration, (d) involving the right people, (e) providing clear direction and goals, and (f) owning responsibility for effective functioning. This section examines these themes in relation to the literature.

Contributed to an environment of support. One of the ways college leaders were found to facilitate collaboration was by contributing to an environment of support. Senior

administrators set the tone for the organization through the attitudes they displayed, the behaviors they modeled, the presence they provided on campus, and the importance they placed on input and involvement from the college staff. Kinzie and Kuh (2004) identified strong senior leadership as one of the primary factors that contributed to a widely shared sense of responsibility for educational quality and student success in higher education. They found that senior managers at campuses where student success was the focus of the college's work all had a strong sense of purpose and provided well-defined goals to guide the work of the college. Gratton and Erickson (2007) explained that collaborative teams do well when executives demonstrate collaborative behavior themselves and create a culture in which employees experience interactions with leaders and colleagues as something valuable and readily available. Their study found that in every case where collaborative teams had performed in a productive and innovative manner, the company's top executives had invested significantly in the environment by building and maintaining social relationships throughout the organization. They noted that even in very large companies where relatively few have the opportunity to observe the behavior of senior administrators on a day-to-day basis, the perceived behavior of senior executives played a significant role in determining how cooperative teams were prepared to be (p. 104). The collaborative nature of upper management "trickled down" throughout the organization, providing an example of the preferred way to get things (p. 105). Matthew and Sternberg (2006) found that management contributed to collaboration and innovation through the open exchange of information, engaging in diverse perspectives, demonstrating risk and conflict tolerance, and shared learning. In organizations where factors such as these were modeled at the top of the organization, an environment was created that that fostered collaboration. Bensimon and Neumann (1993) added that college presidents and other key leaders played a prominent role as team builders within the institution by aligning goals and behaviors, seeking multiple perspectives, and developing an environment of mutual support.

The finding that college leaders influence collaboration by contributing to an environment of support is consistent with current literature. An environment that fosters

the culture and habits necessary for innovation and collaboration to occur is needed to provide the groundwork from which collaboration can grow (Gratton & Erickson, 2007).

Established the project as a priority. Upper management at the colleges I studied visibly and actively supported collaboration by designating resources, sharing the vision for the work of the team, and inviting people to participate. An involved, informed senior leadership team signaled the collaborative work was a priority that had their support. Guarasci (2001) noted that setting a vision for the purpose and direction of work is paramount for collaborative change. A clear vision establishes a set of expectations that everyone can work to support. Kinzie and Kuh (2004) explained that collaboration among all parts of the institution flows from a sense of purpose about what needs to be accomplished and from an understanding of how the collaborative work fits with the institution's goals.

The role of senior administrators to set the vision for the collaborative work and signal the importance of the project was a theme reiterated in the literature. Collaboration is strengthened when upper management puts forth the project as a priority that supports the college mission.

Implemented processes that facilitated collaboration. The establishment of processes to facilitate collaborative activities surfaced as a primary way college leaders influenced collaboration. The types of processes that were implemented included committee structures to expand staff involvement, reporting structures that encouraged completion of assigned tasks, an annual planning and assessment cycle, hiring and evaluation practices, and a structured process for leading group work.

Mohrman et al. (1995) identified that the presence of systematic processes for planning and decision making has a strong and consistently positive impact on team performance. They contend that organizational processes that support the work of collaborative teams should not be left to chance. Effective collaboration requires that management establish processes and systems that support the occurrence of collaboration and guide the nature and quality of the work that takes place (p. 298). "Systematic processes provide a basis for collaborative work, build in the steps to ensure high quality, and prevent employees from having to reinvent procedures repeatedly" (Mohrman et al.,

1995, p. 298). Kezar and Lester (2009) reiterated the view that upper management influences collaboration through the development of processes and structures that facilitate collaborative work.

The role of upper administration to implement processes to support the effective functioning of collaborative teams was a theme consistent with current literature. Organizational leaders were found to influence the structure, processes, and people that enable collaboration to occur (Gratton & Erickson, 2007; Huxham & Vangen, 2000; Kezar, 2006; Kezar & Lester, 2009). By fostering conditions that support collaborative activities, upper management has a direct impact on the success of collaboration across the organization.

Involved the right people. Getting the right people involved in the collaborative process was another way senior administrators influenced the effectiveness of collaborative teams. This was done through appointing team leaders, intentionally involving people with insight and ability, and expanding involvement to include front-line staff. Jassawalla and Sashittal (2006) credited the success of collaborative teams in part to senior management's selection of team leaders (p. 15). Selecting the team leader provides upper management with the opportunity to identify someone with the technical and interpersonal skills to get the job done and to maintain open communication with the management team. When the team leader is selected by senior management, a message is conveyed of senior management's commitment to the success of the leader and the team. (p. 17). Kezar and Lester (2009) echoed the importance of carefully selecting individuals involved on the cross-functional team. The cross-functional team needs careful leadership by an individual familiar with the challenges that can occur so they can negotiate the problems and maintain an effective structure. As Kezar and Lester noted, effective team leaders need to be able to navigate a situation where there may be role ambiguity, authority conflict, accountability problems, and budgetary concerns (p. 126). They may also need to manage conflict that can emerge among individuals and between organizational units. Upper management's role in involving the right people in the collaborative process was supported by literature.

Provided clear direction and goals. Upper management was also found to facilitate cross-functional collaboration through providing clear direction and goals. This occurred through establishing the project's goals and structure prior to extending involvement to the college community and through providing teams with specific goals and responsibilities. (Mohrman et al., 1995) explained that collaborative teams rely on clear direction for the organization and knowledge throughout the organization of that direction. For a college to benefit from the innovation and effectiveness that can be achieved through cross-functional teams, it's important that the college community have a rich understanding of the direction and goals of the organization (p. 172). A clear understanding of organizational goals has been found to impact the confidence team members have in their ability to accomplish the goals, which, in turn, impacts team effectiveness (Mohrman et al., 1995).

