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Space and Power in the Ivory Tower: Decision Making in Public Higher Education

Sandra McCoskrie Blanchette

University of Massachusetts Boston, sblanchette54@gmail.com

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SPACE AND POWER IN THE IVORY TOWER:
DECISION MAKING IN PUBLIC HIGHER EDUCATION

A Dissertation Presented

by

SANDRA MCCOSKRIE BLANCHETTE

Submitted to the Office of Graduate Studies,
University of Massachusetts Boston,
In partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

December 2010

Higher Education Administration Program

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SANDRA MCCOSKRIE BLANCHETTE

Approved as to style and content by:

John Saltmarsh, Ph.D.
Chairperson of Committee

Judith I. Gill, Ph.D.
Member

Dwight E. Giles, Jr., Ph.D.
Member

Anita Miller, Ed.D.
Member

Jay Dee, Ph.D., Program Director
Higher Education Administration Program

WenFan Yan, Ph.D., Chairperson
Leadership in Education Department

ABSTRACT

SPACE AND POWER IN THE IVORY TOWER: DECISION MAKING IN PUBLIC HIGHER EDUCATION

December 2010

Sandra McCoskrie Blanchette, B.S., University of Florida
M.S.P.A., University of Massachusetts Boston
Ed.D., University of Massachusetts Boston

Directed by Professor John Saltmarsh, Ph.D.

The challenges of managing physical space in public higher education are often left unspoken and under researched. In this multiple case study of three urban universities, decision-making processes are examined with particular attention to who has institutional decision-making authority. Effective and efficient space management is important because the use of space on campus can contribute to research and practice by promoting innovation and collaboration or can isolate individuals and departments in silos. This study identifies three distinct challenges related to space management on campus: the quality of space, the location of space, and the quantity of space. The research findings accentuate the importance of: 1) having a well-defined decision-making process; 2) having knowledgeable decision makers; 3) delegating decision-making authority; and 4) having accurate quantitative and qualitative data to inform decisions.

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CHAPTER 1

INTRODUCTION

“In academics, space is everything,” remarked a Massachusetts Institute of Technology (MIT) linguistics professor while relating his 37-year experience as a researcher working in one of the institution’s most rickety, post-World War II buildings. After the war, those MIT professors who could not find research space anywhere else on campus ended up in this temporary makeshift building. Despite its ramshackle condition, the building lays claim to housing the first interdisciplinary labs on the MIT campus and served as an “academic melting pot,” bringing together an eclectic collection of faculty, student clubs, and even a piano repair facility. In the words of this professor, “It turned out to be absolutely perfect for research” (Beam, 1988).

Unfortunately, not all space management issues on campus turn out so positively. Many institutions of higher education are confronted with campus-wide complaints of lack of space or inadequate space for classrooms, research, laboratories, offices, social interaction, and innovation (Harris & Holley, 2008; Sturgeon, 2007; Huey & Valdenegro, 2006; Hillier, 2007; Fink, 2004; Fink, 2002; Thompson, 2002). In a recent study comparing two universities, Thompson (2002), a space management professional, noted that although there was a general perception on the campuses of a lack of space, the

problem was actually related to inefficient space utilization, not insufficient space. However, inefficient space utilization is not the only problem; growth is also an important factor that contributes to space problems. For instance, in the Fulton School of Engineering at Arizona State University, Huey and Valdenegro (2006) reported that “research expenditures have been doubling roughly every five years since 1992 and...the number of full-time faculty has increased 13 percent since 1999” (p. 24). This significant growth has put a strain on the school’s existing space and promoted the need to focus on space management issues. Harris and Holley (2008) have pointed out that “space... [is] one of the most finite and valuable resources for any university [and] embodies institutional mission and values” (p. 36), confirming the importance of space on campus and its symbolic role.

The importance of space on campus can be seen from several different perspectives. In his groundbreaking publications on culture and space, *The Silent Language* (1959) and *The Hidden Dimension* (1966), anthropologist Edward T. Hall observed that issues about space are unique in different cultures and are instrumental in how social groups arrange their lives and interact within their communities. This cultural concept of space also applies to organizations. It affects how individuals interact socially within their cultural group and across cultures and within and across organizations (Hall, 1966), as well as how individuals respond psychologically to their environment in terms of their own personal attitudes and behavior (Davis, 1984). When space is viewed symbolically, the amount and quality of space allocated to individuals, departments, or to specific research topics is indicative of their value within the organizational culture and

represents institutional priorities (Harris & Holley, 2008, p. 36). From a political perspective, space can be equated with power and prestige, and from a functional perspective, space can determine how one works (Davis, 1984) and how one learns (Chism & Bickford, 2002).

Space is a significant resource on campus and the way it is allocated and utilized can be indicative of changing campus priorities. Understanding space management decision-making in public higher education is important to improving higher education practice because it provides insight into how institutions manage limited physical resources in a constantly changing environment. The challenge to make effective space management decisions must be addressed to align with changes in pedagogy and research to maximize educational effectiveness and promote institutional mission fulfillment. In this study, space management refers to decisions related to the allocation, utilization, and renovation of existing space on campus.

Corson (1960) noted that the process of decision making is at the heart of an administrative enterprise. In colleges and universities, faculty and administrators typically collaborate in the process of making and implementing change. This unique style of governance, referred to as shared governance, values consensus, collaboration, and participation among faculty and administrators. However, as a result of honoring these values, shared governance has often been characterized as fragmented, unresponsive, and slow, with unclear lines of responsibility (Bess & Dee, 2008; Kezar & Eckel, 2004). This is true of decision making about space management issues since

faculty and administrators often have different priorities and see space management issues from different perspectives.

At a time when there are enormous economic pressures on campuses to use resources effectively, space being one of these resources, the academic culture of shared governance with its fragmented roles for decision making presents additional challenges. These roles are fragmented due to independent faculty and administrative action. They are ambiguous due to the unclear lines of authority of the various bodies that constitute the shared governance system, such as faculty senates, administrative-faculty committees, or administrative committees. Bess and Dee (2008) noted that this ambiguity in authority creates complications in academic decision making, “not so much about the decision at hand but about who is responsible for making the decision—in essence, decisions about decision-making authority itself” (p. 589).

The higher education environment has undergone significant changes in the past several decades. Expectations have changed with respect to who participates in higher education and the role of higher education in society. Historically, college participation was viewed as a developmental stage for elite white males (Thelin, 2004), more recently it has been viewed as a necessity for men and women of all ages, races, and ethnicities for entry into and success in a complex, knowledge-driven economy. During the same time that individual’s expectations of higher education have increased, so have societal expectations. In addition to educating future leaders, higher education institutions are now being called on to solve societal problems; improve PK-12 schools; interact with communities, business and industry; generate research to fuel the economy; develop a

more just and equal society; and reach out to diverse populations. All of these increased expectations are confounded by funding constraints (particularly in public institutions which have shifted costs to students), increased demands from students, and a more complex legal environment (Kezar & Eckel, 2004).

To address this rapidly changing environment, colleges and universities are being challenged to become more nimble and flexible with their decision-making processes in order to respond to these changes within shorter time frames. Dill and Helm (1988) noted that due to changing environmental demands, caused in part by competition for scarce resources, academic decision makers are being called on to adjust the basic nature of their decisions. Decision making on campus is changing from a focus on traditional “maintenance decisions, such as the allocation of incremental budgets, the administration of traditional curricula and programs, and the governing of student behavior” to a focus on more strategic policy-making decisions that address “the most substantive and divisive issues faced by institutions of higher education” (Dill & Helm, 1988, p. 324). Kezar and Eckel (2004) noted that “these new decisions are high stakes challenges that include the changing nature of scholarship, competing with new for-profit providers, prioritizing programs, choosing among new opportunities and reallocating either shrinking or static budgets” (p. 372). These substantial changes in the higher education environment may require institutions to reevaluate their decision-making processes, including those that relate to space management issues.

Many institutions of public higher education have discovered that they lack sufficient space to accommodate their needs, both in terms of quantity and quality to

sustain programmatic goals or they are not maximizing the utilization of their current space (Thompson, 2002; University of California Santa Cruz, 2002; Derx, 1988).

Because capital funding, required for new construction, is often scarce and the planning and construction process can take 5 to 10 years or longer to complete, new building construction is not the quick and easy answer to alleviate space problems. According to John Gormley, an architect specializing in learning environments, institutions can only effectively anticipate space needs 5 to 10 years out, so by the time needs are identified and construction is complete, the new facility may no longer fulfill institutional needs. Because of these long time frames, flexibility in space management decision making needs to be a major consideration if higher education is “to create the ability to change over time without knowing the specific nature of those changes” (Hignite, 2007).

When new construction is not a viable option, changing needs and priorities must be accommodated by working within the constraints of existing space. This limitation emphasizes the importance of developing an effective decision-making process to maximize the utility of all campus space, especially when considering what is at stake—the viability of the institution. The provision of adequate space on campus is a critical factor in the establishment of quality learning environments (Bickford, 2002) and productive research environments (Harris & Holley, 2008; Huey & Valdenegro, 2006; Fink, 2004), both vital in the highly competitive higher education market (Chism & Bickford, 2002).

Baldrige (1971), writing in the wake of the tumultuous 1960s, in which the civil rights movement and the Vietnam War created a period of campus unrest and radical

action, noted that at “a time of crisis it becomes particularly important to know how decisions are made, how policies are constructed, and how university governance processes operate” (p. vii). Higher education is once again embroiled in a lingering time of crisis brought on by “dramatic changes simultaneously occurring in [higher education’s] role in society, the demographic composition of the student body, societal demands for research and service, the costs of instruction and research, and the availability of public support” (Benjamin & Carroll, 1998, p. 92). Additionally, these changes that directly affect higher education are taking place amid not only a national, but a global economic crisis, putting even more strain on much needed resources, including funding for campus space needs. The economic crisis has delayed new building on many campuses, leaving institutions to address campus growth needs within existing physical plant facilities.

While societal changes can put a significant strain on higher education’s resources, effectively addressing the need for change is exacerbated by the unique characteristics of higher education’s shared governance system that has been characterized as slow and unresponsive (Bess & Dee, 2008; Kezar & Eckel, 2004). Benjamin and Carroll (1998) observed that the existing governance system in higher education which is highly decentralized cannot effectively accommodate the need for reallocating resources among competing demands; it actually works against reallocation. The current governance system was developed in the era of higher education growth promoted by the World War II G.I. Bill of Rights when government funding and enrollments increased simultaneously (Benjamin & Carroll, 1998). The system may have

been effective for distributing new resources to departments, but was not designed to take them away. For instance, departments may make decisions regarding space resources without consideration of other department's or institutional needs. The decentralized nature of decision making and resource allocation does not embrace an institutional perspective. Benjamin and Carroll (1998) call for a restructuring of the governance system to accommodate an environment of competing demands for resources, not one that was designed for growth and resource distribution. An example of one of the resources subject to competing demands and reallocation is existing space on campus which departments are reluctant to relinquish (Fink, 2004).

Problem Statement

The educational problem this study explores concerns the decision-making processes used in public higher education institutions for managing space in order to maximize educational effectiveness and promote mission fulfillment. Despite the importance of space as a valuable resource on campus (Harris & Holley, 2008), little empirical research has been conducted on decision making in higher education regarding space management issues (Fink, 2004; Derx, 2003). Considering the complexities of decision making on higher education space management, this study seeks to gain a better understanding of how public higher education institutions address space management issues and which campus constituencies participate in the decision-making process. A better understanding of this process is important to identify areas which need additional attention so that space management decisions can incorporate the needs of the entire academic community and work in the best interest of the institution and the public. As

stewards of public academic buildings and the public trust, it is the collective responsibility of all segments of the institution to maximize space usage and to provide stimulating learning environments for students and cutting-edge research facilities for faculty (Stigall, 2007). The purpose of this study is to gain a better understanding of decision making about space management issues in public higher education institutions.

Research Questions

Examining decision-making processes regarding space management may provide insight into the ways institutions approach decision making for other types of resources that are of campus-wide concern as well. By addressing a gap in the literature in this area, this study will be useful to higher education institutions that want to examine their own institutional decision-making processes, especially those related to space management.

The study is driven by the following primary research question:

- How are decisions made about space management issues in public higher education and are they related to changing values and priorities, educational effectiveness, and institutional mission fulfillment?

Sub-questions include:

- How do internal (e.g., student enrollment, research growth) and external (e.g., economic situation, demographic changes) factors to the institution shape the decision-making process related to space management?
- In what ways do various sources of data and information shape the decision-making process about space management issues in higher education?

- In what ways do the different roles and priorities of administrators and faculty, two major constituencies of higher education governance, shape decision making about space management issues?
- What is the relationship between space management decision making and implementing change in public higher education?

Theoretical and Conceptual Frameworks

Two theories based on rationality, pure rational choice theory and limited rational choice theory, share a common perspective, both viewing “decisions based on an evaluation of alternatives in terms of their consequences for preferences” (March, 1994, p. 57). Pure rational choice theory, considered to be a logical choice for evaluation of alternatives, assumes that decision makers have complete information, are fully knowledgeable about all possible alternatives and their consequences, share the same preferences, and are in agreement about goals. As such, rational choice theory is more useful in understanding decision-making processes in for-profit business and industry contexts, where common goals and objectives have been established and are known and shared by the participants. However, this is not the case in the non-profit world of higher education (Daigneau, 2002). As Daigneau (2002) acknowledged, “higher education offers a social value, which cannot be evaluated in economic terms” (p. 29). Therefore, unlike for-profit businesses that rely on quantitative, profit-driven measures, colleges and universities commonly use qualitative measures to make investment decisions like building and space needs. They lack the for-profit bottom-line mentality that measures investments against potential return and contribution to profits.

The theory of limited rational choice (Lindblom, 1959; March, 1994; Eckel, 2002) is more useful in understanding organizations such as higher education and government which, contrary to for-profit organizations, have multiple constituencies and ambiguous goals. Limited rational choice theory acknowledges that information needed for decision making is seldom complete, all alternatives are not considered, preferences are individual, and agreement about goals does not always exist. The theory contends that although a relationship exists among information, criteria, and decision outcomes, decision makers acknowledge that it is not possible to consider all alternatives, and thus accept uncertainty and risk as unavoidable consequences. Since these conditions commonly exist in higher education, limited rational choice theory has been used to conceptualize decision making in this study.

Two aspects of limited rational choice theory, individual preference and conflicting goals, allow the introduction of the political frame, which as described by Bolman and Deal (2003) “puts politics at the heart of decision making” (p.186). In the political frame, it is assumed that individual preference is motivated by self-interest (Hardy, 1990) and that individuals have different and competing goals (Bolman & Deal, 2003; Baldrige, 1971). These aspects of the political frame lead to conflict and the formation of interest-based coalitions that use power and influence to pressure the decision-making process (Bolman & Deal, 2003; Baldrige, 1971). The political frame becomes more pronounced in organizations where individuals or groups are competing over scarce resources (Hardy, 1990), which is commonly the case in institutions of public higher education.

To put this in the perspective of this study, competition on campus over limited space, a scarce resource, can become a political decision-making process as powerful groups and individuals wield their influence over others. Baldrige (1971) has posited that to gain a better understanding of what happens on campus, “decision making activities must be seen as a political process, not as a simple bureaucratic mechanism” (p. viii). For that reason, Baldrige made a distinction between university governance, which is focused on policy formulation, and university management, which is focused on policy execution. This distinction is explored in this study in the context of space management. Understanding the political process involved in making effective decisions regarding space on campus is critical to an institution’s ability to respond quickly to the changing environment, to enable the growth of academic programs and enrollment, and to accommodate changing institutional priorities.

Within this theoretical framework of limited rationality, further conceptualization is accomplished using three constructs provided by previous researchers: procedural rationality, decision rationality, and action rationality. Procedural rationality, as used by Dean and Sharfman (1996) in their study on decision processes in a business environment, is defined as “the extent to which the decision process involves the collection of information relevant to the decision and the reliance upon analysis of this information in making the choice” (p. 373). Their findings indicated that in an unstable environment (as I argue higher education is due to its constantly changing nature), procedural rationality had a positive effect on decision effectiveness and that political behavior had a negative effect. This study considers these findings from the business

environment as decision making effectiveness in the higher education environment is examined concentrating on decisions regarding space management. From this conceptual perspective, the use of data analysis is examined in the decision-making process, noting what data is collected and how it is used in the decision-making process.

In addition to examining the role of procedural rationality in space management decision making, the effects of decision rationality and action rationality, as reported by Eckel (2002) in his study on academic program closures, are also explored. Eckel (2002) adopted Brunsson's (1982) model which identified decision rationality as choosing the right thing, by "thoroughly exploring available options, weighing consequences considering alternatives, and choosing the option that optimizes results," and action rationality as getting things done, by "seek[ing] information that supports particular palatable alternatives and analyz[ing them] in terms of a narrow range of desired results people will support" (Eckel, 2002, p. 240). The main differentiation here is that choosing the right thing, decision rationality, while viewed as being effective, may not lead to action, or implementation. Action rationality, on the other hand, is geared toward efficiency and is "dominated foremost by the desire to implement and to act" (p. 240). Eckel (2002) noted that action rationality is political in nature and "challenges the common wisdom associated with decision rationality" (p.240) by focusing on outcomes that favor acceptability and support over practicality. Based on his findings in regard to academic program closures, Eckel (2002) stated that, "One might conclude that the illusion of decision rationality is needed to keep the process moving, but action

rationality is needed to accomplish the task” (p.257). This study considers these three perspectives in regard to space management decisions.

Conceptually, if one perceives that decision effectiveness in higher education can be viewed based on its relationship to institutional mission fulfillment, then it should be affected by the influences of procedural, decision, and action rationality as seen below. (See Figure 1.)

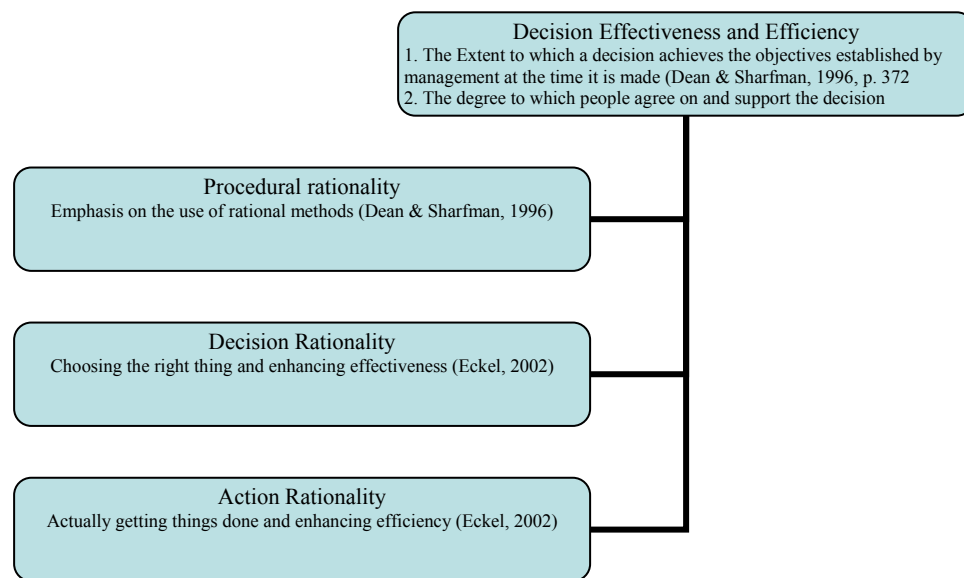


Figure 1. Conceptual Perspective

Significance of Study

Although decisions are considered the “core transactions” of any organization, scholars have acknowledged that half of all organizational decisions fail (Bess & Dee, 2008, p. 588). In addition to educating individuals and creating new knowledge, public higher education is expected to provide vital functions to society, such as developing a

more just and equal society, while fueling the economy and engaging communities, business, and industry (Kezar & Eckel, 2004). With these diverse and vital functions, public higher education cannot afford to make ineffective decisions. Decision making in higher education is ambiguous due to incomplete information and it is complex due to the presence of these multiple expectations and competing goals (Bess & Dee, 2008; March, 1994). Challenges to decision making frequently stem from the decentralized organizational structure of higher education in which independent units pursue divergent goals for different constituencies. This can lead to controversy and result in a competitive or political process rather than a collaborative process. This study will contribute to the higher education literature by providing a deeper understanding of decision making in higher education with specific emphasis on decision-making processes related to space management.

A better understanding of campus space management decision-making processes will enable decision makers to better identify the types of decisions being made, for instance, whether decisions are strategic or routine and how the different cultures of the academy may react to the challenges of competing interests. This information will enhance practice through the development of institutional policies and practices that clarify decision-making processes in terms of who participates and how much time and effort is required. Additionally, the study will highlight different internal and external conditions that shape decision making on space issues that are relevant to other resource-related issues as well. A better understanding of decision making and space issues will have beneficial effects on all members of the higher education community and its

constituencies and will contribute to the generation of more effective and efficient space-related decisions.

This study will be of interest to decision makers in higher education, space management professionals, and others in higher education who seek a better understanding of how space management decisions are made. In addition, by providing an in-depth examination of space management decision making, this study may shed light on critical factors of decision making in higher education that could be applied to a broader range of decision-making processes that take place within the academic context.

CHAPTER 2

LITERATURE REVIEW

A survey of existing literature exposes a gap in the area of decision making regarding space management issues in higher education. While there is ample scholarly research on decision making (March, 1994; Harrison, 1995; Mintzberg, Raisinghani, & Theoret, 1976; Lindblom, 1959) and on academic culture and governance (Tierney, 1988; Schein, 1995; Bergquist & Pawlak, 2008), there is little empirical research on higher education space management decision making (Fink, 2002; Fink, 2004; Hier & Biddison, 1996). Therefore, this literature review will focus first on general space management issues, followed by an examination of the characteristics and role of academic culture in decision making. It will conclude with a survey of the literature on decision-making process and structure. Special attention will be given where these areas intersect.

The literature review begins with a focus on classroom, research, and office space, as well as literature on “decision aids” (Dickmeyer, 1983), such as scenario planning and computer-assisted programs that have been developed to assist decision makers apply procedural rationality to space management issues. Some questions addressed by this literature are: What are the various functional uses of space on campus?

How can space management support institutional priorities? What information is needed for effective space-related decision-making?

The second area of inquiry focuses on the unique characteristics of academic culture and its role in decision making. Higher education has developed a system of shared governance, which provides a way for faculty to participate with administrators in planning and decision making. However, these two distinct constituencies often see the challenges in higher education quite differently. For instance, faculty may focus on the need for high technology learning environments to increase student learning while administrators may be concerned with the high cost of technology and the trade-offs in service that may be necessary to afford technology improvements. These differences are illustrated in the description of various cultures which exist on campus. The following questions are addressed by this literature: What are the unique characteristics of an academic culture that accommodate the different perspectives of faculty and administrators and how do these characteristics shape the decision-making process? What are the different roles of academic and administrative personnel in an environment of shared authority and responsibility?

The third area of inquiry for this study includes a review of decision making processes and structures that can be applied to higher education. The following questions are addressed by this area of literature: What is the nature of decision making in higher education and how does it differ from other types of organizations? What is significant about the process and structure of decision making in higher education that affect

efficiency and effectiveness? The following three sections will focus on these areas of inquiry.

College and University Space Management Issues

What is space management and why is it important for colleges and universities? Space management has been defined as “the art and science of maximizing the value of *existing* space and minimizing the need for *new* space” (Hier & Biddison, 1996, p. 17). Space management is important to colleges and universities because “facilities are the largest asset on the balance sheet and worth many times an institution’s liquid assets” (Hier & Biddison, 1996, p. 17). Space is one of the most valuable and finite resources on campus that must be well managed to accommodate the competing needs of the various campus constituencies (Harris & Holley, 2008).

Not only is the management of space important for financial reasons, studies have shown that space psychologically effects an individual’s response to his/her physical environment both in terms of attitude and behavior (Graetz & Goliber, 2002). Specifically, the physical environment affects how people interact (Davis, 1984), how students learn (Chism & Bickford, 2002), how students decide where to enroll (June, 2006), and how knowledge is exchanged (Harris & Holley, 2008). Space not only affects individuals; the way it is used can signify institutional priorities (Fink, 2004), symbolize institutional values, and transform the institutional culture (Harris & Holley, 2008). For instance, Harris and Holley (2008) conducted a study of 21 institutions with high levels of research activity (over \$300 million in fiscal year 2004) to understand the significance given to interdisciplinary space for research in higher education. They were interested in

discovering how research universities planned to accommodate this changing paradigm, from discipline specific research to a new focus on interdisciplinary research. They found a trend in institutional planning documents that promoted eliminating barriers between academic disciplines and supported reconfiguring physical space to promote interdisciplinary interaction and collaboration among departmental personnel. These planning efforts indicate how institutions can support paradigm shifts or cultural changes by including physical space requirements in the planning process.

Space on campus has many purposes, including residential space, athletic space, social space, classroom space, research space, and office space. This study will focus on three categories of campus space that span all disciplines and relate directly to the education and research mission of higher education: classroom space, research space, and office space. The following sections will review campus environmental and functional changes that affect the way space is used, and how space management professionals address changing needs and priorities.

Classroom Space

Although many may think that classrooms consume much of the available space on college and university campuses, they are at the bottom of the list of space use in terms of actual square footage (Fink, 2002). A study conducted by Fink (2002), a university planning consultant, reported that on average, only 5% of space on campus is devoted to classroom use. His study of 25 public research universities showed that classroom use ranged from 3% to 12% of all academic, administrative, and support space on campus noting that the percentage of classroom space was inversely related to the

percentage of research and support space. For instance, those institutions with large amounts of research and support space had the smallest amount of classroom space and those with small amounts of research and support space had larger amounts of classroom space. None of the campuses in his study had more than 12.4% of its space devoted to classrooms (Fink, 2002). To put campus space use in perspective, Fink (2002) reported that:

excluding residential space, which on some campuses represents one-half of all square footage, offices are the largest users of space at 22.5%. They are followed in the campus hierarchy of space by research space (15.3%); by special use facilities including athletics and recreation (14.1%); by support facilities, including central services (14.4%); by general use facilities, including assembly and food services (11.2%); and then by teaching or class laboratories (7%) and libraries (6.6%). At the end of the list of space use, based on square footage, are classrooms (5.2%). (p. 2)

Despite the fact that classrooms use a small percentage of space on campus, there is much concern over the utilization and “ownership” of classrooms, especially when campuses are experiencing growth and changing priorities (Fink, 2002). Responsibility for classroom utilization and scheduling is typically decentralized on campus, with some classrooms falling under departmental control and some classrooms controlled by a central office, such as the registrar. This dual authority can result in different priorities for classroom space. An example of these different priorities is identified in a study conducted by Fink (2002) on classroom utilization. In his study, Fink addressed two

conflicting goals affecting campus space management decisions; one goal stressed efficient classroom utilization and the other goal stressed the promotion of higher student productivity in terms of time of day preference and the pedagogical advantages of longer class meeting times. He noted that if one were to focus on efficiency, then more efficient scheduling of classrooms could result in low use classrooms being made available for other campus space needs. However, if one were to focus on the goal of higher student productivity, then efficiency may be overlooked in favor of scheduling that was “more market driven or accommodating to faculty and student time preferences” (Fink, 2002, p.14).

Not only is classroom scheduling an issue in space management, but the design of classrooms is also an emerging topic of concern and debate. Changes in pedagogy from the traditional lecture style of teaching based on the “transmission” theory of learning to a new constructivist model, where the teacher is the facilitator of student engagement and learning (Chism, 2002; Lidsky, 2004) has prompted a new look at all learning environments. This shift toward engaged, interactive student learning requires flexible and larger classrooms where students can face each other and move around (Lidsky, 2004). Recognizing that space can influence student motivation, establish social cultures (Chism, 2002) and even be inspirational (Cornell, 2002), researchers are exploring ways to design learning places that consider the relationship between people and their physical environment (Graetz & Goliber, 2002) and ways to furnish them for flexibility and comfort (Cornell, 2002). Others are exploring ways to include faculty, students,

administrators, and architects to work collaboratively in the planning and design of these new learning spaces (Bickford, 2002; Butz, 2002; Hughes, 2002; Lidsky, 2004).

As one type of learning space, classrooms are an important part of any campus and how they are furnished and configured conveys institutional priorities and values. Although they only comprise a small percentage of all space on campus, they affect how faculty teach and how students learn. Research space, the topic of the next section, is also a learning space as it affects how faculty create knowledge and how students learn outside of the traditional classroom environment.

Research Space

The growth in research funding at many public colleges and universities, along with growing support for undergraduate student participation in research (Lidsky, 2004), has put pressure on existing space management systems to identify additional space for research needs. Recent literature has identified the importance of appropriate research space and related issues. Large research universities that depend upon federal research dollars are well aware that research grants can affect space utilization on campus. Institutions are required to comply with stipulations dictated in funding awards, which often call for designated space to conduct research. Huey and Valdenegro (2006) have noted that research growth, coupled with financial constraints at Arizona State University have made it “increasingly critical to have improved objective methods for allocating space and projecting space needs” (p. 24).

A new trend in research funding has been an emphasis on the promotion of interdisciplinary collaboration. In research universities, this changing paradigm

necessitates changes in both space allocation and campus design, resulting in departments sharing space and breaking down physical barriers (Harris & Holley, 2008; Huey & Valdenegro, 2006; Fink, 2004). Interdisciplinary collaboration on research projects, in which faculty from different departments work together challenges the traditional disciplinary or departmental structure of the academy, “representing not only a conflict within the organizational structure, but also within the social and physical structures” (Harris & Holley, 2008, p. 35). Harris and Holley (2008) noted, “instead of knowledge production occurring within separate, well-defined institutional structures or within a disciplinary corridor, interdisciplinary efforts require involvement from individuals across the campus community” (p. 35). This change in focus affects not only the way research is conducted on campus and how faculty interact with each other, but also the nature of the academic organizational culture which has traditionally developed along disciplinary lines.

Huey and Valdenegro (2006) pointed out that the growth of interdisciplinary research will challenge traditional approaches to space management by creating a “transdisciplinary” research environment where researchers from different disciplines can connect in shared space. For instance, at Arizona State University, a system of space allocation has been developed that allows different engineering research projects to share space flexibly, eliminating the need to reallocate space each time a project begins or ends (Huey & Valdenegro, 2006). At the University of Southern California, more than thirty researchers from diverse disciplines collaborate in common space maintained by an interdisciplinary neurogenetic institute and at the Massachusetts Institute of Technology,

the “Stata Center...has been described as a model for the way disciplines intersect on the emerging scientific frontier” (Harris & Holley, 2008, p. 38). These innovative configurations of space encourage interdisciplinary activity and are flexible enough to be responsive to the changing needs of the academic research community. Fink (2004) noted that planning for research space is a process that is so important that it “involves the highest levels of university administration and governance, including deans, provosts, and vice presidents. At the operational level, it is about researchers having enough space to do their research; at the institutional management level, it is part of the larger picture of an institution’s niche and priorities, part of its strategic planning and integral to campus finances” (Fink, 2004, p. 7).

Office Space

Not much literature exists about office space in higher education even though, as noted earlier, it takes up the largest individual percentage of space on campus, 22.5% (Fink, 2002). Fink (1999) noted that many campuses do not have policies that specify office space allocation criteria such as who is entitled to have a private office or as in some faculty cases, if and when it is appropriate for one person to have two offices. There are also significant changes affecting the way offices are being used and assigned. With the increasing numbers of part-time faculty on campus, sharing office space is becoming more prevalent. In addition, due to uneven growth in academic programs, departments may not have adjacent space available for new faculty offices and they may be located haphazardly in different areas around campus (Fink, 1996).

Business and industry standards for office space needs have often been applied to square footage allocations in higher education, although the uses of offices in these different environments are quite diverse. For instance, faculty offices are often expected to serve multipurpose uses, such as teaching, research, and administrative duties (Lidsky, 2004), resulting in the need for larger offices than industry standards suggest.

Like classroom and research space, the way office space is used can convey institutional priorities and culture. An example of how space was used to indicate institutional priorities was shown in a case study conducted by Tierney (1988) in which the president of a state college invigorated the campus climate and transformed it from a climate of complacency to one of excitement. As part of his strategy, the president used office space in a symbolic way to promote openness in his administration. His practice of keeping his office door open was adopted by administrators throughout the institution, creating an inviting atmosphere for colleagues, guests, and students. The informality conveyed by this openness fostered “a widespread sharing of information and an awareness of decisions and current activities” (Tierney, 1988, p. 15).

Taking this open door policy one step further leads to the architectural open floor plan design for office space. Davis (1984) reported that manufacturers of these designs argue that open floor plans are beneficial to an organization because they facilitate and promote interaction among organization members; improve communication, and increase efficiency and productivity. However, Davis (1984) also noted that some of those who worked in open environments reported that communication had in fact deteriorated and that the open plan was a distraction and seemed to reduce efficiency. Preferences in floor

plan design are related to the specific uses of the space. For instance, if privacy is a priority, as it is for many faculty who counsel students or need to focus on research, then the open design does not meet their needs. On the other hand, if the desire is to encourage personnel interaction and privacy is not a priority, then the open floor plan might be more efficient as in administrative or operational areas.

As noted in these three sections about classroom, research, and office space, there are many variations on how space can be used effectively and efficiently in higher education. Examples have shown how functionality and individual preferences affect that usage. Public colleges and universities have a responsibility to research funders to provide adequate space for their projects and an obligation to the public to provide vibrant and interactive space for students, faculty, and staff that enhances teaching and learning and makes the best use of available buildings. Especially in times of economic stress, existing space must first be used effectively, before an institution can justify the need for requesting funds for additional space (Stigall, 2007). What policies and procedures do institutions have to evaluate if they are using space effectively? What instruments are available to gather and interpret data on space utilization?

Decision Aids

Most higher education institutions have policies and procedures to institutionalize space requests and assignments and use a combination of centralized and decentralized management (Huey & Valdenegro, 2006). A typical arrangement is to have classroom assignments centralized by an administrative office such as the registrar and to decentralize research and office space assignments to the college or department level.

Once space has been assigned to a college or department, deans have the authority to reallocate space within their unit and to establish processes to resolve shortages and disputes (Huey & Valdenegro, 2006). When there is institutional space available, this system may work to satisfy campus space needs, but in times of space constraints and competing needs, other methods may be needed to assist in the space allocation decision process. Space management professionals have identified metrics, such as benchmarking, a comparison with like institutions; square foot standards for uniform space allocation; and complicated formulas which incorporate multiple variables to assist in space management decisions (Fink, 1999; Silva, 2003; Derx, 1988).

Recognizing the need to maximize space usage, institutions are exploring methods to assist in the space management decision-making process. Decision aids, as they are sometimes referred to, are strategies or technological innovations that have been created to assist decision makers in evaluating choices that involve complex trade-offs as is often the case with space management decisions. They can provide a system for developing choices or alternatives for decision makers to consider (Dickmeyer, 1983). Decision aids using computer technology are becoming more prevalent and are one way to assist in decision making about space management issues. However, it is important to note that a data-driven system alone cannot meet all the needs of multi-objective criteria which contain unquantifiable variables such as personal preferences, professional status, competing goals, and political influences, such as power and prestige. Some institutions rely on their institutional research departments to provide data to assist in decision making (Peterson, 1999). With current data, they can apply pre-determined metric-based

space models (Alexander & Lewis, 2000; Baker, 1984) or use benchmarks that rely on square footage assignments related to the amount of research dollars, numbers of faculty, or numbers of students (Huey & Valdenegro, 2006; Fink, 1999). Regardless of model used, Thompson (2002) has noted that space management departments “must have access to the best data relating to the estate [campus], and the most effective and efficient methods of managing, maintaining, and manipulating that data” (p.109). Fink (1999) noted that “space data can provide one more tool in space management” and that without it, “space management is strictly politics” (p. 33).

Interest in developing comprehensive data models that can accommodate multiple objectives have led to studies that have experimented with alternative scenario planning (Daigneau, 2002; McIntyre, 2003) and sophisticated algorithmic models (Derx, 1988; Stigall, 2007, Silva, 2003). The purpose of these data-driven computer models is to enable decision makers to consider different scenarios quickly so that more time can be devoted to evaluating possible outcomes than manually configuring alternatives.

However, Dickmeyer (1983), in his study on financial decision making, pointed out that as new information became available, preferences changed based on “an evolving set of constraints and opportunities” (p. 684) indicating the fluid and complex nature of decision making.

What models are currently being used to assist decision-makers navigate this complex process with ever changing goals? The following two sections will explore the utility of scenario planning which uses a qualitative approach and data-driven computer models which use quantitative approaches as aids to decision making.

Scenario Planning

Scenario planning is a model that allows an organization to consider a variety of alternatives and to project the possible consequences of those alternatives before any decisions are made. This model provides decision makers with “a method to evaluate investments against their potential benefit to the future of the institution” (Daigneau, 2002, p. 29). “Scenario planning starts with the premise that while change is certain, the exact form of change is uncertain” (Daigneau, 2002, p. 30). To address the uncertainty of change, scenario planning explores “a broad range of futures and which decisions, if made today, are highly risky or are relatively benign under any potential future conditions” (Daigneau, 2002, p. 30). Daigneau (2002) has suggested that scenario planning “improves learning so decision makers are prepared to ask better questions and to understand the ramifications of their decisions on the success of the institution” (p. 33). It improves learning by allowing decision makers to mentally visualize change and its possible implications.