The provision of clear direction and goals by upper management is a theme consistent with current literature. It's through upper management's clarification and reinforcement of the college vision, goals, and strategic priorities that staff members become aware of college priorities and are able to focus their efforts to achieve those goals.

Owned responsibility for effective functioning. In each of the colleges included in my study, upper management facilitated cross-functional collaboration through taking responsibility for the outcomes of the team. Responsibility for success occurred through a variety of actions, including appointing a senior administrator to oversee the project, committing resources and personnel to support the project, maintaining a reporting structure, and reporting progress to the Board of Trustees. Hansen (2009) explained that leaders of collaborative organizations take responsibility in two ways. The first is through holding themselves accountable for results, even though collaborative work often leads to a diffusion of responsibility; the second is through holding others accountable for their individual parts (p. 158). Hansen clarified that this does not equate to blaming others. Rather, it is more an attitude of "we are all accountable" (Hansen, 2009, p. 158).

Mohrman et al. (1995) recognized the responsibility upper management maintained to link teams to the strategy, decisions, and performance needs of the larger

organization and to provide direction and timely information (p. 139). Providing a champion from among the senior leadership team was found in the literature to be one way upper management maintained a connection with collaborative teams. Establishing a senior champion for the project helps to assure the effort remains a priority, is aligned with college goals, and receives the guidance, support, and resources necessary to function effectively (Linden, 2003).

The actions of upper management to take responsibility for the effective functioning of collaborative teams are a theme consistent with current literature. In colleges where effective collaboration is occurring, upper management does not leave the work of the team to chance. Senior administrators remain accountable for the outcomes and effective functioning of collaborative teams on their campuses.

Summary. The research findings related to how college leadership facilitates cross-functional collaboration were consistent overall with current literature. The themes identified through my study were each echoed in literature related to collaboration. A review of the literature supports the findings that upper management facilitated collaboration by contributing to an environment that supports collaborative work, implementing processes that facilitate collaboration, involving the right people, providing clear direction and goals, and owning responsibility for effective functioning. A factor mentioned by Kezar (2001b) that did not arise in my study was that college leaders might also influence collaboration through monitoring reform. By establishing conditions that support collaboration, senior administrators impact the level and quality of collaborative efforts that occur.

Comments Related to the Uniqueness of Cross-functional Collaboration

The form of collaboration examined in this study was cross-functional collaboration that occurred for improving student success. As is common with cross-functional collaboration (Denison et al., 1996), the teams explored in this study were task-oriented teams comprised of people from multiple organizational functions who operated at a level within the organization where decisions could be made and work could be accomplished. Denison et al. (1996) explained that cross-functional teams differ from other teams in that their context is often more complex because of the hierarchical,

lateral, and inter-team dependences that may require negotiation. The instances of collaboration that served as the basis for this study were all large-scale projects closely related to the mission and goals of the college. The teams examined in this study all had connection to a high-level responsibility within the organization. Two of the teams had direct involvement of a vice president. At the third college, the president had the final say in the designation of team members for teams that had importance.

Other types of collaborative teams also exist within the community college through contexts such as service learning, learning communities, and integrated teaching. While this type of collaboration holds great importance for the community college, it differs from cross-functional collaboration in that the work is more centralized and may not require the knowledge and buy-in from departments across campus to be successful. Haskins, Liedtka, and Rosenblum (1998) refer to this type of teamwork as *relational* collaboration as opposed to the *transactional* nature of cross-functional collaboration.

I chose to focus this study on cross-functional collaboration because I perceived it as the area where the greatest challenges may arise and the greatest benefits may be found. Cross-functional collaboration frequently occurs at the administrative level where decisions related to institutional goals and effectiveness take place. Because of this, cross-functional teams hold the potential to significantly contribute to the effectiveness of the college by providing an avenue where plans can be developed and implemented in a nimble manner. Because the study focused solely on cross-functional collaboration, generalization of the findings to other forms of collaboration should be made with caution. While many of the themes may be applicable to all aspects of collaboration, others may have limited relevance outside of the arena of cross-functional collaboration.

One area that may differ between cross-functional collaboration and other forms of collaboration is the expectation of the team to communicate plans and opportunities to the rest of the college community. Proposition 1.2 was not supported by my study because it was found that administrators periodically took the role of informing the college community of the work being done through the collaborative team. When the college president or other senior administrator informed the college community about the collaborative work and invited participation from the college community, the

commitment of college leadership to the project was signaled and the importance of the project for achieving college goals was communicated. For other types of collaboration where upper management is not as closely involved, the responsibility to convey the purpose, plans, and activities of collaborative work is likely to rest primarily with the team. Assuring that college staff and administrators know the work that is occurring through the efforts of the team is important for generating the involvement and support that can strengthen the efforts. It also makes staff aware of opportunities available to students.

Also unique to cross-functional collaboration may be the level of management involvement, direction, and support that was identified in this study. For collaborative efforts that occur between educators at the department level, the amount of managerial involvement and oversight demonstrated through the study may not be experienced. However, Kezar and Lester (2009) identified that at colleges where multiple collaborative activities occur, integrating structures have been implemented to encourage collaborative activities and support the work of the team. College C, which encouraged collaboration throughout the organization, provided an example of structures and processes that had been put in place to encourage and support collaborative work at all levels of the organization.

Summary of Findings

This section discussed findings to the three research questions in relation to the literature related to collaboration. Findings were compared first to the propositions identified from the literature, followed by a review of the overall study findings. Findings were shown to both agree and contrast with previously published works described in the literature review and other literature identified as relevant. The section concluded with comments related to cross-functional collaboration as compared to other forms of collaboration. The next section will address implications for practice and policy that arose from the study.