Scenario planning can be used to provide empirical support for identifying risk factors in long-term high cost projects. For instance, it can be used as an aid in long-range strategic planning processes (McIntyre, 2003) that project the direction in which an institution is heading, and capital planning (Daigneau, 2002), which projects future building and facility needs. Some of the concepts used in scenario planning related to strategic planning and capital planning can be useful when considering alternative usages for existing space.

McIntyre (2003) identified three methodologies for conducting scenario planning: (a) intuitive, qualitative, or “soft”; (b) quantitative; and (c) a combination of both intuitive and quantitative techniques. Daigneau’s (2002) model for scenario planning is based on qualitative methods using narrative stories to develop different scenarios. Daigneau (2002) suggested a capital planning method that could be applied to space management that ranks alternatives into four categories: (a) no brainers, which are of value to the institution regardless of the future; (b) no gainers, which do not help the institution and may actually be a detriment; (c) no regrets, which can not hurt and may actually provide a benefit; and (d) contingent liabilities, which may help in some instances and be a detriment in others (p. 30). Daigneau suggested that a qualitative ranking process like this, in which alternatives are prioritized based on their value to the institution, is more informative than a quantitative process that strictly relies on metrics and number values to rank alternatives. Problems arise when institutions apply quantitative values to qualitative measures by assigning values for subjective factors such as consistency with mission, code compliance, and revenue generation. The problem with applying quantitative values, he posited, is that most people can justify their projects to meet any defined criteria, suggesting that using a quantitative model could lead to “a capital plan or budget that changes year by year depending on who is president, which new regulation is currently being enforced, who is the loudest squeaky wheel, or the latest industry prognostications about the next wave of the future” (Daigneau, 2002, p. 29). Capital and long-range planning models can be applied to space management issues, in that all require predictions of the future and commitments of financial resources.

The ability to identify risks and acknowledge uncertainty in a controlled environment makes scenario planning a valuable tool in higher education. What other decision aids have been developed to assist in space management decision making?

Information and Data-driven Computer-aided Models

The literature shows a progression of computer-aided data collection and manipulation models that coincide with the development of computer technology. Some models focus on basic computerized data collection and inventories (Pridham, 1994), while other models use more complicated multi-objective models to test alternatives (Derx, 1987; Huey & Valdenegro, 2006; Silva, 2003). Computer-aided data-dependent models for evaluation depend on high quality data that is current which requires data to be updated regularly in central system databases. These data-driven models are considered to be more objective and to reduce the need to rely on anecdotal data, resulting in decision making that is less political (Pridham, 1994; Huey & Valdenegro, 2006). In this case, data is being used as a tool to reduce the uncertainties and ambiguity common in academic decision making (March, 1994).

The literature on space management indicates that fundamental changes in space useage are occurring on college and university campuses. A similar change occurred in the early 1970s and was documented in *Planning for Higher Education*, a publication of the Society of College and University Planners (SCUP). SCUP printed a series of reports based on a joint project funded by the National Institute for Education and the Educational Facilities Laboratories. This study was commissioned to address the problem of “what higher education can do to meet the space needs of new programs and a wider

constituency...with the common goal to avoid resorting to new construction” (Lord & Kliment, 1974). These reports reflected the challenges faced by campus space management decision makers in the 1970s, challenges due in part to increased enrollments, resulting from the influx of baby boomers and a nation-wide economic crisis. The topics addressed included institutional efforts to (a) redeploy space (Kliment & Lord, 1974), (b) recycle space (Morisseau, 1973), (c) identify space off campus (Kliment & Lord, 1974a), (d) renovate space (Kliment & Lord, 1974b; Kliment & Lord, 1974c), and (e) share space with other institutions (Kliment & Lord, 1974d). These reports provided useful suggestions on ways to identify and utilize existing space, many of which apply to institutions facing similar challenges in the 21st century.

As in the 1970s, space management is particularly important now, as many institutions are facing significant decreases in funding and increasing enrollments amid dramatic changes in pedagogy, technology, and institutional priorities (Lidsky, 2004; Harris & Holley, 2008). The functionality of traditional classrooms is being reconsidered as pedagogy is becoming more learner-focused. The literature also suggests that research space allocation and configuration is being reconsidered as institutions consider the value of interdisciplinary collaboration and interaction. To evaluate alternatives and implement changes in space usage, institutions are turning to a combination of quantitative and qualitative methods as decision-making aids. Many of these methods provide guides for collecting data and emphasize the importance of providing the best information to decision makers, but fail to identify who these decision makers are and how they use the information provided to make decisions. What is missing, however, is research that

illustrates how these methods and data-driven space management decision aids are actually used to make decisions in higher education and who are the individuals who make those decisions.

Higher education is an institution which is at odds with itself. On one hand, it expands knowledge and advances the use of technology, and on the other hand, it is steeped in tradition and adverse to change. The people who collectively personify higher education are also different from each other and see their roles from different perspectives; faculty value expanding and transferring knowledge without concerns over operational costs and functions while administrators are forced to focus on costs and efficiencies as they support the work of the faculty. The next section will examine the distinctive organizational culture of higher education to gain a better understanding of the different roles and priorities of faculty and administrators and explore how their unique perspectives shape decision making about space management issues on campus.

The Role of Academic Culture in Space Management

The study of organizational cultures assists researchers in gaining a better understanding of what happens in an organization and why. It helps individuals to interpret decisions and understand “how seemingly disconnected episodes might actually fit together” (Tierney, 2008, p. 3). Culture itself is a concept that is most useful when “it helps to understand the hidden and complex aspects of organizational life” (Schein, 1995, p. 272) or the hidden dimension as posited by Edward T. Hall (1966). An examination of the academic culture will provide a contextual basis for making sense about space management decisions.

One of the most influential theorists on academic cultures is William Tierney, a scholar who has studied the impact of culture on organizational decision making for over twenty years. Tierney (1988) succinctly described the origin and role of culture in organizations by acknowledging the influence of both external and internal forces in its development:

Institutions certainly are influenced by powerful, external factors such as demographic, economic, and political conditions, yet they are also shaped by strong forces that emanate from within. This internal dynamic has its roots in the history of the organization and derives its force from the values, processes, and goals held by those most intimately involved in the organization's workings. An organization's culture is reflected in what is done, how it is done, and who is involved in doing it. It concerns decisions, actions, and communication both on the instrumental and a symbolic level. (Tierney, 1988, p. 3)

If, as Tierney describes, culture “derives its force from the values, processes, and goals” of those in the organization, then it makes sense that culture is not static but is “dynamic and ever changing” (Tierney, 2008, p. 6) as personnel come and go within the organizational culture.

To better understand and study academic cultures, Tierney (1988) identified the following six “operative cultural concepts” to use as a framework to study culture in collegiate institutions: environment, mission, socialization, information, strategy, and leadership (Tierney, 1988). He suggested that a unique culture emerges as a result of how

these six concepts are institutionalized. For example, Tierney (1988) suggests that answers to these questions distinguish each institution's cultural identity: How is the environment defined? How is the mission defined? And is it used as a basis for decision making? How are members socialized? Who has information and how is it disseminated? How are decisions made and who makes them? What is expected from leaders and who are they? Understanding these concepts helps to identify how academic culture affects decision making, gives meaning to what institutions do, and provides a better understanding of how and why they do it.

Understanding an institution's culture can contribute to improved institutional management and performance and enhance the ability to address challenges and make significant changes (Tierney, 1988). Kezar and Eckel (2002) posited that knowing one's culture and working within its accepted values to effect change may be more successful than challenging those values. Equally valuable, however, is recognizing when the cultural beliefs should be challenged. For instance, if an institution's culture was change resistant, "it might be necessary or important to challenge the institutional culture, rather than work within it" (Kezar & Eckel, 2002, p. 458).

Academic culture has many dimensions and works at multiple levels. Not only is there a culture associated with higher education in general, but each academic institution develops its own distinct culture which defines the set of values, beliefs, expectations and assumptions that guide its behavior (Bess & Dee, 2008, p. 362). Furthermore, as a result of institutional decentralization, academic departments within colleges and universities develop unique cultures which define what they value and how they work. These cultures

can be so strong that faculty members often have a greater loyalty to their department or discipline than to their institution (Kezar & Eckel, 2004).

Concepts of culture permeate all aspects of the academic institution. Bergquist and Pawlak (2008) identified six distinct cultures that value different aspects of the academic enterprise that are not associated with specific departments, but exist across the institution. They suggest that it is important to understand the multiple cultures that exist in an institution and to build on the strengths and resources that each offers to accomplish institutional goals. The six cultures provide a “framework to guide leaders and inspire new courses of action to further improve functioning within these complicated institutions” (p. x). These cultures, as Bergquist and Pawlak (2008) identify them, are briefly defined below.

The *collegial culture* emanates from academic disciplines and is associated with faculty research and scholarship. Those who identify with it value scholarly engagement, shared governance and decision making, and rationality. To them, the primary purpose of the academy is the generation, interpretation, and dissemination of knowledge and the development of future leaders of our society. The *managerial culture* focuses on the organization, implementation, and evaluation of work and values efficiency, effective supervisory skills, and fiscal responsibility. The *developmental culture* has a more inward focus. It values the personal and professional growth of all members of the collegiate environment, with an emphasis on service to others. The *advocacy culture* values the establishment of equitable and egalitarian policies and procedures, valuing collective bargaining, confrontation, interest groups, mediation, and power. The *virtual culture*

values technology and the capacity for global learning networks and the *tangible culture* finds meaning in institutional roots and connection to the community (Bergquist & Pawlak, 2008). Can these cultural frameworks be used to gain a better understanding of decision making regarding space management?

Changes in the utilization, allocation, and reallocation of existing space may be indications of changing priorities on campus that may be at odds with the prevailing campus cultural ideals. Kezar and Eckel (2002) used the original first four of Bergquist's and Pawlak's cultures, along with Tierney's framework, to examine the effect of institutional culture on comprehensive change strategies which have a wide institutional effect and can challenge institutional values, beliefs, and structures. They wanted to know if institutional culture was related to the change process and how. And they wanted to see if change processes were "thwarted by violating cultural norms or enhanced by culturally sensitive strategies" (Kezar & Eckel, 2002). Their findings indicate that it is important to understand the institutional culture to develop change strategies consistent with that culture to bring about effective change. This concept of matching culture to a specific change strategy is useful in considering how changes in space management could be approached on campus.

The cultures that are most pertinent to this study on space management decision making are the collegial culture, the managerial culture, and the advocacy culture. Specifically, collegial culture provides a framework for understanding faculty work and what they value, managerial culture provides organizational insight and a framework for understanding the work and values of managers and management principles, and

advocacy culture provides a framework for understanding how these cultures interact in the higher education environment. Bergquist and Pawlak (2008) identified the collegial and managerial cultures as the two dominant cultures on campus, with the advocacy culture as an intermediary between the two. Of interest to this study, is where these cultures intersect over issues of space.

The Collegial Culture and Shared Governance

Bergquist and Pawlak (2008) described the collegial culture as being grounded in the disciplines represented by the faculty in the institution and identified with those who “value faculty research and scholarship as well as the quasi-political governance processes of the faculty” (p.xiii). These quasi-political governance processes are part of the shared governance model in use at most higher education institutions. The primary function of shared governance in the academy is to provide a venue for faculty participation in institutional decision making. Typically, faculty participation in governance is advisory to institutional management and concerns academic functions such as curriculum, tenure, and matters of academic freedom. The collegial culture and the value it places on shared governance are important to understand in regard to this space management study due to the importance of space as an academic resource.

Kezar and Eckel (2004) noted that governance in higher education “refers to the process of policy making and macro-level decision making” (p. 375). They further described shared governance as “a multi-level phenomenon including various bodies and processes with different decision-making functions” (p. 375). Under this model, faculty and administrators share the governance responsibility by collaborating on the process of

decision making and the implementation of a course of action that had been agreed upon. Shared governance values consensus, collaboration, and participation and is different from most business and industry models, which rely on hierarchical models of decision making and are heavily reliant on company executives to make unilateral decisions (Hardy, 1990). These same values - consensus, collaboration, and participation, which make higher education management unique - present some operational challenges. For instance, the participative nature of shared governance which includes individuals from disparate interest groups can make consensus difficult to attain due to divergent goals, values, and priorities.

While shared governance may work well when making decisions regarding curriculum and other academic matters, its deliberative nature can be too slow to provide an adequate response to resource allocation decisions, even though resource allocations have a direct impact on the educational mission of the institution. Many researchers in higher education have questioned the continued efficacy of shared governance as it is currently practiced (Tierney, 2008; Kezar & Eckel, 2004; Benjamin & Carroll, 1998) and have asserted that there is a fundamental disjunction between higher education's rapidly changing environment and its shared governance system that values consensus, collaboration, and participation. They have argued that the process of shared governance can have a negative effect on decision making because "it acts as a conservative force, slowing the rate of change, avoiding extremes, and protecting the pursuit of multiple goals and objectives" (Benjamin & Carroll, 1998, p. 101) and it protects the status quo (Kezar & Eckel, 2004). In a comprehensive review of the governance literature, Kezar

and Eckel (2004) noted that much of the research on governance over the years has focused on structural theories which have not provided explanations of or ideas on ways to improve governance. In fact, they observed that few studies have addressed the entire governance process and suggested an approach to the study of governance that would consist of a comprehensive view of all components of governance, with special attention on how they interact with each other. Based on this observation, this study will examine space management decision-making from a holistic perspective which includes components of the shared governance process and institutional management and how they intersect over issues of space.

Despite the value placed on the traditional university governance system in the collegial culture, there is a call for change. For instance, Benjamin and Carroll (1998) argued that governance systems need restructuring and suggested that “the existing governance system in higher education cannot effectively cope with the problem of reallocation of resources” (p. 93), primarily because the governance system was designed to address issues of growth and the distribution of new resources, not the redistribution of declining resources. They suggested developing a new governance system that is iterative, in which decision making is based on both department and administrative-suggested solutions, and incorporates more relevant and shared information and more participation, enabling participants to better understand the potential tradeoffs of resource allocation. Competing for scarce resources challenges the traditional collegial culture of inclusion and collaboration valued by the tenets of shared governance. Resources in higher education can be identified as human resources, financial resources, and physical

resources, such as space. Furthermore, Benjamin and Carroll (1998) noted that the idea behind a new governance system is to better “set priorities, focus missions, and implement choices, not merely to create winners and losers” (p. 111). And Tierney (2008) argued that “shared governance is a cultural artifact of the organization” (p. 6) and no longer adequately serves its intended purpose. This study seeks a better understanding of how the collegial culture views space management as an academic issue and the role, if any, of shared governance in the space management decision-making process.

The Managerial Culture and the Professionalization of Higher Education

The managerial culture focuses on “the organization, implementation, and evaluation of work that is directed toward specified goals and purposes...[and] values fiscal responsibility and effective supervisory skills” (Bergquist & Pawlak, 2008, p.xiii). Changes in the external environment, such as funding mechanisms and calls for accountability, have led to increased bureaucratization that has contributed to the growth of this culture and has affected the way higher education institutions are managed. Ward (2007) has observed that the growth of market-related revenues has put intense pressures on how universities are managed and governed, noting that “traditional academic governance is seen as too slow, inexpert and unresponsive and its sphere of influence is mediated by professional management” (p. 16). The increased prevalence of professional management in academia has occurred over time as the role and substance of higher education has changed to meet the demands of a market-driven knowledge-based economy. In part, this change has been driven by new and more complex market-driven revenue sources with increased expectations for accountability and performance

outcomes. Professional financial management has become more necessary to mediate the complex forms of revenue that have been generated to support higher education as public funding has decreased (Ward, 2007).

As higher education has become a more complex array of funding, regulatory, and technology-related functions (Blumel, 2008), faculty participation in governance has waned and the gap has been filled by non-academic professional managers. The decreased faculty participation has been attributed to a variety of reasons: fewer numbers of full-time faculty, other demands on faculty time, a reward system that puts less value on service, and faculty commitment to their disciplines over their institutions (Kezar & Eckel, 2004). Regardless of the reason, Burgan (2005) suggested that the lack of faculty participation in the governance process deprives the institution of the faculty perspective, particularly valuable when it comes to issues about the working environment. Burgan (2005) noted that campus governance needs to be revived to encourage faculty participation in discussions “about building needs, debates about priorities, and oversight of the uses of facilities. Professors have shown their expertise when asked to participate in the designing of their classrooms, but their access should not stop there” (p.32). Burgan (2005) noted, however, that contrary to promoting more participation, the message being sent to faculty senates is that “construction and financial matters are too complicated for the faculty to understand and are outside the purview of faculty governance, so they should be left to the vice president for operations” (p. 32). An iterative process, as mentioned earlier, would provide a role for faculty to participate in

space management decision making by incorporating their perspective in the design process.

As faculty participation in management issues have decreased, the faculty are being replaced by professional administrators who are more accustomed to business-like hierarchical models of management and decision making rather than traditional academic models which rely on the tenets of shared governance (Blumel, 2008). The increase of professional administrative personnel has accentuated the differences between academic and administrative roles within higher education institutions and affected the roles of the collegial and managerial cultures within the institutions. Conflict between cultures is sometimes referred to as a culture clash within the academy, where the academic side and the administrative or business side of the organization are seen as two distinct entities that sometimes seem to work at cross purposes.

The differentiation in the roles and cultural orientation of faculty and administrators is quite distinct. In higher education, faculty typically have a stronger loyalty to their discipline than to the institution, contrary to administrators. This stems from intrinsic differences in these two categories of professionals. Faculty self-interest originates in their fields of study, or disciplines. They are experts in their field and seek national recognition for their research and generation of new knowledge. They are members of national organizations which focus on discoveries and developments in their fields. Among other things, institutions hire faculty based on their expertise and research potential. Faculty members see themselves as independent scholars, focused on career goals of achieving tenure and advancing in professorial ranks. The mixed message of

priorities of teaching, research, and service, with differential values in the reward system, leave faculty in a situation where they are focused on advancing their careers in the context of their discipline, thereby contributing to the institution by virtue of their personal success. Their subsequent achievements in their discipline can lead to national recognition and improve their transferability to other institutions of higher prestige. Administrators on the other hand, are more invested in the institution. While they may have achieved success in prior positions, their success is tied more to the success of the institution than to personal achievement.

The inherent conflict that exists between faculty and administration cultures can result in a constructive tension that actually contributes to effective management (Bergquist & Pawlak, 2008). Although faculty and administrators have different approaches to their roles, it has been argued that this overlap of roles and authority can actually improve decision making, albeit, sacrificing efficiency for effectiveness (Kezar & Eckel, 2004). The overlap sacrifices efficiency due to the time and deliberation spent on collaborative processes, the pursuit of consensus, and broad participation in the decision making process, and it is for these same reasons that effectiveness is enhanced.

The Advocacy Culture and the Role of Power

The advocacy culture values the establishment of “equitable and egalitarian policies and procedures for the distribution of resources and benefits in the institution” (Bergquist & Pawlak, 2008, p. xiv). While these values can seem to be in conflict with those espoused by the collegial culture which values individualism over egalitarianism and the managerial culture which values entrepreneurship and differential compensation

over equity, the three are interdependent due to the fact that what happens in one culture affects what happens in the others (Bergquist & Pawlak, 2008). The advocacy culture has grown in response to the growth of the managerial culture driven by increased complexity and the decline of the collegial culture driven by weak governance systems and changes in faculty hiring practices which effectively reduce the numbers of full time faculty and thus, their power. Those aligned with the advocacy culture value confrontation and fair bargaining among constituencies when their interests conflict, which is often the case over limited resources such as space. Confrontation and fair bargaining, or collective bargaining in many institutions, were developed in response to the differential power associated with the collegial and managerial cultures. For instance, the power that “old guard” faculty exhibit over new faculty in the collegial culture and the power of the managerial culture over terms of employment, such as compensation and work schedules.

Advocacy culture members value fairness and are “likely to look out for and be particularly sensitive to processes and procedures being used in their institutions that appear to be unjust or that do not square with their institution’s espoused mission and values” (Bergquist & Pawlak, 2008, p. 115). Those that align with the advocacy culture are inclined to question the way things are done on campus and are sensitive to issues of social justice. They believe “that change takes place through confrontation and the effective use of prized resources” (Bergquist & Pawlak, 2008, p. 112). In this study, the prized resource is space and an examination of the policies and procedures that dictate its

usage will examine if effective space management can drive change in an institution or if it is driven by change.

In this section, the impact of culture on organizational decision making (Tierney, 2008) and the description of the six cultures of the academy (Bergquist & Pawlak, 2008) were used to frame the discussion of the importance and role of culture in higher education. Further discussion identified the collegial, managerial, and advocacy cultures as those most closely related to this study of space management decision making. In addition, the discussion of shared governance revealed that recent changes that have occurred in the external environment are putting pressures on university governance systems. Benjamin and Carroll (1998), Tierney (2004), and Ward (2007) have called for changes in the governance system, arguing that it is too slow and unresponsive to effectively operate in a rapidly changing environment. Burgan (2005), on the other hand, called for more faculty participation in governance, particularly in planning processes, and identified the presence of a new market mentality that is taking over academic values and virtually excludes faculty from some planning processes. The studies that call for change in academic governance have suggested that these traditional university governance systems may be better suited for long-term planning and that existing governance systems are stressed and ill suited to effectively respond to rapid change.

Issues of space management are embedded in the cultures of higher education and subject to its decision-making processes. The next section will focus on decision-making processes and structures that apply to higher education in general and that can be applied to space management issues as well.

Decision Making

Effective decision making is a critical element of every organization. Not only is it a sign of good leadership, it is also an indicator of a functional organization (Vroom, 1995). Harrison (1995) suggested that decision making is synonymous to management and that the process of decision making should have as its central focus, the management of the formal organization (p. 410). Given that decision making is at the center of organizational effectiveness, it has been the subject of extensive research and theoretical examination (Lindblom, 1959; March, 1994; Harrison, 1995; Eckel, 2002). Noted theorists in the area of decision making, such as Lindblom (1959), Cohen, March, and Olsen (1972) and Mintzberg, Raisinghani, and Theoret (1976), are often cited as research continues today to better understand the complexities that affect individual and group decision making. Decision making in higher education is complicated by shared governance models that include different groups and individuals in the process, each with its own sets of values, goals, and objectives.

An important consideration when studying decision making is to identify and understand the context in which decisions are made. For instance, what type of organization is under investigation—business, government, non-profit, or educational? What are the environmental conditions, both external and internal, that affect the decision-making process? What types of decisions are being considered? Decisions can range from routine decisions made by individuals to extremely complex or strategic decisions made by groups of multiple stakeholders with competing interests.

Higher education, for instance, is a complex organization which defies many of the decision-making principles employed in business and industry environments (Hardy, 1990). The most notable operational difference between higher education and other organizations is the separation of the roles of academic and administrative personnel and their sharing of authority and responsibility (Bess & Dee, 2008), referred to earlier as shared governance. Although shared governance serves as the cornerstone to academic culture, this separation of roles and shared authority has been identified as the source of a “decision-making process [that] is fraught with a cultural aversion to risk and a fragmentation of authority that diffuses responsibility” (Blaik, 2007). Participation from these different segments of the organization can lead to the fragmentation of responsibility mentioned above, even to the extent that it is not clear whose responsibility it is to actually make the decision (Bess & Dee, 2008). Despite these ambiguities and recent criticisms (Blaik, 2007; Bess & Dee, 2008), shared governance has persisted in higher education as a central tenet of academic culture and a key component in academic decision making. The differentiation between what constitutes an academic decision and what constitutes an administrative decision is often a gray area. Academic decisions are typically those which affect faculty work and the curriculum and lend themselves to a process of shared governance. They concentrate on the question: Where is the institution going, what are its priorities and goals? Administrative decisions are those which affect general operations and finance and speak to the question: How will the institution address those priorities and accomplish those goals?

The way that colleges and universities are organized promotes the formation of academic and administrative groups that can act in political ways, using their power and influence to affect the decision-making process. For instance, the structural organization of institutions of higher education emphasizes a decentralized approach, in which colleges and universities are sub-divided into semi-autonomous departments or units. This structure promotes a system in which departmental faculty and staff may participate more at the departmental level, i.e., meetings, lecture series, events, and consequently develop stronger loyalty to their department or discipline than to the larger institution. This departmental structure results in a natural grouping of individuals in departments with competing interests, consistent with interest-based coalitions common in the political framework.

Within a decentralized organizational structure, each unit, or department, acts independently of the other departments within the same institution. Each academic unit has its own governance structure, including a department chair and a committee structure, which addresses departmental issues such as hiring new faculty and curriculum development. This organizational structure has been described as “loosely coupled,” because although there is a connection between departments, it is not very strong or coherent (March, 1994). While loose coupling allows decentralized units to respond quickly to new trends and ideas associated with their specific constituencies, to pursue disparate goals, and enables them to coexist harmoniously by insulating them from each other, it inhibits an institution’s ability to react effectively at an organizational level (Keith, 1998; Hardy, 1990). This is due, in part because loose coupling produces diverse

interest groups that come into competition with each other over scarce resources. At these times, they act politically instead of collegially and use their power to achieve their departmental goals (Hardy, 1990).

So while loose coupling allows units to operate independently and pursue specialized goals without affecting the larger institution (Birnbaum, 1988), it also inhibits institutions from collective action based on institutional mission and priorities. The units that operate with relative independence come together over issues which fall outside of the department purview, such as financial resources and institutional space allocation. Many institutions allocate space to the college or administrative unit to assign according to their needs (Fink, 2004). It is when these larger units need more space that they have to work within the space allocation process identified by their institution. The concept of independent, and somewhat autonomous, departments working within a larger institution has led some theorists to describe higher education as “organized anarchies” (Hatch, 1997). This terminology has been used to describe the nature of the decision making in colleges and universities that is disjointed due to their unique organizational structure. While the concepts of loose coupling and organized anarchies are helpful in understanding the effects of decentralization in higher education, Cohen et al. (1972) suggested another model to help understand the actions of the individuals in those groups, the “garbage can” model. The Garbage Can Model describes situations where key actors move in and out of the decision-making process due to competing demands on their time and attention, resulting in varying degrees of personal interest or even disinterest (Hardy,

1990) in the decision. Thus, decisions are made in a random and erratic manner (March, 1994; Hatch, 1997).

Decision making has been defined by Mintzberg as “the process of developing a commitment to a course of action” (Bess & Dee, 2008). This broad definition implies that decision making is the process that precedes action or as Dean and Sharfman (1996) and Eckel (2002) suggest, is the result of the interaction of procedural rationality, decision rationality, and action rationality. Routine decisions are made every day in organizations and are based upon familiar, pre-determined guidelines that are straightforward and rely on known alternatives and past experiences. Complex or unstructured decisions are answers to questions “that have not been encountered in quite the same form and for which no predetermined and explicit set of ordered responses exists in the organization” (Mintzberg, Raisinghani, & Theoret, 1976). They require a greater degree of information gathering, examination of alternatives, and an evaluation of the possible consequences of the alternative choices. Consequently, complex decisions require input from more people and take more deliberation. While some space management decisions are straight forward and based on metrics, many are complex and involve decisions that reflect institutional priorities and mission. For a deeper understanding of decision making in higher education, it is useful to examine decision-making processes and the organizational structures in which they take place.

Decision-making Process and Structure

Bess & Dee (2008) identified decision making both in terms of process and structure. Process encompasses a step-by-step model of information gathering and

evaluation resulting in choice, thus addressing the question of *how* decisions are made. Structure defines the organization level of responsibility for the type of decision to be made and addresses the question of *who* participates in decision making and under what circumstances. This section examines issues of decision-making process and organizational structure.

A decision-making process can be defined “as a set of actions and dynamic factors that begins with the identification of a stimulus for action and ends with the specific commitment to action” (Mintzberg, Raisinghani, & Theoret, 1976). Harrison (1995) acknowledged the importance of having an identified process in decision-making and noted that having and following a process serves these important functions:

(1) It indicates the dynamic nature of decision making; (2) it depicts decision-making activities as occurring over varying spans of time; (3) it implies that the decision-making process is continuous and thus, it is an ever-present reality of organizational life; and (4) it suggests that, at least to some extent, managerial decision making can direct and control the nature, degree, and pace of change within the organization. (Harrison, 1995, p. 409)

The literature on decision making suggests that the decision-making process and who participates in this process is of interest in many organizational contexts. The following review includes cases of decision making based on the theoretical frameworks discussed earlier. These cases concern: 1) strategic decision making in a business context which used a rational choice and political theoretical perspective (Dean & Sharfman,

1996); 2) decision making about financial resources which used a political theoretical perspective (Hardy, 1990); 3) institutional consolidation which used a political theoretical perspective (Carnahan, 1983); and 4) academic program closure which used a limited rational choice and political theoretical perspective (Eckel, 2002). Although these cases do not address issues of space management directly, they contribute to this study because they provide different perspectives on decision making that can inform decision making regarding space management issues in higher education. For instance, some issues of space management can be viewed as strategic to an institution, such as cases of creating or focusing on research space because the institution has made a strategic decision to increase its research capacity. They would involve strategic decision making as discussed in the research reported by Dean and Sharfman (1996). Hardy's (1990) study on decision making about financial resources can be applied to the study of space as a valuable resource on campus. Carnahan's (1983) study accentuated the complexities involved in decision making in the context of higher education and exemplified how the process can change over time. Eckel's (2002) study on academic program closure illustrated how internal politics affected the decision making process. Together, these cases provide a broader picture of the challenges that face decision makers in a higher education context and are related in greater detail below.

1) Employing a longitudinal study to measure the relationship of process to strategic decision-making effectiveness in a business environment, Dean and Sharfman (1996) asked the question: Does decision-making process matter? For the purposes of their study, the authors defined strategic decision effectiveness "as the extent to which a

decision achieves the objectives established by management at the time it is made” (Dean & Sharfman, 1996, p. 372). After evaluating 52 decisions made by 24 different companies, the results of the study suggested that procedural rationality and political behavior have a significant influence on strategic decision effectiveness. Procedural rationality is used to describe process and is “defined as the extent to which the decision process involves the collection of information relevant to the decision and the reliance upon analysis of this information in making the choice” (Dean & Sharfman, 1996, p. 373). Rationality is designated as “procedural” here to emphasize that the focus is specifically on the decision-making process, a distinct component of decision making. The political aspect of organizational decision making recognizes that people have different interests and that they try to influence the outcomes of decisions so their interests will be served. Examining these two constructs, Dean and Sharfman’s study indicated that “managers who collected information and used analytical techniques made decisions that were more effective than those who did not. Those who engaged in the use of power or pushed hidden agenda were less effective than those who did not” (p. 389). The authors also noted that strategic decision-making effectiveness was related to both decision process and internal and external environmental factors, indicating that differences in outcomes were based on the extent of the stability of the environment.

2) Hardy (1990) examined the decision-making processes of two universities facing difficult financial conditions. The analysis focused “on both the political context—the interest groups that were involved and the power they possessed—and the political process—how administrators managed these interest groups” (p. 303). Hardy noted that

in terms of accountability and efficiency, governments have advocated the use of business principles in higher education despite the significant organizational differences that exist between the two. For instance, the organizational structure in business is more hierarchical, and the decision-making process more autocratic, than the organizational structure in higher education, which is flatter due to decentralization and the decision making is more democratic based on the tenets of shared governance.

Despite these differences, some business principles, like strategic planning and program review, have been making their way into the academic operation. Hardy (1990) highlighted these differences by describing universities as “decentralized, loosely coupled, and diversified in highly specialized areas, with complex decision making structures...[that] are often constrained by government funding and regulations, [as well as] academic freedom and tenure regulations” (p. 302-3). Hardy’s study indicated that business principles were helpful in identifying areas that were less productive or inefficient, emphasizing the “economic variables and analytic techniques,” but had little to offer in addressing the social and political issues that are present in a higher education environment. Social and political skills are important in the higher education context due to the nature of academic interactions in which self-interest and loyalty to a discipline can take precedence over working toward broader institutional goals.

3) In another case focused on decision-making processes in higher education, Carnahan (1983) examined the decision-making process employed by four distinct governing boards working together to develop an educational complex in Denver, Colorado. Carnahan noted that the decision-making process was “marked by turbulence

due to the disparity of goals of the various participants, changes in consistency of participants, the absence of resource constraints, and strong norms against redistribution” (Carnahan, 1983, p. 247). These inconsistencies influenced the decision-making process by affecting shifts in the style or model of the decision-making process. For instance, the process shifted from a long period of decision making characterized by competition and struggles consistent with the political decision-making model, to a short transitional period characterized by inconsistent participation and indifference consistent with the garbage can model of decision making, and finally to the firm decision-making model based on bargaining and cooperation (Carnahan, 1983, p. 239). Of particular interest was the constantly changing decision-making style that occurred in Carnahan’s study in relation to the changing environment. The study illustrated that “the style of organizational decision making may change day to day as the perceptions and goals of the individual participants change” (Carnahan, 1983, p. 9). At the same time, the environment changes, making it difficult to understand what happens when two or more decision-making styles overlap, operate simultaneously, or are in transition. The changing nature of the decision-making process in this case exemplifies the important functions of process as pointed out by Harrison (1995), underscoring the fact that decision making is a dynamic and interactive process.

4) Eckel (2002) reported on the decision-making process used by four universities to determine academic program closure, identifying two relevant sub-types of limited rationality: (a) action rationality, defined as a political process based on power, negotiation, and coalition building that results in getting things done and focuses on

efficiency; and (b) decision rationality, a process based on criteria, comparative data, and economic benefits that result in choosing the right thing, with a focus on effectiveness. Eckel's findings indicated that within the framework of limited rationality, action rationality played a much larger role in the final choice than decision rationality. He acknowledged that the academic program closure process called for specific decision-making criteria, but these criteria were not used by the decision makers. Although the prescribed process was not followed, Eckel noted that having a process had other valuable consequences, finding that "attention to process is essential, not simply to create legitimate and acceptable processes that are politically acceptable, but also to 'discover' criteria that will lead to intended outcomes" (Eckel, 2002). These findings are important because they demonstrate how the affect of power and politics superseded the established decision-making process.

These studies illustrate the value of having a decision-making process, albeit in different ways. Dean and Sharfman (1996) found that process matters in a business environment and had a positive effect on decision success. Hardy (1990), however, noted that a process developed from business principles had utility in areas of productivity and efficiency that were dependent on economic variables and analytic techniques, but were not useful in managing the social and political issues that are common in academic organizations. Carnahan (1983) observed that when decisions are made in a constantly changing environment, the decision-making process is "marked with turbulence" (p. 247) and is also in a constant state of change, fluctuating with the change in participants and the affects of previous decisions. Finally, Eckel (2002) suggested, as did Dean and

Sharfman (1996) that having a process contributed positively to the ultimate decision. However, as Eckel (2002) illustrated, having a process was more important than following it. These examples of decision-making processes in higher education are useful in framing decision making regarding space management issues in higher education because they all take place within the same general environment and face similar obstacles.

Due to the unique organizational characteristics of higher education institutions, it is important to know more about how decisions are made and by whom and to understand the environment in which decision making takes place. Based on the review of the literature, four propositions emerge that can be examined through the current study:

Proposition 1: A defined space management decision-making process leads to effective and efficient decision making. (Dean & Sharfman, 1996; Eckel, 2002; Harrison, 1995)

Proposition 2: Decision making on space issues is more effective when made by a joint committee of all stake holders, in which there is a stable core of participants and only the space requestors change. (Bergquist & Pawlak, (2008); Kezar & Eckel, 2004; Burgan, 2005; Hardy, 1990)

Proposition 3: Decisions on space issues are more effective and efficient when the primary decision maker is focused on space without multiple distractions. (Hardy, 1990; Carnahan, 1983)

Proposition 4: The role of data and information is valuable to the decision-making process. (Fink, 1999; Fink, 1996; Dickmeyer, 1983; Thompson, 2002; Huey & Valdenegro, 2006)

CHAPTER 3.

METHODOLOGY

In order to better understand the complexity of decision making in higher education, this study uses a qualitative research approach. Qualitative research, as described by Creswell (2007), is best used when one needs to understand a concept or phenomenon that has received limited attention in the literature. Such is the case with decision making about space management issues in higher education. The exploratory nature of qualitative research allows the researcher to discover important variables related to the issue under investigation that may not have been obvious from the outset and to explore themes that emerge during the study (Creswell, 2007). The specific qualitative inquiry strategy employed in this investigation is the case study method. This method is relevant for research that seeks to know “how” or “why” a social phenomenon works (Yin, 2009). As in this study, seeking to know “how” decisions about space management issues in higher education are made in a real-life context consisting of distinct organizational cultural norms and values. The case study method entails an extensive and in-depth investigation bounded in time of a particular event, activity, process, phenomenon, or one or more individuals, which leads to a detailed description (Yin, 2009; Creswell, 2007). As such, the case study method is widely used in higher education

research to explain and describe complex phenomena, including decision making at colleges and universities (Eckel, 2002).

For example, the case study method was effectively used in Carnahan's (1983) research on three institutions involved in a contentious decision-making process regarding the development of a higher education complex and in Hardy's (1990) research on the use of the business approach to financial decision making on campus. Hardy (1990) recommended the case study approach as an "effective way of probing into sensitive decisions" and noted that the qualitative approach was necessary to reveal "the political processes that occurred around decision making" (p. 318), both of which are important components of this study.

A political frame as described by Bolman and Deal (2003) is based on power, either real or perceived, and is value laden. Political actions are driven by individuals or interest groups and are explained by personal interpretations of the "how" and "why" of a phenomena. For instance, how was a certain group able to have a substantive influence on a decision? Or why was one person's point of view valued more than another person's? The use of qualitative methods allows the researcher to draw out the answers to these types of questions in the interview process common in case study research.