Implications for Practice and Policy

The purpose of this study was to explore cross-functional collaboration in the community college that occurred in order to support student success. The motivation for

this study arose from my curiosity about factors that enabled some community colleges to effectively engage in collaborative work to support the mission and goals of the college when so many collaborative efforts never come to fruition (Linden, 2003). What made the difference at community colleges where effective collaboration across departments occurred? Was there something that community college leaders could do to prepare their institutions to effectively support collaborative work? At stake for community colleges is the ability to bring together the knowledge and ideas from across the institution to respond to challenges facing higher education today. The findings that arose across all three colleges in my study provided insight that could benefit other community colleges seeking to expand their collaborative advantage. The cases examined in this study provided an understanding of the context in which effective collaboration occurs in the community college and the factors that influenced its effectiveness.

Several implications for practice arose from the findings described in this study that may be useful to community college leaders and staff who want to expand the ability of their institution to collaborate across department lines. The implications of findings in my study may be useful to senior administrators in the community college (i.e., those considering senior leadership roles and those already in positions of senior management), team leaders (i.e., those considering leading a collaborative team and those already in a team leadership role), middle managers in the community college (i.e., those in positions such as coordinator, director, or dean who may be involved in cross-functional efforts), and those responsible for policy development in higher education (i.e., policy committees at the institutional, state, and national level). This section is organized by the implications for practice for these four groups. The implications included in this section are directly related to the findings of my study and provide a synthesis of results from across the three research questions. They were selected because of the insight they provide and the potential usefulness to individuals identified within the four groups noted above. By the nature of a critical realist study, it is recognized that readers may have gained a different perspective of cross-functional collaboration in the community college than what is presented here. Differing perspectives contribute to a greater understanding of the reality

of cross-functional collaboration and expand our knowledge of the causal processes that contribute to its effectiveness.

The characteristics of the colleges where research was conducted and the examples of collaboration examined within this study provided a context that influenced the implications for practice and policy. My research examined cross-functional collaboration at three community colleges that ranged in size from small to large (Carnegie Foundation for the Advancement of Teaching, 2009). The selected case sites had one or more collaborative teams that had been successful at developing and implementing solutions to improve student success at their campuses. The projects that served as an initial point of inquiry included the Achieving the Dream initiative (College A), the First Year Introduction (College B), and the Center for Teaching and Learning (College C). At each study site, the collaborative project represented a large-scale effort that supported the college mission and affected campus operations. These factors, which defined the context of this study, also provide opportunity for the reader to identify similarities and make connections to other scenarios. Consideration of these factors may assist the reader in determining the applicability of the implications to her or his own situation.

Implications for Senior Administrators in the Community College

The contribution of senior management to the success of cross-functional collaboration arose repeatedly throughout this study. At one of the colleges included in this study, the president of the college had the largest influence on effective collaboration at the college. At the other two colleges, a vice president played the primary role in establishing processes and expectations that influenced collaboration. In all three cases, the influence from upper management was attributed to multiple college leaders rather than limited to one single person. By examining the implications derived from this study, it is hoped that other community college leaders can gain insight into specific actions they may take to better support collaborative work at their institution. Several implications emerged for senior administrative leaders from a synthesis of findings across the research questions that guided the study. The implications for senior administrative

leaders centered on the concepts of: (a) responsibility for collaboration, (b) college environment, and (c) processes and structures.

Responsibility for Collaboration

The first implication for community college leaders is that the ultimate responsibility for effective collaborative work across departments lies with the college's senior administrators. Without the intentional involvement and active support of administrators who established the project as a priority and set the direction for the collaborative work, it is unlikely that the collaborative efforts would have taken hold in the manner that they did at these institutions. The positive results that were produced and the ongoing commitment to the progress of the collaborative team were attributed in large part to the emphasis upper management gave to the project. Study participants described the critical role upper management played in creating the environment and structures that enabled collaborative work to succeed. It can't be assumed that collaborative efforts will emerge from the ranks and grow to be successful on their own. Senior administrators need to be aware of the impact they have on the success of collaborative work and intentionally contribute to a context in which effective collaboration can occur.

As demonstrated through this study and the literature (Denison et al., 1996) cross-functional teams often focus on the development and implementation of plans that are of considerable importance to the college. Each of the collaborative projects described in this study, for example, represented new college programs that were expected to become part of the college's ongoing operations. In cases such as these, upper management had a particular interest in assuring the project's success and maintained a level of responsibility for its continued effectiveness. Oversight for projects of importance to the college was maintained by someone who was either directly a part of the president's management team or who was assigned by upper management to perform the role. Management assumed responsibility for the collaborative work by creating conditions that supported collaboration across department. The findings from my study demonstrated a variety of ways this occurred. Actions that supported effective collaboration included the development of an environment of support, making goals clear, providing the structure and processes by which collaboration could occur,

designating a champion for the project from the senior leadership team, designating resources, and getting the right people involved in the collaborative work. By understanding the important role they play in establishing a context in which effective collaboration can occur, college leaders have the opportunity to unleash the college to benefit from the innovation and participation that can be generated from effective cross-functional collaboration. The following sections describe ways college leaders establish a context for collaboration.

College Environment

Senior administrators in my study were described as setting the tone for collaboration through the attitudes they displayed, the behaviors they modeled, the presence they provided on campus, and the importance they placed on input and involvement from the college staff. The president was seen as the primary person who set the tone for the college through the attitudes and actions displayed, but all of the senior administrators were credited with contributing to an environment that encouraged collaboration and recognized the contribution of individuals. By modeling collaboration and other behaviors, the president and senior administrators demonstrated the type of interaction they expected to occur throughout the college. In addition, participants cited respect for differing viewpoints, the opportunity for people to participate, and an open and encouraging atmosphere as part of the environment which contributed to a collaborative environment.