Several researchers have suggested using case study research to further examine quantitative findings and to increase the understanding of complex issues (Dean & Sharfman, 1996; Kezar & Eckel, 2004). For example, Dean and Sharfman (1996) suggested that qualitative case study methodology can be an effective way to examine the results from quantitative studies in greater depth. The results of their quantitative study

on strategic decision-making effectiveness suggested that the existence of a decision-making process mattered in decision success, but the authors were unable to elaborate on *how* it mattered and *in what settings* it mattered, two questions of interest in this study. Dean and Sharfman (1996) also suggested that case study methodology would be more suitable to sort out and explain the variables that influence strategic decision-making effectiveness due to the inherent complexities involved. In fact, they compared the findings of their quantitative study to qualitative findings from a multiple-case study conducted on the same topic years earlier. Dean and Sharfman suggested that the similar findings of both studies, conducted using two different methodologies, increased the level of confidence of both studies.

Much of the research on space management issues in higher education is quantitative, identifying and comparing metrics that can be used to inform the decision-making process (Daigneau, 2002; Derx, 1987; Silva, 2003). What is missing, however, is a qualitative investigation of if and how these metrics are used to shape the decision-making process. This study aims to add to the current literature by introducing a qualitative perspective to the predominantly quantitative research on space management issues.

The case study design is the chosen methodology for this study, not because I seek to understand a unique or critical case, but because I seek to understand a specific phenomenon that takes place in a specific context on a specific issue: decision making in higher education regarding space management issues. This type of case has been described by Stake (1995) as an instrumental case study because of its focus on seeking a

general understanding of decision making rather than seeking a better understanding of a specific decision.

To enhance this study, I have chosen to use a collective or multiple-case study design using three cases to contribute to a broader understanding of decision making and to make the findings more compelling (Yin, 2009; Stake, 1995; Creswell, 2007). This design was used effectively by Eckel (2002) in a study examining decision rules used in academic program closure decisions because like the current study, “its purpose was to understand a complex process phenomenon that could not be quantified or controlled, and so that cross-site comparisons could be made” (p.241). Eckel’s (2002) design has been adapted here to investigate space management decision making in higher education because both issues, academic program termination and space management, concern allocation of resources, span institutional interests, and can be viewed through the theoretical lens of limited rationality.

Yin (2009) identified two additional circumstances in which the multiple-case study design is useful. One is when the researcher predicts the cases to have similar results, referred to as literal replication, and the other is when the researcher predicts to find contrasting results, referred to as theoretical replication (Yin, 2009). Creswell (2007) suggests that the study of multiple cases can be useful because it may lead to the discovery of different perspectives on the issue being studied, especially if the researcher engages in purposeful sampling.

As an exploratory case study in a relatively unexamined area, examining the space management related decision-making processes of three institutions of higher

education has allowed for the description of multiple perspectives from different contexts. Information from these three cases has contributed to a stronger study (Yin, 2009), more so than if just one case was examined. The multiple-case study design has also allowed comparisons of decision-making processes across cases and helped to identify and understand themes that emerged related to decision making about space management issues.

This multiple-case study is the result of three site visits and nineteen interviews including a total of twenty-three informants. The following sections will discuss the criteria used to select sites and to identify knowledgeable informants at those sites.

Site Selection

I purposefully selected three institutions that are members of the Urban 21. The Urban 21 is an informal classification of institutions that “are dedicated to serving as intellectual and creative resources to their metropolitan regions in order to contribute to their economic development, social health, and cultural vitality, through education, research, and professional outreach” (Huttner & Gooding, 2002, p. 1). (See Appendix A for a list of the Urban 21 institutions.) In addition to these community-based indicators, there are three other common characteristics of these institutions that make this group coherent: 1) they are all public institutions; 2) they are all urban, primarily non-residential, meaning that less than 25% of students live on campus; and 3) they are all classified by Carnegie Classifications as either Doctoral/Research or Research Institutions. (See detailed definitions for Carnegie Classification in Appendix B.)

To narrow the sample further and to ensure that space management issues had been addressed in the recent past, I included additional sampling criteria that addressed institutional growth, space issues, and accessibility. The criteria were: 1) that the institution has experienced growth in both enrollments and research funding within the last five to ten years; 2) that a new building had been built or significant renovation of an older building had taken place in the same time period; and 3) that the site was accessible, both in terms of institutional participation and geographical location. These additional criteria ensured that the institution had recently engaged in decision making about space allocation and space utilization issues.

My aim was to identify three campuses (three cases) for in-depth study. I constructed a spreadsheet using IPEDS data that included a wide range of variables to initiate the site selection process. I wanted the findings to be relevant and applicable to space management issues at UMass Boston, my home institution, so my selection included those with characteristics similar to UMass Boston. Of the original 21 institutions, those with characteristics which varied considerably from UMass Boston were eliminated. That included the four institutions with hospitals, two that were classified as primarily residential, and one that was not classified as a doctoral/research or higher institution. Another was eliminated due to the significant crisis it had faced in the wake of a natural disaster. Of the remaining twelve institutions, the six with enrollments over 25,000, based on IPEDS 2007 data, were eliminated because they were substantially larger than UMass Boston. I reviewed websites of the remaining six institutions to confirm that they met my selection criteria in terms of growth in enrollments and research

funding and new construction. The first three institutions to agree to participate in my research were chosen as case study sites. UMass Boston was used to conduct pilot interviews.

The three selected universities represent three different geographical areas. Conducting a study with three cases is consistent with the literature that indicates that due to the in-depth examination conducted in case study research, the number of cases required to adequately inform the topic can range from a single case to more than one, but should not exceed four or five cases (Mertens, 2005). To summarize, institutions chosen met the following criteria:

1. They were identified as members of the Urban 21;
2. They had experienced growth in enrollment and research funding over the past five to ten years;
3. They had a new building constructed or a significant renovation in the last five years;
4. The institution was accessible in terms of willingness to participate and geographical location.

Data Collection

Two important aspects of qualitative research design are construct validity and reliability (Yin, 2009). Both have been identified as ways to reduce subjectivity in case study research, often a criticism of this research method. Construct validity ensures the use of correct operational measures for the concept being studied and reliability ensures that data collection can be repeated with the same results (Yin, 2009). In this study I have

identified the decision-making process as the operational measure or unit of analysis. With the decision-making process as the unit of analysis, I was able to examine how and by whom it was constructed and how and by whom it was used on campus. By examining these aspects of the process, I have identified the cultural perspectives of the participants and the institutional power they possess. As noted by Creswell (2007) and Mertens (2005), case studies are bounded by time and activity and include a variety of data collection methods and sources of evidence. Using multiple sources of evidence is considered to be a good practice to ensure construct validity in case study research. Additionally, as stated by Yin (2009, p.115), “the most important advantage presented by using multiple sources of evidence is the development of *converging lines of inquiry*, a process of triangulation and corroboration....” The multiple sources of evidence used to triangulate the data in this study include multiple interviews from different perspectives and a review of institutional documents, used to corroborate and support the data garnered from the interviews.

The primary data collection method for this study was face-to-face interviews; nineteen interviews in total were conducted, three of those included more than one informant. All informants were sent an invitation to participate (See Invitation to Participate Letter in Appendix C.) and were asked to sign a consent form to participate in the study and to have their interviews audio-taped and transcribed. (See Consent Form in Appendix D.) Document review provided an additional source of information to augment the interviews. Data collection took place over a six-month period, starting with document review, followed by informant interviews. As noted in Yin (2009), it is

important to the integrity of the study that all interviewees fully understand the intent of the study and what is being asked of them. To do so, I emailed all interviewees information regarding the study which included the research questions.

To ensure reliability of the study and to have consistency between the multiple cases, I developed a case study protocol and database and used them throughout the data collection phase. The case study protocol clearly indicated the data collection process and the interview questions. The database served as both a guide for data collection and as a device to keep track of data as it was collected. The combination of both documents provided a step like process that helped to functionally operationalize the study and allowed it to be repeated at each study site and by future researchers.

An initial exploratory document review was conducted on the Internet. Institutional web sites were examined for information related to governance models, space management policies and procedures, and other information that was relevant to this study. In the current climate of instant information, an emphasis on transparency (of actions), and advanced technology, websites and internet access have become increasingly important for internal communications. Accordingly, I found web sites that contained a variety of information regarding campus governance, space management policies and procedures, committee membership, minutes of meetings, and related administrative documents. The document review process continued throughout the study as documents were provided by informants and new information was revealed. A thorough document review provided background information regarding informants, campus organization structures, space management policies, and campus operating

procedures. This document review contributed to the validity of the study by providing both vital information that was not discussed in interviews and by providing support of information that was discussed.

Personal interviews were conducted on site at the selected institutions because interviewing informants in their natural settings is preferred in qualitative research since it allows interviewees to reflect on the decision-making activities and space management issues on their campus where these activities occur (Creswell, 2007). Interviewees were briefed on the intent of the study so they had a better understanding of the rationale behind the questions and were able to provide pertinent information related to the study. On-site interviews also allowed me to make observations of the campus and to observe the informants in their own environment. One campus provided a campus tour and another invited me to attend their space management committee meeting.

A semi-structured and open-ended interview format allowed information to flow freely from informants and encouraged emergent themes to surface in addition to addressing the pre-determined questions. In addition to taking notes during the interviews, the sessions were audio-taped and then transcribed. Follow-up questions and clarification were accomplished by telephone and email correspondence. To ensure validity of the interview process, informants were offered the opportunity to review the transcripts of their interview, referred to as member checking (Creswell, 2007). The names of the institutions selected will remain confidential, as well as the names of informants, who have been identified by functional title. All participants signed a consent form which clearly described the study and the extent of their role in it.

To test the interview protocol and individual questions, an abbreviated pilot study was conducted prior to going into the field. This helped to fine tune the interview questions and provided me with additional interviewing experience.

Participant Selection

As institutions were selected for study, their institutional web site was used to identify potential interview participants by functional title. I had initially planned to make first contact with a space management professional in the facilities department. This method of contact resulted in a delay and one institution chose not to participate, so I emailed the provost and vice chancellor of administration and finance directly at the next two institutions. This method worked better in that both of the top level administrators were informed simultaneously and seemed inclined to respond positively.

Once campuses agreed to participate, potential informants were identified by organizational position. These positions included: the administrator responsible for facilities; the chair of the faculty senate or space committee; the provost or chief academic officer; the administrator responsible for administration and finance (or their equivalents); and one or more persons who were directly affected by a space management decision (Eckel, 2002). The rationale for selecting informants in these positions was based on my experience working within the higher education environment. Engaging in this purposeful selection of individuals at different levels of the organization and in these different positions provided a more complete understanding of space management decision making in higher education (Creswell, 2007).

Higher education institutions are typically organized by function. The two largest functional areas are academics and finance and administration. The chief academic officer, commonly known as the provost or the vice president/chancellor of academic affairs, typically comes from a faculty background. Conversely, the chief financial officer, the vice chancellor or vice president of administration and finance, typically comes from a business background. This differentiation of purpose and perspective is often a source of controversy based on different goals and priorities. All of the people interviewed for this study worked in units that reported directly to one of these two senior administrators.

At each campus I interviewed the chief financial officer and one or more persons from the office of administration and finance. In one case, additional administrators in that office had direct responsibility in the areas of planning and finance. The facilities or physical plant departments typically report to the chief financial officer. The organization of these departments varied considerably at the institutions I visited. Two institutions addressed space management from the office of the University Architect and had space planners that dealt directly with space management data and planning. On those campuses, another department had responsibility for maintenance and daily operations. I was able to interview both the directors/architects and the planners which fulfilled my desire to interview the person/s in the position with the most knowledge, authority, and experience addressing space management issues. They were knowledgeable about space-related policies and procedures, the space management decision-making process, and the space management metrics used in their institution.

To get an academic perspective of space management, I wanted to interview both the chief academic officer/provost and a faculty member who had a role in space management. I interviewed the provost or vice provost at each institution. These people provided a comprehensive view of the space needs of the academic departments and how space is allocated to departments. Interviews with members or former members of the faculty senate or faculty sub-committee on space issues indicated the extent to which faculty and shared governance played a role in decision making regarding space management issues.

To obtain a complete picture of space management on campus, I also interviewed persons who were directly affected by the decision-making process but not formally a part of the process and may have had limited participation other than making a request for space. They provided another dimension to this study by providing the perspective of those only involved in the decision-making process by virtue of requesting either additional space or the renovation of existing space.

I interviewed at least six people per campus and in some instances, more than one person participated in an interview. These multi-person interviews consisted of personnel responsible for space planning in the facilities' or architects' office. (See Figure 2. for list of interviewees.)

Interviewees	Case 1	Case 2	Case 3	Total
Space planners	2	1	2	5
Facilities Director	1	1	1	3
Provost	1	1		2
Associate Provost	1		1	2
Vice President of A&F	1	1	1	3
Associate Vice President			2	2
Faculty	2	2	2	6
Total	8	6	9	23

Figure 2. List of Interviewees

The value of collecting data from multiple informants at multiple sites is that it aids in corroborating the evidence uncovered and contributes to the validity of the study. Triangulating data by using multiple sources of evidence of the same phenomenon or issue addresses concerns of validity (Yin, 2009). In this case study, the primary unit of analysis is the decision-making process associated with space management decisions (Creswell, 2007). Although this multiple-case study design required more travel and coordination than conducting a single case study, the benefits gained from visiting multiple sites and interviewing persons with different roles in the process has made a positive contribution to the overall quality of the investigation (Yin, 2009) and has increased the value of the findings.

Data Analysis and Findings

Data analysis started with document review and continued with coding and interpretation of the interviews. A study database containing document titles and brief content descriptions was developed and maintained throughout the study. The actual documents, interview notes, and interview transcriptions were filed by institution to allow

for efficient retrieval. Using ATLAS.ti qualitative research software, interview notes and transcriptions were coded and sorted. Codes were developed using topical areas identified in the literature review which were included in the interview protocol. (See Codes in Figure 3. and the Interview Protocol in Appendix E.) Some codes were related to specific questions in the protocol and some were broader in nature resulting in a large degree of overlap. Interviews from each institution were coded as a unit so each case could be described individually.

I used the coding process to help organize my data. Interview transcripts were entered into ATLAS.ti and grouped by institution which constituted a case. Each interview transcript was coded so I could organize the data by case and consolidate data by code for all interviews within each case. For instance, for the *Introduction* of each case, I used general descriptive data from the institution's website and interview data coded as culture. For the *Space Management Issues* section, I made a family of codes (Space Management Issues) that I used to write the case description based on the multiple interviews per case. These codes included: Space issues, process, data, resources, committee-space, governance, and decision-making. I also coded each interview for specific examples that illustrated the institution's space management issues. These examples were described in the *Illustrative Examples* section and in most instances, reported from more than one perspective. In Chapter 5, I used the data coded politics, priorities, and change to address the three related research questions across the three cases. The data coded procedural, action, and decision rationality were used to write the section on conceptual perspectives. The data coded efficiency and effectiveness were

integrated throughout chapters 4 and 5. When code content overlapped, I used the data in the section where it fit best. After the coding was complete and connections between codes were identified, individual case studies were developed.

Action rationality
Change
Committee-space
Culture
Data
Decision making
Decision rationality
Effectiveness
Efficiency
Examples
Governance
Politics
Priorities
Procedural rationality
Process
Resources
Space issues

Figure 3. Codes for Data Analysis

The research findings are reported in a narrative format as three individual cases in Chapter 4. This format draws attention to the ways in which each of the three institutions approached space management decision making on their campuses, identifying perspectives of the informants and how they relate to each other and space management within their own institutional context.

These findings are followed in Chapter 5 by a discussion which consists of three parts. The first part incorporates the study's conceptual framework identified earlier in which the use of procedural, decision, and action rationality in decision making are viewed in relation to decision effectiveness and efficiency. The second part consists of a cross-case analysis using the research questions to identify differences and commonalities

in the institutional approaches to decision making and to illustrate the ways in which institutions adapt to the needs of their internal and external environments. The third part addresses the original propositions of this study which emerged from the literature review and draws from the three case's information that leads to a better understanding of the decision-making process for space management issues in higher education.

Strengths of the Study

The strength of this study is in the qualitative, multiple-case study design. As noted by Yin (2009) and Stake (1995), a collective or multiple-case study design is preferred over the single-case design due to opportunities to investigate commonalities and differences among the cases, contributing to substantial analytic benefits. Additionally, conducting multiple interviews at each site provided a wide-range of perspectives on the decision-making process and added depth to the study. The qualitative approach allowed for a deep understanding of the issues related to space management decision making.

Researcher Role and Background

My particular interest in this subject comes from my involvement in space management related issues as an assistant dean in a college at an urban, public university. My role is not that of a space management professional, but that of one who must manage an organization based on the decisions of those who have responsibility for space management decisions. In my role, I have made requests for additional space to meet the needs of our growing college and have had to creatively fit people and programs into inadequate space while vacant space on campus remained unused. As described in the

literature, the decision-making process has been slow, unresponsive (Bess & Dee, 2008) and, at times, mysterious. I conducted this study to get a better understanding of the decision-making process by examining how other institutions of higher education address this issue. I have no prior personal or professional connections to the institutions included in this study or the individuals on the campuses that I interviewed. All associations are a direct result of this study.

CHAPTER 4

FINDINGS

As stated in the methodology section, all institutions and individuals in this study have been kept confidential. To maintain this confidentiality, I refer to the participating institutions as University A (UA), University B (UB), and University C (UC) and to the individual participants by functional title. While exact job titles may vary at different institutions, the functions are quite similar. To maintain consistency across institutions, the functional titles used in each case study are defined in this way: chancellor refers to the highest executive position in the state-wide university system; president refers to the chief executive officer of the institution; provost refers to the chief academic officer of the institution; vice president of administration and finance (VPAF) refers to the chief financial officer of the institution; associate provost (AP) refers to the provost's designee/s; associate vice president of administration and finance (AVP) refers to the VPAF's designee/s; faculty refers to associate deans, department chairs, and tenured or tenure-track faculty; director of facilities refers to the administrator responsible for the physical plant; and space planner/architect refers to individuals responsible for specific space-related duties such as database management, planning, and/or design.

All three institutions share a common organizational structure. The provost is the highest ranking academic officer and has responsibility over faculty, academics, and all associated academic space. The VPAF is the highest ranking administrative officer and has responsibility for finance and operations and all associated administrative space. The director of facilities and space planners report up through a line that leads to the VPAF. This structure is illustrated in Figure 4.

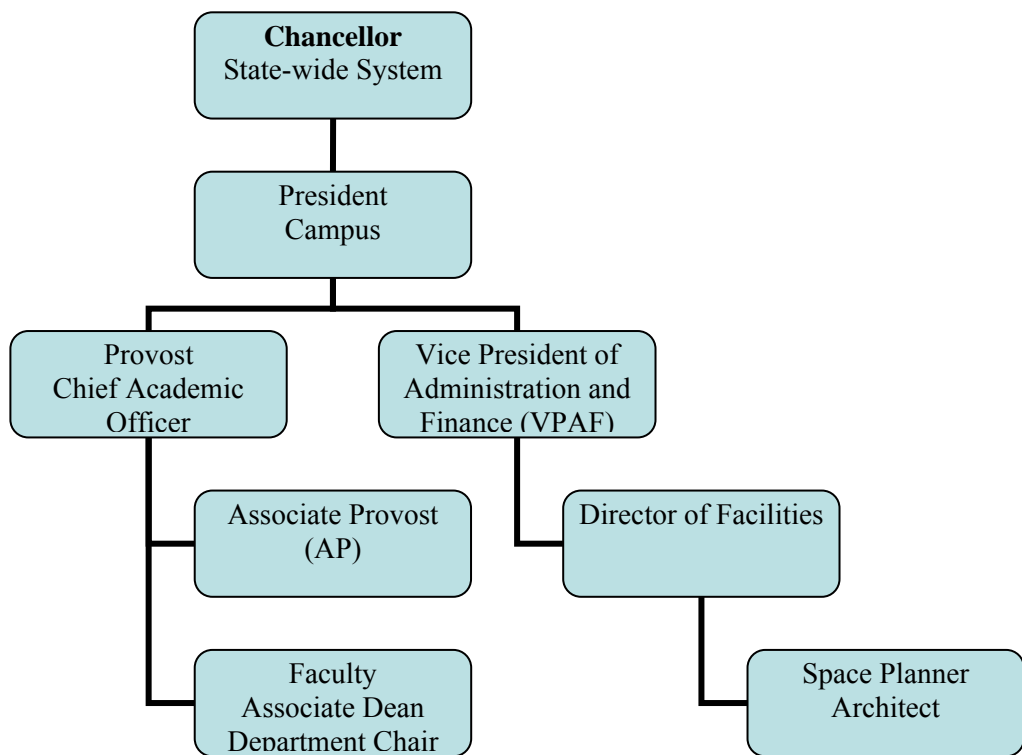


Figure 4. Organizational Hierarchy Chart

All institutions in this study are part of larger, state-wide, public higher education systems. All are experiencing financial challenges inherent with being public institutions which are compounded by the current economic recession. Two institutions have faculty unions, one does not. None of them are considered their state's flagship institution.

The findings of this multiple case study are presented as individual cases. Each individual case consists of the following three parts: 1) An introduction which consists of a descriptive section and a section that describes the cultural context of the institution; 2) A section on space management issues which includes descriptions of the space management process, data, resources, and space committee/governance; and 3) A section with illustrative examples.

Case 1 - Introduction

Description

University A (UA) was established in the 1960s as part of a larger state-wide university system. It is a mid-sized, urban, public research university and is located in the city's downtown district. Its physical plant is a combination of buildings originally built for campus purposes and pre-existing structures in the city that have been purchased and renovated over time. Some buildings were purchased and demolished to make room for new construction and some are vacant waiting for resources for renovation. UA is primarily a commuter campus with less than 1000 of its approximately 15,000 full and part-time undergraduate and graduate students living on campus.

UA's enrollment peaked in the early 1990s and has not returned to that level of enrollment, even though enrollments are now increasing annually. The university has undergone a new marketing campaign to attract traditional age students as part of its strategic plan. Consistent with that plan and in an effort to attract younger students, the university has completed construction of a new recreation center and is close to completion of a new student center and residential building. UA currently has a

disproportionately large number of graduate students that result in an overall increase in the cost of instruction. The current thinking and recruitment strategy maintains that more traditional aged undergraduates will bring in additional revenue over a four year period and that consistent stream of revenue will help subsidize graduate education. There is also an effort to attract foreign students as they make a more long term institutional commitment and contribute to higher tuition revenues.

Cultural Background

In the same way that culture shapes how people see themselves in the world by defining values, beliefs, customs, and the use of language, organizations also develop cultural characteristics. These cultural characteristics are dynamic in that they develop over time and are influenced by changes in the environment and in participants. It is important to identify and be aware of these characteristics to better understand how and why an organization, such as a university, reacts to the challenges it meets.

There are three relevant characteristics that shape the cultural beliefs and values on this campus that relate directly to this study. First is an acknowledged cultural divide between the faculty and the administration, sometimes seen as a divergence between an academic perspective and an administrative or business perspective. The other two characteristics that contribute to the university's culture are a sense of entitlement and a sense of acceptance of the status quo.

The cultural divide between administrators and faculty is common on many campuses. At UA it was expressed in ways that related to levels of respect, information flow, power, and influence. One faculty member referring to a particular instance noted

that “there’s a line in the sand between the administration and the faculty.” There were also many references to us [faculty] and them [administration]. This demarcation of roles resulted in a differentiation in the hierarchy of administrators’ influence and power. Administrators were treated with varying amounts of respect by the faculty. This was revealed in stories from space planners which told of faculty withholding information, requesting their removal from faculty offices, cancelled meetings, and similar acts that generated disrespect and distrust. Although the provost is the chief academic officer, a former faculty member and an advocate for the faculty; the position is considered administrative by some and results in the provost being placed in the “them” category. Even faculty administrators such as deans and department chairs are viewed as administrators by some faculty although they are given more credibility because they have come directly from the faculty ranks and hold faculty appointments.

The institution is viewed differently by these two groups as noted in the following quotes: A faculty member noted, “An academic institution is much different than a business one.” In contrast to that view, a space planner noted that within the institutional context, the facilities department is like “a business that has to operate, that has to make money that has to sustain itself, that has to provide services.” These two contrasting views result in a conflict when considering issues of space management, with administrators looking to cut costs and increase efficiency and faculty trying to maintain a sense of place. Some of this disconnect is evident in the conflicting and unproductive language used by each group.

Throughout the interviews, administrators used terms such as these to describe interactions with faculty - they were distrustful, uncooperative, bossy, rude, nasty, and hostile. Administrators indicated they were looking for respect and cooperation but were “met with stiff resistance,” and ended up with frustration noting that “you can never seem to satisfy people,” the faculty are “very quick to complain when a decision is made that they feel goes contrary to their good intentions” and “you can’t rely on what people are telling you.” While one administrator noted that you’ve got to be open and honest with them [faculty], others talked in less civil terms such as having to “force” faculty to respond to requests for information, “putting the hammer down,” or indicating that they could just take the space. Some of the strategies administrators noted using to get information about space usage without consulting faculty directly have included checking with maintenance crews to confirm usage, such as noting that they have not emptied a waste basket in the room for three years; using computerized energy conservation systems that will indicate when lights go on with motion detectors; and instructing facilities staff to keep their eye on what’s going on, from a safety and security standpoint.

On the other hand, faculty talked about being “forced” to comply with requests, being skeptical of administrative actions, and of being wary to cooperate because “once it [taking space] starts” you can expect it to continue. One faculty member who disagreed with the concept of the faculty/administration cultural divide noted that the “us” and “them” perspective was inherited, and that it needs to change, “. . .there’s no room for that.”

One way in which administrators tried to deal with this mutual lack of trust around space issues was to hire an outside consultant with an academic background to evaluate space usage. This strategy resulted in more cooperation from the faculty since the consultant was viewed as credible authority.

The second relevant characteristic of the culture at UA is that there is a sense of entitlement regarding space. This was referred to several times from different informants in the following ways: “Possession is 9/10^{ths} of the law, those who have it [space], have it and they hold on to it;” “Once you have it [space] and it’s yours and how dare you say that I can give that space to anyone else.” It was noted that there is “this inherited sense of territory.” One college reported that when a faculty member retires his/her space is given to a new hire and that a one to one replacement had been the norm. One informant stated that you “inherit” space. These references are indicative of the strong connection that individuals have to their space. The value and scarcity of space is illustrated in these comments: “when space becomes available, there is a ‘land grab’;” “people just expanded – like when the German army took over Europe;” the use of the phrase “hoarding space” which implies holding on to it even if they do not need it but do not want somebody else to have it just in case they might need it in the future. Initially space was territorial, leading colleges, departments and even individuals to consider that they own their space. This sense of entitlement and ownership is so strong to some that when some space planners were conducting a space inventory and evaluation, a faculty member called campus police to have them removed from his office. One space planner noted that “I’ve

had people tell me don't you worry about what we do in our space over here. Excuse me? That's my job."

It is important to note these cultural characteristics regarding space management practices and the history behind them to make sense of current decision-making processes. Several informants noted that the university officially owns all space on campus and that the VPAF is the "landlord." Although university ownership is acknowledged in the abstract, it is not recognized in practice. Historically, space ownership and management has been decentralized to the college and departmental level, even to the point that some individual faculty members claim ownership of their offices. This ownership mentality has been supported by a naming convention on campus which identifies buildings by function, for instance, the Smith Science building or the College of Education building. This has resulted in a territorialism which led to one administrator to describe the placement of a department from one college in another college's building as "the first alien in their building."

This sense of entitlement extends beyond owning current space to the idea of being entitled to have new space. For example, when college leadership was approached by administration to discuss renovations to the college's existing space, they refused to discuss it and instead brought out architectural plans for a new building.

One effort to change this sense of entitlement across campus involved classroom space. Historically, a large percentage of classroom space was controlled and scheduled at the college or department level. A few years ago classroom scheduling was centralized, putting the registrar in charge of most classroom scheduling. This significant change to

centralize classroom management was instituted in two ways; first, by introducing a scheduling software program and secondly, by upgrading technology in selected classrooms. This two prong approach gave something significant to both the faculty and the administration. The faculty benefited by having upgraded technology in more classrooms and the administration benefited by regaining control of the classroom space. Since all departments could not afford to upgrade the classrooms under their control, they were now able to offer their faculty access to technology enhanced classrooms. Having access to these classrooms counteracted the faculty desire to teach within the same building as their office. Although this might result in faculty having to travel farther to class, they were now able to make a choice. If they wanted to stay closer to their office, then they might have to settle for space that did not have technology upgrades, the choice was theirs. They did not feel like something was being “forced” on them. The provost noted that this effort “was a pretty successful culture change for things like classrooms...” The administrators were able to let technology force the issue of centralization, by both the technological upgrades and by investing in a new scheduling software program. Technology added value to the classroom space and efficiency to the scheduling process. It was reported that there is some drift back to a classroom ownership mentality, an indication that the change was not fully institutionalized, and that it may be time to remind the departments that the provost owns the classrooms, not the departments.

Another way this sense of entitlement is changing was reported by a second generation faculty member. (First generation is founding faculty, second generation is 25

years later; and third generation would be new faculty within the past ten years.) This informant noted that some of the older faculty were the most entrenched in this ideology (or cultural view), they were most resistant to sharing space, and their retirements were referred to as “some very good retirements.” This faculty member suggested that while the composition of the faculty was changing, with the retirement of older faculty and the hiring of new or “transitional faculty,” the composition of the faculty senate remained relatively unchanged, made up of mostly senior faculty members. It was suggested that cultural change comes at the personal level, with changes in personal attitudes that eventually pervade the university. Faculty with a different cultural outlook were seen as the “silent majority” and were characterized as being less invested in the social stratum of the university and more interested in outreach and community engagement.

UA also exhibited a sense of acceptance, acceptance with the status quo. This was expressed by the provost who commented on the faculty’s understanding of scarce resources and their reluctance to ask for more or expect more than what they already have. A belief expressed as “We don’t have much we don’t get much,” and “Hang on to what you have.” The provost noted that upon visiting a faculty office, it was evident that the room needed new carpet and desk chairs and was surprised that the faculty member accepted this low quality working environment. The provost went on to note that departments and colleges can choose how to spend their money and that in many cases it depends on the perspective of the individual responsible for budgeting to prioritize the value of fresh paint, comfortable furniture, and other space improvements that can serve as morale boosters and work to change the sense of acceptance of the status quo.

The next section will address issues directly related to space management in light of these cultural characteristics.

Space Management Issues

A brief description of the current status of space on campus will provide the context for this section. In addition to the auxiliary (non-academic) buildings newly constructed or under construction, UA has a new academic building scheduled to open in the next year and has renovated several other academic buildings in the past ten to fifteen years. As noted by several informants, there is currently a surplus of classroom space on campus during the day, although classrooms are used to capacity for evening classes due to the high number of part-time undergraduate and graduate students. The growth of graduate education, delivered primarily in the evenings, has resulted in the use of satellite campuses to relieve the shortage of evening classroom space on the main campus. In addition, alternative models of scheduling which include weekend classes have been adopted to alleviate stress on the current evening classroom inventory.

The primary space management issue articulated by informants is not that they don't have enough space, but that the quality of the space does not meet the current needs of the university, partly because the original campus buildings are about 40 years old and have not been sufficiently upgraded. For instance, science laboratories are outdated and cannot support the current technology requirements to provide state of the art educational opportunities for students. With construction costs associated with building a new science facility deemed prohibitive, UA has had to make do with the space available. As a result of successful university efforts to increase research funding, research laboratory and

office space for research faculty are in short supply. To accommodate these shortages, classrooms have often been converted to provide research laboratory and office space. If a college has excess classroom space under its purview, the decision to make these changes falls to the dean. If a college does not have control of any space to convert to its needs, then the decision to identify space goes up to another level of administration.

The demand for academic programs has shifted over the years, resulting in enrollment growth in some colleges and a decrease in others. Reallocation of space among colleges to accommodate this fluctuation in enrollments and subsequent space needs has been problematic due to the sense of entitlement and ownership issues mentioned earlier. In most cases, the colleges have been assigned to buildings that are named for the specific college function, such as the College of Engineering or the College of Education. As mentioned earlier, this naming convention has resulted in territorialism and a sense of ownership. Deans are free to make space assignment changes within their college, but as noted earlier, the possessiveness of space often goes to the departmental and individual levels. Administrators are very much aware of the difficulties that can arise when space is reassigned and try to avoid it unless absolutely necessary, even within colleges.

Space management process

UA has a comprehensive Space Management Procedures Manual which clearly defines university's space priorities which ranks academic space as the highest priority and defines academics as "approved instructional and research programs scheduled by regular academic departments and colleges." Facilities used for these academic purposes

“are scheduled through the classroom scheduling office, unless otherwise permanently assigned to the departments and/or colleges.” It further identifies what data is annually collected to inventory space and to audit its usage. A comprehensive, custom designed database is maintained by the office of space management and includes information on area measurements, CAD drawings, floor plans in PDF, room classification and identified use by code.

The space management decision-making process at UA can start from the bottom up or the top down. On a bottom-up request, the originating office first tries to work out space issues in their own department through the department chair, or between chairs if two departments are involved. Within the college, the dean has the final decision-making authority. Space swaps involving two colleges can be made when the deans agree, if they do not agree, the provost decides. The provost may give this decision-making authority to the AP. Ultimately, the provost has the final authority over academic space, which has a priority on campus. When a space change has been successfully worked out, the office of facilities planning is notified so they can update their database and provide any minor upgrades to the space like painting and/or carpet.

If the parties seeking additional space have not identified a viable alternative, there is a procedure for them to submit a memo to facilities requesting information regarding available space on campus. The memo must identify who is requesting the space and why and have administrative signatures up through the dean or vice president level before the facilities planning department investigates options. At this point, the facilities department also confirms that adequate funding has been identified by the

requestor. A request for a significant renovation also starts with a memo to facilities, signed by the dean. Again, a funding source should be identified. If the requesting department does not have funding, they must request it through their dean/director or higher up the administrative hierarchy. Agreement on the project and funding availability must be identified at the vice president or provost level because the role of the space planning department is “limited to analysis, review, advice and recommendation.”

A top down initiative to change space is based on a strategic decision from the president or provost/senior executive level. In this case, the senior executive would meet with the deans or vice presidents in an effort to make an amicable move. If the request to reallocate space comes from the senior executive level, the department is not responsible for funding. All space changes are reported to the space planners to record in the appropriate database.

UA has a department of facilities planning which consists of professional architects and space planners. The space planning professionals are involved in designing new space and reconfiguring existing space. The increased functionality of the new buildings on campus has had a positive impact among those requesting new space. Seeing that quality space has been designed for specific functions has encouraged space requestors to more fully participate with space planners in discussions about how much space they really need and to focus on issues of quality over quantity. Seeing better quality space appear on campus has engendered more trust in space planners. As one space planner said, “Sometimes people trust us, sometimes people don’t.” Space planners indicated that they try to be inclusive when designing space for departments and

establish user groups so they can accommodate departmental needs to the smallest details, their concern was that they were often not consulted or included in committee meetings or that they were asked for input too late in the design process. However, this design for function is more difficult to do in existing space, especially when the planning process is done “backwards.” This happens when departments move into space first and then try to make it fit their needs. Space planners noted that they can provide suggestions to make existing space more efficient, but they cannot make people want to share office space.

The importance of having an identified process was noted by a faculty administrator, “faculty need to know that they are being listened to. You have to have a process in place. You’re gonna come to the same end but if you don’t do it right, it can... Then faculty can be very, very resistant.”

Data

Data on space is maintained by the space planners in the facilities department. Inventories and space audits are conducted annually and the collected information is entered into a database. All data regarding room type, size, usage, and capacity are available and CAD drawings of all buildings are available. The planners interviewed noted that this quantitative data on space leaves a large gap in information in that it does not reveal the quality of the space or how the space relates to the functional needs of the occupant. The annual space audits are being revised to enhance the quality and detail of information received from the departments. The planning department has reason to believe that some of the reporting misrepresents the way space is used and is a tactic used

by departments to hold on to space they no longer need. One space planner observed that information gathering has advanced beyond rudimentary figures and drawings, “its not just the squeaky wheel now that’s gonna get greased because there’s more methodologies out there available to the universities to operate as businesses to find out the facts, like space management industry is out there with standards.”

Industry standards are used for new construction, but assignments in older buildings are inconsistent in that they were not built for specific needs. New faculty typically request research space based on square feet and their requests are accommodated within available space in existing buildings. As mentioned earlier, sometimes classrooms may need to be converted to lab or research space to accommodate the needs of new faculty.

In addition to the data provided by the office of space management, the provost’s office indicated that they utilize an additional set of data when responding to requests from departments for more space. They include institutional research data originating in their office which report on student credit hours. These data give an indication of growth by indicating the numbers of students, faculty, and classrooms required in a specific department. A compilation of these data are incorporated into an annually produced report on enrollment trends.