The implication to draw from this finding is that senior administrators desiring to expand their colleges' collaborative ability should first examine the environment they cultivate. The attitudes and examples displayed by upper management set the tone that either encourages or dissuades collaborative efforts by college staff. To generate ideas and new solutions through a collaborative effort, college leaders should strive to maintain an environment where ideas are considered and contributions are respected. Through practices such as being principle driven, modeling collaboration, seeking innovation, and recognizing the contributions and ability of staff, college leaders can contribute to a college environment that fosters collaboration.

Processes and Structure

Each of the colleges included in my study established processes and structures that fostered collaboration and reduced barriers. The establishment of processes to facilitate collaborative activities surfaced as a primary way college leaders influenced collaboration. The types of processes that were implemented included committee structures to expand staff involvement, reporting structures that encouraged completion of assigned tasks, annual planning and assessment processes, hiring and evaluation practices, and a structured process for leading group work. Effective collaboration required that management establish processes and systems that strengthened collaborative work and provided procedures that helped the collaborative teams.

The implication is that for effective collaboration to occur, senior administrators should consider developing a framework for collaboration that removes barriers, encourages the involvement of people with varying perspectives and knowledge, and allows ideas to enter the organizational pipeline. The establishment of structures and processes to support collaboration sets the stage for collaboration by providing consistent practices that make responsibilities and practices clear. Examples provided by the colleges in my study included project approval processes, group procedures, resource identification, specification of project goals, timelines, assessment practices, and information distribution practices. Establishing systematic processes that support the occurrence of collaboration is beneficial for guiding the nature and quality of the work that takes place.

Implications for Team Leaders

The actions and characteristics of the team leader were found to have considerable impact on the effectiveness of the team. At each of the colleges included in this study, participants attributed success of the collaborative team to the actions and qualities of the team leader. By providing vision for the group, taking responsibility for the results of the team, and working to move plans forward, the team leader moved the team toward success. The team leader was described as someone who drove the work of the committee forward; communicated with team members, management, and the college at large; implemented effective group processes; and displayed strong leadership skills.

The implication for team leaders is that their effectiveness may be strengthened from training related to leadership responsibilities, characteristics, and actions that contribute to the ability of a team to bring a project to fruition. Taking responsibility to drive the work of the team and move it forward to accomplish its goals is a top priority. This involves being well-prepared for each meeting, having clear goals, leading effective meetings, following up with people, and doing the necessary work outside of the group to keep things moving and to assure people are informed. Maintaining communication with senior management is another important characteristic of the team leader in order to assure the plans of the team are aligned with college goals. The pursuit of training, independent study, or mentoring to strengthen group processes and other team leadership skills may increase the leader's effectiveness.

Implications for Middle Managers in the Community College

The teams explored in this study were largely comprised of people who operated at a mid-management level within the organization where decisions could be made and work could be accomplished. Middle managers with the experience and knowledge base to understand the implications new plans have for college operations may be called upon to contribute to or lead the work of the collaborative team. It's important that people in positions such as Coordinator, Director, and Dean be aware of factors that influence cross-functional collaboration so they can help collaborative teams meet their goals and bring plans to fruition.

The implication from this study is that middle managers should prepare themselves to function in a variety of roles related to cross-functional collaboration. By gaining an awareness of the factors that influence cross-functional collaboration, middle managers will be better equipped to lead an effective collaborative effort, participate as a team member on a collaborative team, or take the role of project champion to represent the work of the team to upper management and the broader college community. An investment in training to develop collaborative skills in middle managers and others may benefit the college by increasing leadership potential for collaborative work. The actions and attitudes identified in this study as factors that influence collaboration imply potential training topics for middle managers and team leaders. From findings that emerged from

my study and review of related literature, training in the following areas may be beneficial for community college staff:

- Processes to support collaborative work
- The role and responsibilities of team leaders
- Establishing goals and timelines
- Conducting a productive meeting
- Conflict management
- The role of task-oriented and relationship-oriented behaviors

Implications for Policy Development

Implications from this study also extend to the area of institutional policy. Kezar (2009) explained that if collaboration is a priority for the institution, it should be demonstrated in visible, tangible, and concrete ways by establishing structures that support and facilitate effective collaboration. The implementation of policies and procedures that affirm the value of collaborative work is one way to demonstrate the college's commitment to functioning in a collaborative manner. Policies that clarify processes and define decision-making structures serve to reduce barriers, provide clarity about how cross-functional teams operate within the institution, and create a sense of priority related to the collaborative work (Kezar & Lester, 2009). Addressing expectations for processes such as plan approval, progress reporting, and project assessment provides structure that will clarify expectations and strengthen accountability.

Findings from my study indicated that accountability measures from both internal and external sources helped to keep collaborative teams on track. The implication for colleges, as well as state and national higher education agencies, is that establishing assessment expectations for new initiatives is beneficial for strengthening accountability and assisting the college to remain on track with project plans. Higher education organizations external to the college also have the potential to influence collaboration among college departments for the development of new practices to help students succeed. For example, funded initiatives at the state or federal level may encourage the development of innovative strategies to help students in adult basic education courses transition into career training more quickly with a higher rate of success. Through setting

assessment requirements and providing incentive for innovative planning in specific areas of need, state and national agencies have the ability to encourage innovation and accountability at the college level.

Summary

This section spoke of the implications for practice across three groups of practitioners: senior administrators, team leaders, and middle managers. It also identified implications for policy at institutional, state, and national levels. The subsequent section will discuss implications for further research on the topic of cross-functional collaboration in the community college.

Implications for Further Research

The purpose of this study was to explore the factors that influence cross-functional collaboration in the community college and to gain insight into how college administrators facilitate effective collaborative work across departments on their campuses. From the findings of my study and the discussion pertaining to related literature, I selected four implications for further research regarding cross-functional collaboration in the community college. The rationale for selection of these specific areas is presented in the paragraphs below. My suggestions for additional research include:

1. *The impact of cultural versus procedural strategies on cross-functional collaboration in the community college.* Results from the national study on academic and student affairs collaboration reported by Kezar (2001b) indicated that while more procedural strategies within the planned change model were used in colleges where collaboration was occurring, the colleges that had the greatest number of successful collaborations were found to implement more cultural strategies aligned with Kuh's model of seamless learning. The findings of my study affirmed that more procedural strategies were implemented, but it did not provide data that could affirm that cultural strategies have a greater impact on collaboration success. Further study related to the factors that support cross-functional collaboration is recommended to determine the types of strategies that have the greatest effect on collaborative work and which individual strategies provide the greatest contribution to effective collaboration. Additional research

in this area will provide more specific guidance to college leaders desiring to increase the collaborative ability of their campus.

2. *Factors that influence other types of collaboration in the community college.* The focus of the current study was on one specific form of collaboration – cross-functional collaboration to support student success. The cross-functional teams examined in this study focused on the development and implementation of plans that have strategic importance to the college and that require the knowledge and input from various functional departments of the college. As such, the collaborative projects examined in this study received the attention and support of senior administrators in order to assure plans aligned with college goals and support was provided to enable the projects to become integrated within the colleges' ongoing operations. Other higher education examples of collaboration – such as interdisciplinary teaching, learning communities, and service learning – have been found to have a positive impact on students in areas such as grade point average, persistence, and learning outcomes. Further study is recommended to identify whether the factors found to influence cross-functional collaboration are also applicable to other forms collaborative work occurring in community colleges. Additional research in this area would expand our understanding of the influence college leaders have on collaborative work across the college and the factors that influence collaboration's effectiveness.
3. *Sustaining collaborative work.* The organizational elements necessary to sustain collaborative work may differ from the elements needed to initiate a collaborative project. Although one of the colleges included in my study (College C) had implemented collaborative processes for over 13 years, collaboration across departments was a relatively recent occurrence at the other two colleges. Kezar and Lester (2009) proposed that sustained collaboration seems highly dependent on the redesign of campus systems (p. 224). The examples they provided included the development of new reward and incentive systems, redesigning space for collaboration, and creation of new structures such as institutes to provide support for collaborative work. While integrating structures were

identified in my study in the form of processes to help the organization function more effectively to meet its goals, the level of emphasis on redesigning structures described by Kezar and Lester was not observed at any of the colleges in my study. This leads me to question whether the divergence is related to differences between comprehensive four-year institutions and community colleges or another factor such as the timing of study in terms of the life span of the collaboration being attempted. A future study that examines community colleges in differing stages of collaborative work is recommended to identify the leadership skills, processes, and structures that support collaboration at different points in the collaboration life cycle. Identifying whether different actions are required to support collaboration at different phases within a college's experience would provide additional insight into how college leaders can promote a collaborative environment at different phases of their colleges' experience. Further research around the focus of sustaining collaborative work in the community college would allow a more in-depth examination of structures implemented in community colleges to support collaboration over time. A study on sustaining collaborative work would also provide valuable insight that could assist colleges in preparing for a long-term perspective on collaborative practices.

4. *The impact of cross-functional collaborative on student success.* A final area for future research revolves around the question of whether developing and implementing plans in a collaborative manner has a measurable impact on student success. The value of collaboration for gathering collective knowledge and resources in order to make better decisions and implement plans more effectively was an accepted premise for this study. However, other more directive approaches to developing plans also exist and may demonstrate positive results. Bourassa and Kruger (2001) noted that few collaborative efforts have been evaluated in a manner that demonstrates the benefits of collaboration in advancing higher education's overall mission (p. 15). Engaging in future research to identify the impact of collaboration on student success as compared to other methods (such as directive or transactional management strategies) would provide

practitioners with the knowledge they need to determine for themselves which management style to implement to achieve the results they desire.

The implications for further research focused on four areas of exploration that will expand the understanding of collaboration within the community college setting based on my study findings.

Concluding Remarks

“I think the reason why we do it together is because it’s more powerful together than when we work individually” (P6B). This quote, first expressed in Chapter 4, provided a resonating sentiment that was reflected across each participating college. Collaboration appeared to develop from the heart of the organization. It began with a commitment of individuals to serve students in a powerful way and to achieve the mission of the college. Collaborative processes emerged to enable the college to best achieve a common goal of supporting students. As I conducted my research, I was struck by the focused commitment to students demonstrated at each institution and the energy derived from monitoring and assessing the results of implemented plans.

Through the research conducted at each site, a picture developed of cross-functional collaboration in the community college and the factors that impact its success. The presentation of findings in Chapter 4 and the discussion of findings in relation to the literature in this chapter provided a thorough presentation of the key themes that were identified across the three colleges. It is my hope that the information gained from the experiences of cross-functional collaboration at the three colleges provides guidance that may benefit other community college leaders seeking to improve the effectiveness of collaborative efforts at their institutions.

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APPENDICES

Appendix A
College A – Analysis Summary

COLLEGE A	
Question 1: What Does Cross-functional Collaboration Look Like?	
Finding	Evidence
Collaboration is viewed as essential	<ul style="list-style-type: none"> • Required as part of the structure for the AtD initiative • Needed the input and ideas from people from those working directly with students • Couldn't accomplish goals without the involvement of a broad range of individuals
Collaboration was initiated by upper management	<ul style="list-style-type: none"> • Made commitment to participate in initiative • Sent people to training • Selected initial participants – core and data teams • Upper management involvement on teams
Collaboration is maintained by upper management	<ul style="list-style-type: none"> • VP schedules information meetings and asks for reports • Reporting structure institutionalized • Upper admin encourages communication
Structures have been established to involve the college community	<ul style="list-style-type: none"> • Cascading responsibility structure • Group leaders invited others to participate • Open meetings to which everyone is invited • Attempt made to keep people informed
Someone “drives” the process	<ul style="list-style-type: none"> • VP drives the process for the college • Team leaders drive the process for work groups
Reporting requirements keeps teams on task	<ul style="list-style-type: none"> • Mentor comes to campus 3 times per year • Monthly reporting to Board of Trustees has been established • Reporting expectations provide timelines for teams • Requires “get it done” types of people
Commitment of participants is key to effectiveness	<ul style="list-style-type: none"> • Participation is voluntary • Most volunteer to participate because student retention and success is something they feel strongly about • Huge desire for students to succeed • The work extends to many
College culture is changing because of the structures that have been implemented	<ul style="list-style-type: none"> • College becoming more focused on student success • Becoming data driven in various areas • Enthusiasm growing about results

Appendix A (Continued)
College A – Analysis Summary

Question 2: What Organizational Factors Influence Cross-functional Collaboration?