To enhance data collection, several informants reported individually inspecting space. When needed, they will go to the space to determine its status and evaluate if it is being efficiently utilized. Although this is not done on a regular basis, they indicated they would like to do so if time permitted. In one reported instance, a physical inspection

indicated that a graduate student was actually living in research space. Depending on the hierarchical status of the “inspector” some are met with resistance and little cooperation from the space occupants. To reduce this resistance and to alleviate the workload on the space planners, a private architecture consultant with an academic background has been hired to assess the condition of space on campus to assist in determining whether it is suitable, needs renovation, or should be demolished. This “outside consultant” approach to data collection has resulted in more cooperation from space occupants. And the visual inspection of space has added a new dimension which enhances data collection. Where previous methods of surveys, forms, and database entries provided extensive quantitative data, visual inspection has enhanced the quality of the data by incorporating a qualitative dimension which provides more detailed description of the quality of the space and its suitability for the desired use.

Resources

As in most public higher education institutions, allocation of resources is a constant concern. Space is considered a valuable resource on campus and how it is managed and allocated can indicate institutional priorities. However, managing space resources requires significant financial resources and how they are allocated and distributed differ on many campuses. For large projects, UA requests capital funding from the state and when projects are approved, they are required to save funding from each year’s allocation until they have enough to start construction. For smaller projects, financial resources for reallocations or renovations typically come from college or departmental operating budgets. This means that when a department or college requests

additional space or renovations to existing space, they must identify a departmental funding source. Typically units pay for minor renovations from “carry over” funds. Carry over funds are any unused funds from previous years that come from savings from operational or personnel costs.

A funding source must be identified before designers draw up plans for any changes. Units are typically expected to cover costs of projects that do not exceed \$225,000. If they do not have adequate funding, they look higher up the hierarchy to the dean or provost to support their needs. Their arguments in support of additional funding may stress that their department has been identified as an institutional priority or that they can contribute part of the required funds from their own allocation or with money they have raised through philanthropy. Projects costing over \$225,000 are included in the university’s request for capital funding from the state. In addition to requesting funding from the state, the provost’s office will pursue grant funding, federal funding, state earmarks for specific projects, and philanthropy.

Another approach to centralizing control of space on campus is directly related to the allocation of financial resources. For example, when the university has identified needs for reclaiming space they have charged units for their space by square footage. This strategy is used to reduce what administration calls “hoarding space,” that is maintaining ownership of space that is not currently being used. The charges are based on a square foot maintenance charge for upkeep and utilities. Putting a price tag on space has made units more aware of the cost of space in terms of lighting it, heating it, and maintaining it. As one administrator noted, “when you put a price tag on it, all of the

sudden they [units] rethink whether they really need all that space.” When asked if units could use the saved financial resources for other needs, I received an interesting response. No, units did not get access to additional funding, in return for relinquishing space. Instead they were able to reduce their unit’s deficit and looked good in the eyes of the provost. (It was reported by the VPAF that most units operated in a deficit.) This goodwill was seen as political capital and was useful for future negotiations and requests. As noted by the VPAF:

With the current situation of reduced state funding, the institution is being forced to figure out ways either to reuse and better use their facilities or find another way to finance improvement. But saying we are out of space and we got to go to the state and get another \$25 million to build a classroom building, that’s not gonna happen.

Reallocation of space was easier to manage when the institution was in a growth mode and financial resources were increasing, however, when the opposite is true, “the system just doesn’t work.” New economic realities are going to require institutional priority setting at the highest level and some budgets will have to decrease, this has not happened before.

Space Committee/governance

As noted earlier by Kezar and Eckel (2004), governance in higher education “refers to the process of policy making and macro-level decision making” (p.375). They further describe it as “a multi-level phenomenon including various bodies and processes with different decision-making functions” (p.375). However, central administrators have

final authority to make decisions (Benjamin & Carroll, 1998, p. 110). This is consistent with the governance process at UA. Governance is hierarchical and all binding decisions are made at the senior administrator level. Faculty participate in decision making in an advisory capacity through the faculty senate and have the most influence on campus decision making related to curriculum and tenure matters. The campus is engaged in an on-going inclusive strategic planning process in which faculty participate. This planning process focuses on the general direction the institution is heading and on broad strategic plans to accomplish the identified goals.

There is no strong faculty influence in space management decision making at UA. There is no formal campus-wide space management committee. The only identified formal committee is a standing committee on academic space within the faculty senate. This committee is authorized by the faculty senate by-laws to review classroom space issues and make recommendations. The committee responds to requests to review issues that arise, but does not vote on issues and its recommendations are non-binding. Since the faculty became unionized, the committee has also taken on the role of monitoring space issues in regard to compliance with the union contract and to identify unfair practices. For instance, one stipulation of the union contract states that faculty are entitled to equivalent space if they are moved; they can be moved, but not to smaller offices or research laboratory space than they currently have.

Membership in this faculty senate committee consists of tenured or tenure-track faculty, adjuncts are not entitled to participate as stipulated by the faculty senate by-laws. Committee membership is voluntary. Faculty are sent a list of various senate committee

assignments and choose the ones they are interested in serving on. In terms of desirable committee assignments, the faculty senate committee on academic space has been described as “an obscure committee that is often overlooked” and “not a plum assignment that a typical faculty member likes to spend their extra time on.” Staff members of the university facilities planning office sit in on these committee meetings to provide information.

Historically, the faculty senate committee on academic space has been concerned with only classroom space issues, other types of space fall under the purview of administration, notably the provost and the VPAF. The committee has been fairly inactive; in the last ten years it has only submitted one annual report and no minutes have been posted in over two years indicating that no meetings have taken place. However, recent events on campus in which faculty were not consulted have raised the level of interest in space issues and the committee, with a newly appointed chair, now wants to be involved in additional university space management decisions affecting offices, research space and non-traditional classroom space. The particular events that drew a negative reaction from the faculty include the removal of two lecture halls from the classroom inventory and the contentious expansion of one college into office space traditionally held by another, referred to as a “crisis” by more than one informant. (These particular examples will be discussed in more detail in the following section.)

The new faculty senate space committee chair plans to engage the committee members more actively in space issues and expand the committee’s function. While recognizing the limitations inherent in non-binding recommendations, the chair sees the

primary role of the committee being to solicit and encourage faculty input.

Administrators commented that they go out of their way to be inclusive of faculty members when considering space issues but they seem uninterested. One commented, “We only hear from them [faculty] when they are unhappy” and they are “quick to complain when a decision goes contrary to the good intentions of their members.”

Another commented that they receive complaints from those who “hadn’t shared in the burden of decision making,” noting that they “always believe there’s extra space that’s not theirs.” The VPAF talked about trying to get faculty input through the committee, but having trouble getting them to meet to discuss pending issues. He noted, “They always want to complain about space but they don’t really want to participate in solving some of the problems.”

Through committee participation, faculty can discuss their space concerns and make recommendations to administrators, but ultimate decision-making authority for academic space rests with the provost or his/her designee. The following section provides examples of three specific space issues that occurred on campus in the last few years.

Illustrative Examples

The following examples illustrate space management issues at UA that pertain to issues of classroom space, growth, and changing priorities.

Classroom conversion

In this example, two large lecture style auditoriums were removed from the classroom inventory. The decision came from the university architect without consultation of the faculty senate committee on academic space or the provost. When

complaints about the loss of these two auditoriums came to the provost, an investigation revealed that the two rooms were actually assigned to the conference center and were not originally intended to be used as classroom space. The conference center which reports to the VPAF did not notify the provost or faculty of their intentions to renovate and reclaim the space for conferencing purposes. This action resulted in the conception that the process of consulting with faculty had not been followed, when in fact, it was outside of the faculty purview. The loss of high capacity rooms had a direct impact on the faculty that used those rooms and resulted in a higher sense of awareness of space issues and a desire by the faculty to be more involved in space management decisions.

Reallocation of space based on growth

In this example, one college had experienced a significant increase in students, 150% increase in 5 years. New faculty had been hired to accommodate this growth and now there were more faculty than available office and research spaces. This resulted in a need for additional space beyond what was available within the college. During the same time period, statistics revealed that another college had seen a significant decrease in students and two departments in that college had merged into one, effectively freeing up space. When approached to relinquish the vacated space, the dean of the shrinking college resisted, fabricating needs for space and expanding in an obvious way to fill vacant space, i.e. women's graduate lounge, men's graduate lounge, fraternity room. This effort to "hoard space" was recognized as a tactic to retain unneeded space because they felt ownership and entitlement to space which had originally been assigned to them. Additionally, they thought that infringement by another department would be the start of

more space getting taken out of their control. This fear was not unfounded as enrollments continue to drop and administrators indicated that they would reassign their space if necessary.

This issue became very contentious as the dean from the growing college was desperate for additional space. The issue had the potential to be discussed at the faculty senate committee on academic space except that the chair of that committee was in the college that hoped to gain space and so no meetings were scheduled to discuss the issue. This angered the president of the faculty senate who was in the college that was trying to hold on to their space. The academic space committee chair worked outside of the committee structure to secure the additional space by going directly to the provost. This action resulted in the faculty senate president removing the chair from the space committee and appointing a new chair. Working outside the committee structure in this way led one faculty member to comment that “the space had been embezzled” and that the result was that space was appropriated “unethically” by avoiding the shared decision making process.

While the provost supported the transfer of space to the growing college, it resulted in a power play between the AP and the dean of college who lost space. When the AP informed the dean that they must vacate the space, the dean responded with a note that said, “The last time I checked, I’m a dean and you’re a director and unless I hear it from the provost you know I’m gonna forget what you just told me.” The provost’s response to the dean that the AP “has the authority to act for the provost’s office in this matter” resolved the issue and the reallocation of space took place.

The AP noted that the individuals that moved into the vacated space were faculty members, so the issue was not encroachment by administration, but the first time anyone from another college had occupied space in that building. When the faculty from the different college moved into the building, the AP indicated that they went in as a unit, “there are several of them as their own immediate family together... and I think that probably has minimized the whole situation...” This incident also prompted one administrator to refer to the group moving in as “aliens.”

Changing priorities

This example is an indication of how changing priorities affect space management. A space study conducted ten years prior had indicated that a college with a high priority, determined both institutionally and from a state-wide perspective, was limited in growth due to the lack of space. The university requested capital funding for a new building to house this college. After approval, it took almost ten years to accumulate enough funding and to begin construction of the building. During that ten year time period, university and state-wide priorities changed favoring another discipline. A new president was hired and saw this building under construction as an opportunity to address the new priority, he wanted to abandon the original purpose and convert the building to a new purpose. The provost convinced the new president that this decision would not be well received as the dean and faculty had been waiting ten years for this building and had a lot of energy invested in the design. Additionally, if he carried out his plan, he would start his tenure at the university “with the faculty hating him.” Through negotiation and

compromise, they reached an agreement that part of the new building could be used for the new priority.

Conclusions

As this case has illustrated, space management issues are important and exist at several different levels. Despite the fact that UA claimed not to have an overall space shortage problem, they did have a shortage of quality space designed for optimum functionality. The provost pointed out, “The relationship that the faculty and the deans have to their space is much different than in the corporate world where you are given a place to work and [in academia] people think of it as a second home.” The VPAF shared this view, “It’s a status symbol in an area where there are very few differentiators between a professor on their first day of work and a professor on their last day of work 30 years later. They’re doing the same job.” Administrators recognized that space is very important to faculty; it evokes an emotional response because they have so little, it’s important because so much else is attached to it – ego, home, a sense of belonging. It is where they do their research and train their students. The provost noted, “It is very emotionally painful to try to move a professor from the laboratory or a professor from an office.”

The provost acknowledged the difficulty of managing space in such an emotionally charged environment, “I don’t think we ever handle it right.” Giving up space or having it taken away is viewed more as a personal loss or as a departmental loss than as a contribution to the growth of other departments. The faculty feel so strongly about space that the provost reported receiving hate mail from faculty and a threat of

censure by the faculty senate. As a result of all this backlash and controversy, the provost noted, “I do feel that I personally made some missteps of underestimating the attachment people have to space.”

Throughout the years, the university has been sending mixed messages to the university community. They have worked to house each college in a separate building, noting that by next year, all colleges will have their own building. At the same time they are trying to plan for uneven growth and expansion. While they talk about centralizing classroom scheduling, they note that each college has its own building. They acknowledge that nobody wants to give up space in what’s perceived as their own building, but keep designating single purpose buildings. The VPAF predicts that that practice will change in the future.

Case 2 - Introduction

Description

University B (UB) was established in the 1960s as part of a larger, state-wide university system. It is a mid-sized, urban, public research university and is located in one of the city’s suburban areas. While not in the downtown district, it is serviced by public transportation and easily accessible by automobile. Its physical plant consists of a combination of buildings originally built for campus use and pre-existing structures in the neighborhood which have been purchased by the university as they have come available. Of these, some have been demolished, some renovated for campus use, and others are waiting for resources for renovation. This building expansion has resulted in a physically divided campus, the east campus and the west campus, separated by a major

thoroughfare. New construction in the last ten years has included a student center, a center for performing arts, and a parking garage.

UB is primarily a commuter campus with slightly over 1000 of its approximately 16,500 full and part-time undergraduate and graduate students living on campus. Plans are underway to double the number of resident students and build additional dormitories. Approximately two-thirds of undergraduate students are enrolled full-time and one-quarter of graduate students are enrolled full-time. UB identifies its core strength as attracting non-traditional and transfer students. A recent headcount indicated that over 75% of incoming undergraduate students were transfer students. While continuing to recruit transfer students, UB is also working to attract more first time/full time freshmen, not only to enhance current revenues and provide a traditional university experience for its students, but to invest in the future by promoting loyalty to the university and to promote future philanthropic commitment to the university. Enrollment at UB has been steadily increasing and the campus is trying to expand its evening programs. They take great pride in their faculty research and publication activity as noted by their national ranking in faculty scholarly productivity among universities in their classification. Some of UB's academic programs are ranked among the top five in several categories of various ranking organizations.

UB has described their organizational structure as flat, with only three vice presidents reporting directly to the president, resulting in all university functions coming under three general areas: academics, administration and operations, and development.

The university has recently engaged in an inclusive strategic planning process, resulting in what is referred to as an action plan.

Cultural Background

The culture at UB is one that has been shaped by a fully inclusive system of shared governance. The term “shared governance” was prominent in discussions with informants on campus. UB has a comprehensive shared governance committee structure which has representation from every group on campus, from administrators and faculty to students and custodial staff. Concerted effort has been made to be inclusive of all members of the university community. For instance, the provost mentioned that the president scheduled meetings at various times during the day to enable staff on different shifts to participate in discussions about accreditation. The president wanted to make sure that all staff understood how important their role was in the university by asking, “How do you help students learn?” This outreach resulted in custodial and maintenance staff realizing that “if the place isn’t clean, the building is falling down, the students can’t learn as well.” This realization was said to have prompted the staff to take ownership of their role in education and feel a part of the overall mission of the university.

This inclusiveness is pervasive throughout the committee structure on campus. The faculty senate includes tenured, tenure-track, and full-time nontenure-track faculty; all participate equally. Another group on campus referred to as “the all campus committee” welcomes representatives from every group on campus, again, all are entitled to participate equally. Not only is the committee structure on campus strong, other

intercampus committee structures exist across the state-wide system including an intercampus faculty council and an intercampus staff council.

In addition to the inclusive committee structure, the provost noted that the campus was very “porous,” meaning that it was open to ideas and discussion and executive level administrators were accessible on many levels. The provost noted that all faculty and staff on campus felt free to contact the president or vice presidents in person or by email and that they were listened to. “Everyone around here seems free to tell their opinion on what they want and very often they have very good ideas...you never know when one of them is gonna be really clever.” The provost indicated that there were a lot of meetings on campus and a lot of conversations, “it’s just a very, very porous and consultative campus. Everybody talks. There’s very much shared governance.” A faculty member confirmed this view by saying that the inclusive committee structure resulted in a “pure, pure democratic process” in which “this president and this provost are particular advocates of shared governance and take most if not virtually all major decisions to one or more committees...It’s very much a culture of get as many of the appropriate committees as involved as possible.” This open consultative process led a faculty member to note, “my impression is that there is a general feeling that people are listened to and that virtually all, all points of view are at least heard and I don’t think there’s any question there.” The Vice President of Administration and Finance (VPAF) further confirmed this culture of shared governance by describing the culture as participative and consultative. Acknowledging that the final decision-making authority rests with the president and the vice presidents, the VPAF noted “Our [president] takes very, very

seriously all recommendations from every committee. So if we, the administration disagrees with the committee and it gets to the [president], we're probably gonna lose."

Although the campus is open and porous, there is an internal anxiety over sense of place or status that seems pervasive. Issues of status or prestige were mentioned in terms of UB's place in the city, in the state system, and even internally. In reference to UB's status within the city, a faculty member talked about competing with the private universities and that faculty are "always feeling like we have to prove ourselves" which has resulted in UB establishing "fairly high requirements for tenure and promotion and we really try to emphasize research and publications." In terms of how they view themselves within the state system, one faculty member noted that UB is "seen as not the same as or not as big as [the flagship]" and described this as "always feeling like the underdog," and a space planner described it as feeling like the "little brother" or "little sister" in the state university system. To counteract this sense of inferiority or insecurity, UB has made a point of publicizing their rankings and focusing on their strengths as they continue to grow while striving and aspiring to improve their reputation. These feelings of low status are reinforced by perceived slights at the state level. For instance, one building project which was identified as a critical need 15 years ago is still waiting for state funding. Although funding was close to being appropriated twice at the state level, it was delayed both times. One director lamented that it took over five years to get space for a newly formed school and that it only came about with pressure from the accrediting body. A view that the flagship campus should have the best of everything came out in a story about alumni from the flagship attending an event in UB's new theatre, this group

was “offended” that UB “would have something so much nicer than what they had [at the flagship campus].”

There also is a status or prestige issue internally at UB between the east campus and the west campus. The east campus is home to the core academic units and student buildings and the west campus is the result of expansion and growth. Units prefer to be located on the east campus, not “on the other side of the road.” One school was consolidated and relocated from the east campus to the west campus; this perceived loss of status was mediated by the allocation of more space in the new location. Besides being home to the original campus, the east campus maintains and gains higher status by the work that is conducted there. As noted, “The units on campus that have the highest status are the ones who do the best in terms of research and publications” and there is more research currently taking place on the east campus, thus giving it more prestige. As more units are expanding to the west campus, a faculty member noted that this divide is beginning to change. There are currently plans underway to relocate and consolidate two complementary colleges into an existing building on the west campus, making it “the first of its kind in the nation.” This move is expected to maximize UB’s prestige and enhance its presence and reputation within the state and nation as well as enhance the prestige of the west campus.

The provost described how departments have had a sense of ownership of their space. Once space is under departmental control, the chair or dean has control of its use. A new policy states that vacated space no longer stays under the “ownership” of the unit that had it before. Vacated space now is to be returned to the central pool of space and

reverts to control of the appropriate vice president. Since the university has a flat organizational structure, as described by the provost, of three vice presidents, they can informally meet and decide how to reallocate the vacant space. “We’re small enough an institution, even though we have 16,000 students, we are a very flat organization. There are only three vice presidents. We can easily talk. We don’t need to be very formal.”