Cultural Factors:

- Cross-institutional dialog
 - Open meetings
 - Open door with administrators
 - Broad communication about plans, actions, and results
- Common vision
 - Initiated by the president and vice president
 - Purposeful communication about purpose and direction
 - Ongoing communication
- Generating enthusiasm
 - Results are shared widely
 - People’s input & ideas are valued (and not told how to do the job)
 - People have an opportunity to make a difference
 - Credit given to those involved
- Marketing change
 - Results of efforts are shared widely
- Staff development
 - Training for core team
 - Ongoing interaction with mentor
- Environmental factors
 - Culture of support
 - Lack of rapid decision making (hinderance)
 - Tendency to “beat topics to death” (hinderance)

Structural Factors

- Combining fiscal resources (grants)
- Initial planning
- Goals and expectations set
- Size of the college
- Physical location of offices and departments
- Combined VP position over instruction and student services
- Implementation of processes
 - Cascading responsibility structure
 - Accountability - Reporting requirements
 - Data driven decision making
 - Consistent meeting and reporting structure
- Change in policy – related to student requirements
- Faculty contract (can hinder)
- Hiring of new employees
- Structures on campus can exclude (hinderance)

Appendix A (Continued)
College A – Analysis Summary

Question 3: How Does Leadership Facilitate Cross-functional Collaboration?	
Finding	Evidence
Approve Plans	<ul style="list-style-type: none"> • Provide approval before work begins • Talking about plans show's it a priority • Commit budget if necessary
Promote the work of teams	<ul style="list-style-type: none"> • Recognize participation personally and publicly • Share success stories • Be present at meetings/events • Give time to work together • Value the work of the group • Allow participants to report results
Set the tone	<ul style="list-style-type: none"> • Model collaboration • Approachable • Value ideas and input • Focus of the college • Expectations • Be present • Seek diverse ideas • Seek to continually improve
Own the responsibility	<ul style="list-style-type: none"> • Establish structure that allows participation • Establish time line, process to enable things to get done • Follow through • Send people to training
Establish mechanism for people to work together	<ul style="list-style-type: none"> • Expectations • Structure • Timelines • Follow up
Communicate	<ul style="list-style-type: none"> • Expectations • Priorities • Values • What's happening
Hiring	<ul style="list-style-type: none"> • Hire people who <ul style="list-style-type: none"> ○ Work well with others ○ Are “get it done” people ○ Focus on serving students ○ Have experiences and ideas to share

Appendix A (Continued)
College A – Analysis Summary

Interpersonal and managerial processes of senior administrators
<p><u>Interpersonal</u></p> <ul style="list-style-type: none"> • Promote a vision • Provide encouragement • Taking a long-term perspective on change
<p><u>Managerial</u></p> <ul style="list-style-type: none"> • Obtain resources • Adapt standard operating procedures • Establish initial plans • Establish mechanisms for people to work together • Establish reporting structures • Provide opportunities for participation by many
Qualities of the effective team leader
<p><u>Relationship oriented</u></p> <ul style="list-style-type: none"> • Keep people informed • Sends out emails • Invites participation from others <p><u>Task oriented</u></p> <ul style="list-style-type: none"> • Brought group to specific results • Consistent follow up • Moves plan forward once they've been made Communicated results • Follow through

Appendix B
College B – Analysis Summary

COLLEGE B	
Question 1: What Does Cross-functional Collaboration Look Like?	
General Findings	
Finding	Evidence
Addresses a need or concern shared by multiple groups	<ul style="list-style-type: none"> • Growing disappointment by faculty • Lingered student laws • Vision and priority of the president • CCSSE report • Both VP of instruction and VP of Student Services agreed that this was a priority
Voiced support from the President	<ul style="list-style-type: none"> • President’s vision for 8 years • President called all the faculty together to announce the project and express his support
Person who drives the project	<ul style="list-style-type: none"> • Maintained regular communication, both with the larger institution and one-on-one. • Developed and implemented the details • Invited people to participate
Provide opportunity for input from the front line	<ul style="list-style-type: none"> • Sought the ideas and input of others • Recruited participants
Structure in place to maintain the effort	<ul style="list-style-type: none"> • Established a position of Director of Student Services and Retention to lead the development and maintain the project.
Assessment	<ul style="list-style-type: none"> • Provide information about goals and whether the effort is working • Let people know the work will be assessed • Reported back on the results
Campus-wide communication	<ul style="list-style-type: none"> • “Missionary trips” to individuals to spread the word, seek input, and invite participation • Courtesy meetings with groups to keep them informed. • Shared the research and reasons for FYI
Champion to assure continued success	<ul style="list-style-type: none"> • VP of Student Services initiated the project and serves as the champion for its continued success • Director of student retention and success also a primary champion of the project
Recognized contributions of participants	<ul style="list-style-type: none"> • Saw this as a college project from the very beginning rather than a student services project • Provide many
Communication	<ul style="list-style-type: none"> • Offered reports at different periods • Report back on results • Continue to share the vision

Appendix B (Continued)
College B – Analysis Summary

It takes work	<ul style="list-style-type: none"> • Realize it takes work and commit to making it happen • Ongoing effort to keep people involved and the project moving forward
Occurs from both the top down and the bottom up	<ul style="list-style-type: none"> • FYI began as a top-down initiative • Involved people throughout the process • Additional collaborations along the way
Question 2: What Organizational Factors Influence Cross-functional Collaboration?	
<ul style="list-style-type: none"> • Voiced support from the top <ul style="list-style-type: none"> ○ The president was out in front saying “this is important” ○ Visible support from VPI, VP of Student Services, VP of Administrative Services • Strong leadership <ul style="list-style-type: none"> ○ The VP of Student Services stepped up to take responsibility to make it happen ○ The Director of Student Retention and Success did the footwork to assure success • The right person for the right job • Clear vision and goals • Commitment of resources <ul style="list-style-type: none"> ○ New position of Director of Student Retention and Success ○ Committed finances ○ Commitment of time • Focus on problem solving with an entrepreneurial spirit • Open to risk <ul style="list-style-type: none"> ○ Committed to short implementation time frame ○ Mandatory project could impact FTEs • Culture of support • Emphasis on communication 	
Cultural and Structural Factors	
<p><u>Cultural Factors</u></p> <ul style="list-style-type: none"> • Common vision about purpose of project, plan for the project, and desired results • Cross-institutional dialog occurred through one-on-one discussions, division presentations, public support by the president • Enthusiasm generated through exceptional preparation, clear vision, and regular communication • Training provided to prepare staff • Marketing materials developed to show the results 	

Appendix B (Continued)
College B – Analysis Summary

<u>Structural Factors</u>	
<ul style="list-style-type: none"> • Fiscal resources provided - \$100,000 designated from instruction to cover expenses until it was able to support itself. Funding also provided by grant money identified by student services • Incentives to participate were provided by paying session leaders, recognition, and tokens of appreciation • Restructuring occurred through the establishment of a new position – Director of Student Retention and Success. • Expectations and accountability were set through identifying goals and expected outcomes, then following up to report on results. • Systemic orientation provided by the president lending strong support and a series of informational meetings to make sure the college community was aware. 	
Question 3: How Does Leadership Facilitate Cross-functional Collaboration?	
Finding	Evidence
Sets a vision	<ul style="list-style-type: none"> • A mandatory orientation had been a goal of the president for eight years • Shared vision and value with the college
Championed the project	<ul style="list-style-type: none"> • Announced it to the college • VPI
Risk taking	<ul style="list-style-type: none"> • Invested in the Director of Student Retention and Success • Made it mandatory even though there could be resistance • Willing to lose FTEs in order to support retention
Identified the right people	<ul style="list-style-type: none"> • Selected someone to head the effort that would be able to get it done
Good communication	<ul style="list-style-type: none"> • Establishes an open environment • People comfortable sharing ideas • Administrators “speak positively”
Attitudes	<ul style="list-style-type: none"> • “Can do” attitude among top administrators • Whole team attitude • Focus on problem solving with an entrepreneurial spirit • Likes and supports people
Collaboration is modeled	<ul style="list-style-type: none"> • Senior administrators work collaboratively • President models what he expects
Provides the resources	<ul style="list-style-type: none"> • Invested in a Director for Student Retention and Success • Identified \$100,000 of funding in order to implement

Appendix B (Continued)
College B – Analysis Summary

Interpersonal and managerial processes of senior administrators
<p><u>Interpersonal</u></p> <ul style="list-style-type: none"> • Models collaboration • Welcoming attitudes • Sets a vision
<p><u>Managerial</u></p> <ul style="list-style-type: none"> • Provides resources • Sets the vision/direction • Appoints the right people • Willing to accept risk • Communicates results
Qualities of the effective team leader
<p><u>Relationship oriented</u></p> <ul style="list-style-type: none"> • Sought feedback from others through one-on-one conversations and “missionary trips” • Went to where the people were • Views role as “the cream filling between the two Oreo cookies of student services and instruction” • Had a vision of retention as everyone’s responsibility and saw it as his role to set up systems that would enable people to participate in achieving that goal • Strong rapport throughout the college community. • Great listener <p><u>Task oriented</u></p> <ul style="list-style-type: none"> • Assembled the cross-functional team • Provided the structure for the planning sessions • Work was done by the leader outside of the group sessions to be sure the planning teams would know what to do and would be able to move forward • Handled the logistics • Commitment of time and energy to make the project work • Visionary yet practical

Appendix C
College C – Analysis Summary

COLLEGE C	
Question 1: What Does Cross-functional Collaboration Look Like?	
General Findings	
Finding	Evidence
The collaborative environment is directly attributable to the President	<ul style="list-style-type: none"> • Long-term president (13 yrs) provides consistency and stability over time • Provided 8 expectations for all employees and established student success as the core of everything that occurs • Provides a personal example of what he expects from others • Models the values of that guide the college
Collaboration arises from necessity	<ul style="list-style-type: none"> • The encompassing work to support student learning, student development, and student success can't be done in isolation.
Structures are in place to support collaboration	<ul style="list-style-type: none"> • Annual objectives process • Annual assessment and submission of goals • Accountability through annual reporting of outcomes • Recognition of accomplishments • Hiring process incorporates 8 expectations • Employee assessment incorporates the 8 expectations • Center for Teaching and Learning • Library's role in collaboration
Culture supports collaboration	<ul style="list-style-type: none"> • Every project is expected to have input from others • 8 expectations emphasize collaboration • Feeling that every idea is valued and considered • Expectation for excellence • Decisions made based on what helps students
Collaboration is expected by upper management	<ul style="list-style-type: none"> • Modeled by upper management • All proposals/projects must have collaborative input
Collaborative by design	<ul style="list-style-type: none"> • Structure implemented supports the collaborative work • People selected to lead based upon their ability to get things done
Reporting requirements keeps teams on task	<ul style="list-style-type: none"> • Annual submission of goals • Annual assessment • Annual report prepared • Annual year at a glance video
Ability and commitment of participants is key to effectiveness.	<ul style="list-style-type: none"> • Hire people with talent • Expect excellence • Hire people who fit with the 8 expectations

Appendix C (Continued)
College C – Analysis Summary

Looking for innovation to influence student learning, success, and retention.	<ul style="list-style-type: none"> • Looking for things that are going to influence the quality of the student experience. • Willing not only to create it, but to assess it.
Collaboration occurs from the top, middle, and ranks of the organization	<ul style="list-style-type: none"> • Expectations communicated and modeled from the top • Substantial “middle organization” supports collaborative work • Opportunities for ideas to rise from the ranks
<p><u>Cultural Strategies that have been implemented:</u></p> <ul style="list-style-type: none"> • Cross-institutional dialog – opening day, inservice days, open meetings • Common vision generated by the promise statement to students – provides a universal focus on student learning, student development, and student success • Enthusiasm generated through measuring and reporting success, recognizing accomplishments, and celebrating achievement • Staff development <ul style="list-style-type: none"> ○ New faculty orientation ○ Center for Teaching and Learning • Projects won’t move forward without collaborative input from a variety of stakeholders 	
<p><u>Structural Strategies that have been implemented:</u></p> <ul style="list-style-type: none"> • Clear expectations are set through the Eight Expectations for Professionalism • Annual goal setting and assessment processes • Promotion and tenure requirements connected to the eight expectations • Hiring practices incorporate the eight expectations • Systemic orientation • Center for Teaching and Learning 	
<p>Question 2: What Organizational Factors Influence Cross-Functional Collaboration?</p>	
<p>Cultural Factors</p> <ul style="list-style-type: none"> • Common expectation for collaboration • Common vision and mission – generated by the promise statement to students – provides a universal focus on student learning, student development, and student success • Identifies people with the work • Open meetings and information • Staff given authority and responsibility to implement projects • Opportunity to be involved • Innovation encouraged • Cross-institutional dialog • Enthusiasm generated through measuring and reporting success, recognizing accomplishments, and celebrating achievement 	

<ul style="list-style-type: none"> • Staff development encourages innovation <ul style="list-style-type: none"> ○ New faculty orientation ○ Center for Teaching and Learning • Projects won't move forward without collaborative input 	
Structural Factors <ul style="list-style-type: none"> • Annual goal setting and assessment processes • Clear expectations are set through the Eight Expectations for Professionalism • Calendar that drives the goal setting, planning and assessment • Reporting of results • Promotion and tenure requirements connected to the eight expectations • Cross-representation on leadership teams • Focus on continuous improvement • Commitment of resources to do the job • Recognition processes • Hiring practices incorporate the eight expectations • Systemic orientation • Center for Teaching and Learning • Physical location of offices and departments doesn't impact collaboration's effectiveness 	
Question 3: How Does Leadership Facilitate Cross-Functional Collaboration?	
Finding	Evidence
Establishes collaboration as a priority	<ul style="list-style-type: none"> • Collaboration is included in the Eight Expectations for Professionalism • President models collaboration • The President often talks about the need for collaboration to provide innovation for better student success and to meet goals • The president formally calls people to work together
Sets the Tone from the top	<ul style="list-style-type: none"> • Clear expectations • Models what he expects • Very visible on campus • Personal Attitude
Implements processes that facilitate collaboration and accountability	<ul style="list-style-type: none"> • Annual goal setting • Annual assessment of goals • Hiring practices • Evaluation processes
Senior administrator interpersonal and managerial processes	
<u>Interpersonal</u>	
<ul style="list-style-type: none"> • Promotes the vision • Sets the tone for working together • Models collaboration • Principle driven • Persistent over time 	

Appendix C (Continued)
College C – Analysis Summary

<p><u>Managerial</u></p> <ul style="list-style-type: none"> • Makes sure teams have the resources they need • The president formally calls people to work together • He's able to clearly recognize problems and marshal resources and get people to work with him in a collaborative manner • Remains current with trends in higher education • Common purpose • Gets the right people at the table • Gives attention to the process by which desired changes are identified and implemented • Provides opportunity for participation by many.
<p>Qualities of the effective team leader</p>
<p><u>Relationship oriented</u></p> <ul style="list-style-type: none"> • Maintains team connectivity and participation • Communicates with team members • Seeks input and involves everyone in the discussion <p><u>Task oriented</u></p> <ul style="list-style-type: none"> • Drives the work • Takes personal responsibility for the work of the team • Sets the agenda • Implements good group processes • Maintains a structure for the meetings • Pushes for action

Appendix D
Interview Protocol

Research Question 1: What Does Cross-Functional Collaboration Look Like at a Community College Known for Strong Collaborative Work?

1. Where do you see collaboration occurring across departments at your college to support student achievement?
2. Would you describe the collaborative work you've participated in?
3. How effective has your collaborative team been at establishing ways to improve student achievement? How do you know if these ways have been effective?
4. When you became part of the collaborative team to work on improving student achievement, did your regular responsibilities with the college change? If so, how?
5. How do you know if the work you're doing is important to the college?
6. How has the team kept others in the college informed about work to improve student achievement?
7. What has been the key to moving plans forward once they have been made?
8. Does collaboration occur from the top down, or from the bottom up?
9. How are opportunities provided for information and ideas to flow from the ranks?

Research Question 2: What Organizational Factors Influence Cross-functional Collaboration in the Community College?

1. What has enabled your group to successfully come together to develop and implement solutions to improve student achievement?
2. What organizational factors have facilitated the ability to collaborate effectively?
3. What organizational factors have hindered the ability to collaborate effectively?
4. What could the college do differently to better support cross-functional collaboration?

Research Question #3: How Does College Leadership Facilitate Cross-Functional Collaboration in the Community College?

1. Have senior administrators supported your cross-functional collaborative work? How do you know?
2. Can you provide examples of specific ways senior administrators have either facilitated or hindered the work of your team?
3. How does the team leader influence collaboration?
4. Would you like to share any other information based on your experience?