The space planners talked about how culture relates to the quality of space, noting that those people in new or renovated space had positive feelings and were more interactive and welcoming. The quality of the space made them feel better about themselves, their work, and the university. They talked about the positive effect of having a “hallmark” building on campus, one that is unique or outstanding, and “what it can possibly mean to a campus” and how it can influence the culture. The presence of a state of the art building that has a public presence, one that is used for more than just academic purposes and welcomes the public, “has a lot of positive influence on culture and attitude.”

Space Management Issues

A brief description of the current status of space on campus will provide the context for this section on space management issues. These issues have been categorized into four areas: the first describes the overall process of space management, the second describes the use of data in this process, the third describes the role of resources in the process, and the fourth describes the space committee, its role, and how that role relates to university governance.

The original buildings on campus are over 40 years old and some of those purchased for expansion are over 90 years old. In addition, there has been some new construction in the last 10 years as well as some significant renovation projects. In one instance, a dormitory building was converted into academic space and home for a new school. There is a general sense of a space shortage on campus, although it was mentioned that there are often vacant offices scattered around campus and classrooms are not used to capacity except for prime time two days per week. The provost noted:

We do have some vacant offices and vacant spaces but they're not necessarily in the right places for certain things. They're on the edges of campus or that sort of thing, which doesn't fit. So that's why I say we don't have very much available space.

The primary space issues at UB relate to the location of space on campus. As mentioned earlier, the campus has an east campus and a west campus. The east campus consists of the original campus buildings and is considered the core of the university. It is a more desirable location than the west campus, which consists of pre-existing older buildings that have been retrofit to accommodate academic use. Many of the space management issues relate to unit growth and dispersion of offices in different locations on campus. Efforts to bring all component parts of colleges and schools in one location have driven much of the space management discussion as well as the need to have units appropriately located on campus.

Most classrooms at UB are centrally scheduled and no one department has exclusive use over a classroom with the exception of science labs and other special

purpose rooms. Classroom technology upgrades have taken place to bring them up to date and create “meaningful learning environments.” An issue with classroom capacity was recently identified due to non-compliance with fire and safety codes. According to building codes, some high capacity classrooms will need to be reconfigured to have fewer students or have an additional egress built. Classrooms are reported to be in short supply on some days, but in general there is excess capacity. Most classes take place from Tuesday through Thursday leaving the campus “void” on Mondays and Fridays. This utilization pattern was said to be the result of “demographics” and having commuter students who “have jobs and have families and things like that” which affect their schedules. The way this scheduling pattern emerged was described by a space planner: “It’s that circular finger pointing. The students say well the faculty won’t offer classes. And the faculty say well, the students won’t come.”

By instituting a new policy, the campus is trying to regain control over other space on campus by requiring departments to return space to the “central pool” when it is vacated so it can be reassigned. With a history of departmental perception of ownership of space, this change is met with some resistance. For example, a faculty member said that although his college is raising funds to construct a new building,

the dean has first claim on the space that he or she is currently in. So when our people move to the new building and that space is opened up, then they have the right to either vacate the [old] space or say no, we’re gonna keep this for some other purpose.

Meanwhile, across campus other departments are already vying for that space and administrators are expecting it to return to the central pool for reallocation. The VPAF noted that when a unit moves into new space, “the old stuff goes into a general space bank...Once you move, you don’t have claim to it. You can’t have it both ways. They want it both ways, but they can’t have it both ways.”

UB has plans for future building and renovation. Units on campus know where they are in the priority list and seem to patiently wait for their turn to come up. For instance, UB has been trying to upgrade its science facilities for 15 years. Despite their inability to secure funding, the building project is still viewed as the highest priority. One faculty member noted that although funding has not come through for the building, the pressure is off “because a decision has been made to go forward and people are willing to wait a little bit more.” Decisions that have been made and are waiting for funding have taken pressure off of lingering space issues because they are no longer seen as being under campus control. Instead, they are dependent on either state funding appropriation or private fund raising efforts.

Space Management Process

The space management process at UB has two complementary components, one informal and one formal. The inherent informal process focuses on people and informal communication; who you know, who you talk to, and what you see. The formal component, which has been introduced in the last five years, includes forms, procedures, and space committee involvement. It was instituted in an effort to make the process standardized and more transparent.

The general space policy at UB is described in the Space Management Procedures Manual which clearly defines procedures that “establish a comprehensive framework for assignment and management of space...[that] will help insure that campus space is used efficiently and effectively.” While stating clearly that all space is “owned by the University,” the campus “supports the practice of decentralized space management in the belief that individual units can best manage their day-to-day space needs.” The manual further states that “the assignment of space is neither permanent nor does it confer ownership of space” and that reassignment may be necessary “in order to better serve the overall University mission.” This policy sets up a system in which deans or directors have virtual autonomy over the space assigned to their unit. Changes can be made within units and between units as long as all parties are in agreement. These changes are referred to as trades or “musical chairs” and result in a “domino effect” which frees up space and results in more changes. Consensual changes are part of the informal process that takes place when units are in agreement. An important component of the informal process is trust; trust between the different units on campus, between VPs, between provost and deans, deans and faculty and unit managers and staff.

The informal process starts with someone identifying a space need and in some cases, suggesting a possible solution. This need is then communicated to the department chair, if not resolved at that level, the issue proceeds to the dean. If the dean cannot resolve the need within the college or in consultation with a college-wide space committee, then trading or negotiating with others deans may take place, if this is unsuccessful, then the issue is brought to the attention of the appropriate vice president. If

the vice president cannot resolve the issue, it is brought to the other two vice presidents for consideration. If it is still not resolved, the issue is then sent to the space committee for investigation and a recommendation for resolution.

A more formal process is initiated when the requestor cannot resolve the issue informally at the college level or cannot identify any viable space options. When this occurs, the requestor fills out a form indicating the need for space along with a justification statement. This form then goes to the vice president who tries to accommodate the request within his/her area of control with consultation of the space planners. If the vice president cannot accommodate the request, he/she talks to the other vice presidents to see if they have space to accommodate the request. If the three vice presidents cannot come to an agreement on proposed solutions, the issue is taken to the space committee to consider and make a recommendation, or it goes to the president. Although the president has the final decision-making authority, most space management issues are resolved at the vice president level. While this formal process is spelled out, the provost noted that due to limited space and few moves, it is not used very often. "As units grow and shrink, they just sort of unfortunately usually deal with whatever they have," and in some cases, "Just limp along."

The process for identification of space options can also be considered informal and formal. Space can be identified informally by walking around and looking for vacant space, talking to people that may be moving or that know of a move being planned, otherwise referred to as "keeping an eye out when somebody moves." The provost noted that walking around "isn't very fruitful" because after identifying space, they may

“discover those spaces are spoken for.” In terms of identifying space that is vacant, the provost noted that “There isn’t really a formal process to do that but we do tend to keep track.” Since each vice president has a general idea of space issues in their area, direct consultation was identified as a more efficient way of discovering available or potentially available space. This more formal approach of direct contact can be initiated by inquiring at the vice president level or submitting a space request form to facilities for space planner review.

There is an identified process for communication along the way, so the requestor can keep track of the progress of the request; again it is not fully developed due to lack of use. The provost noted “We don’t have very much extra space. We don’t do this pretty much.”

The space planners talked about the space request system and how it provides transparent communication, but the users were not that familiar with it and relied on personal contact. The provost noted that although there is an online system to record each stage of the process, “How well that works, I’m not sure because again, we have so few formal requests for space like this.” Additionally, the provost guessed “that the maintenance of information on the web site probably is not as timely as it should be, partially because there isn’t that much going on.” The VPAF and the provost noted that people find out the status of their request by informal inquiry, “They can easily ask whoever they know where are things and they’ll find that out pretty easily.” And “I think they usually have to keep asking, but eventually they get their answer.” The primary form of communication on campus is “word of mouth.”

Everyone interviewed acknowledged that the president owns the space on campus and has final decision-making authority although is rarely called upon to exert this authority. The three VPs typically resolve all space issues collectively and with consensus at their level and only when necessary, with advice from the space committee. When a controversial decision has been made, the president is informed to confer agreement.

It was acknowledged that one of the roles of the VPAF is to manage campus space by incorporating the strategic vision and available resources. This is done even though the VPAF described his role as “trying to keep the peace. I mean literally trying to keep the peace, trying how to find win-win situations where we can say this moves us forward as an institution and is a high enough priority that we can do it.”

The space planners also have a role to play in this process. They collect and maintain space related data and provide information about space and associated costs to the different entities on campus. As explained by the space planners, their role in the space management process is more reactive than proactive, although they do engage in general planning studies for the future. When individuals or units come to them with problems or requests, they try to solve problems and identify alternatives. The introduction of the formal process of submitting space requests has institutionalized their role in the process and expanded it beyond their role in developing a master plan.

Data

Space inventory data and current campus space planning efforts are used to assess if space is being used efficiently. The facilities department conducts a space inventory in

person every two to three years and maintains the data on a database which consists of blueprints, floor plans, departmental assignments, room numbers and sizes and types of rooms. Changes that are made throughout the year are reported to the facilities department to update the database. The space inventory is conducted in person for several important reasons. Not only does the inventory process provide an opportunity for the space planner to sit individually with each of the 60 units on campus to discuss their space needs, it also results in more accurate data and helps to develop a network of people really knowledgeable about space in their unit. This approach leads to the development of personal relationships and trust between the facilities department/space planners and the individual units. This personal interaction results in the collection of better information and helps to properly identify rooms by function. The units are more confident about the quality and reliability of the data because they know they have participated in collecting it. This method was described as being much more desirable and beneficial than just issuing a broad email requesting information.

When facilities space planners request data from the units, they want to know how much space they are currently using, how much additional space they need right now, how much they predict they'll need considering growth projections. This data is collected both in terms of rooms and square feet (accreditation requirements) and is compared with standards and guidelines. The space planners noted that standardization is problematic when you have buildings of varied ages and conditions. Additionally, standardizations and guidelines do not always keep up with the changes taking place in the field. For instance, a standard classroom size may no longer be applicable when teaching styles

change from individual learning taking place at desks to group learning taking place at tables.

In addition to various sets of space-related data collected by the facilities department, other data on enrollment trends and student headcount are used and collected by the institutional research department. Although it was stressed that it was important to have the right data and good rationale for furthering your case, a faculty member noted, “I don’t think they use information enough to make decisions...I just think that many times decisions are made without using data.”

Resources

Financial resources are scarce at UB and there is not a general budget item for renovations. However, the university does have access to state funding for maintenance and repairs that are required to keep buildings operational. Recent interpretations of this fund have allowed for some renovations in conjunction with HVAC replacements or upgrades and fire and safety code compliance. One criterion mentioned frequently in terms of space was that each unit is responsible to fund their own renovations from their unit operating budgets. This means that anytime a unit asks for new space, they have to identify available funding to accommodate their needs. Sometimes this has included unexpected expenses required to bring buildings up to current fire, safety, and ADA codes. These additional unexpected expenses often delayed projects due to insufficient funding.

Major renovation projects and new buildings are dependent on state funding. For instance, one building project has been on the priority list for a major renovation for 15

years, but due to the expense involved, it has not been funded by the state despite two different occasions when UB thought the project would get approval and funding. The cost of the project in this case is well beyond both the department's resources and the university's resources.

Although financial resources are scarce, UB continues to think toward the future. As an urban university, UB feels the need to acquire space and buildings for expansion when they become available. Money that could be directed elsewhere may go to buying property so that new buildings can be constructed in the future. The buildings being purchased now are old and in need of expensive renovations, not only to bring them up to various building codes, but to make them appropriate for university needs. As one space planner noted, it is always easier to get money for new construction than for renovations. But even money for new buildings is hard to acquire. For instance, the VPAF noted:

if you are fundraising for a project, a brand new building is more attractive to potential donors than an existing building. Our policy is for the college or department to raise 20% of the full cost of the project. Raising that 20% for a renovation project is almost impossible.

In an effort to get new building projects underway, some units have relied on private fundraising over waiting on state funding. For instance, one college that wants to construct a new building has engaged in a fundraising campaign, even though it was predicted that this effort may take up to ten years to accumulate enough money to start their project.

Units that want to move or renovate their space are expected to save money from their operating budgets, use research generated funds, or raise private funds. Units are allowed to “carry over” funding from previous years, but one faculty member noted that carrying over too much funding can be risky because “whenever there is a budget crunch, then they [administration] start looking at money and picking it up from the unit.” It was noted that units with limited funding may choose to sacrifice frills in exchange for more space to accommodate unit consolidation or to get an optimal location on campus. One unit was willing to take space “as bare bones and as simple as possible” to save costs. The VPAF noted that in this case, “I’m not sure what he’s going to get, but he may get no ceiling tiles....He wants cubicles. He doesn’t want offices. He doesn’t need walls.” In another example, a unit moved to a building that had disconnected sinks in each room and left them there to spare the expense of removal. Since having funding to move is so critical, those units with funding have more leverage in the decision-making process and are more likely to get the space they desire. In some cases, the university can lend money to their units for renovations if they show a good faith effort in raising money and are good managers of their current funding. Another way a unit could potentially save money on renovations would be to have the facilities staff do some of the work when they were available instead of hiring outside contractors. While a much less expensive process, this model could easily add much more time to complete the project.

The concept of “responsibility-centered budgeting” was mentioned as a way to address the financial aspect of space issues. Responsibility-centered budgeting requires units to cover all costs associated with their units within their budget allocation. That

would include paying for all occupied space. The VPAF said that this model would likely limit requests for new space and encourage units to use their space more efficiently. However, initiating and implementing responsibility-centered budgeting is not currently being considered at UB.

Space Committee/governance

The current president and provost at UB are committed to an inclusive model of shared governance. This is evident in the committee structures on campus and the informal ways of communication on campus. A faculty member noted:

[the president] is much more amenable to using the senate and other faculty in terms of decision making and so they think that faculty governance plays a stronger role now than it did previously, a more important role than it did previously.

The faculty senate plays a large role in governance and is made of both tenure-track faculty and nontenure track faculty. The faculty at UB are not unionized and, as noted by the provost:

don't particularly want to be.... When you have a very strong governance system, you generally don't have any strong unionized faculty and vice versa. The faculty senate is consulted on pretty much everything.... There's very much shared governance. It's not just lip service. I mean, we really do, we really do talk to them just about everything.

To accommodate this inclusive model, the campus structure consists of many committees and many meetings, both regularly scheduled meetings and informal conversations. The

provost stressed the current president's commitment to shared governance by noting that "If the senate or the [all campus committee] said no to something, he [the president] probably wouldn't do it. If they said yes to it, he probably would do it." This concept of shared governance and inclusion pervades the state-wide system as well with intercampus councils for faculty, staff and students.

The University prides itself in this commitment to shared governance. The faculty by-laws identify the existence of four governing bodies: 1) the faculty body as a whole; 2) the student body as a whole; 3) the faculty senate whose members are elected from the faculty body, with 12 standing committees focused on academic matters, whose function as delegated by the faculty body "is to bear the responsibility for recommending and implementing educational policy".... and to "make recommendations to the [president] concerning general policy matters affecting the University;" and 4) the all university committee, with 7 standing committees focused on administrative, operational, space, and student matters, an inclusive university-wide group with representation from the administration, the faculty, the staff, and students. The all university committee's function is also delegated by the faculty body. (See Figure 5.)

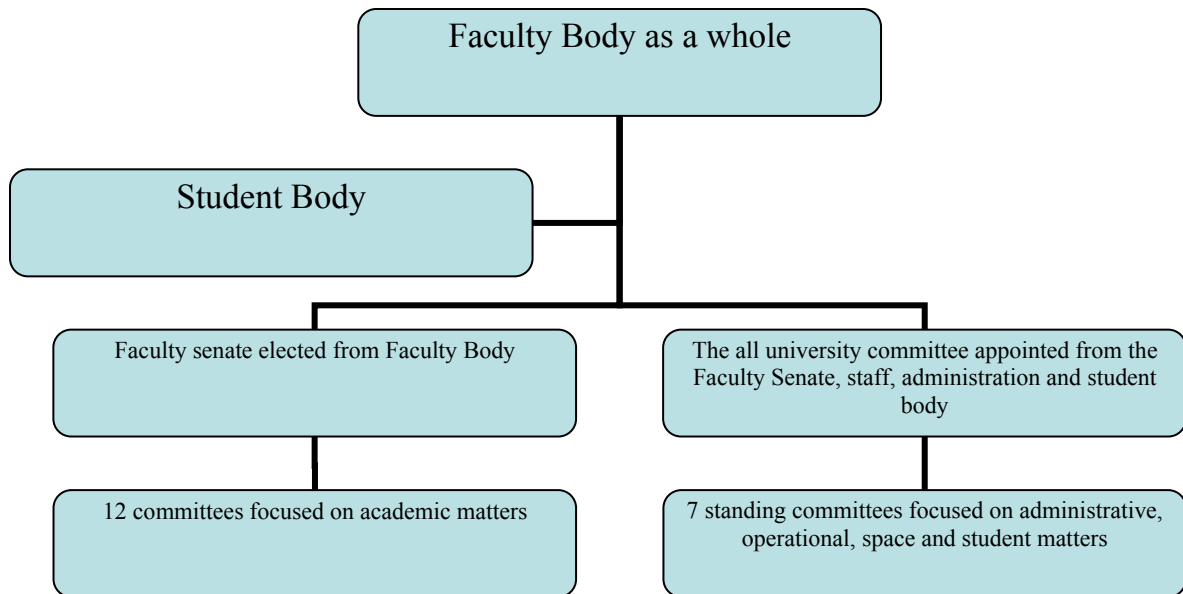


Figure 5. UB campus committee structure

The primary governing body on campus is the all university committee which is composed of administrators, faculty, staff, and students from all units on campus. The provost noted that any major decision on campus would not be made without consulting this body. The space sub-committee of this committee is a key component of space management at UB. This space sub-committee has broad representation including a wide range of campus constituencies. All space issues that cannot be resolved at the vice president level are submitted to this space sub-committee for review and recommendation. The provost noted that “It’s a shared governance committee.”

The role of the space sub-committee is to listen, review information and make recommendations on major space issues on campus and to resolve conflicts. The space sub-committee serves in an advisory capacity on controversial space issues on campus, for instance, they are consulted in cases when three units may vie for the same space or

when the three vice presidents disagree or request advice on space allocation decisions. The space sub-committee gathers information from the involved parties and from facilities to garner information on costs and feasibility and then makes a recommendation to the president. In addition to serving in an advisory capacity, the space sub-committee serves as “a way for faculty and staff and students to be heard on the issues.” The VPAF noted that the campus administration tries very hard to get faculty, staff and students involved in campus “stuff” as much as possible and are always trying to work with them, but they often have other priorities that consume their time and interest. The VPAF explained how the variation in commitment level can be seen, “They meet once a month. We tend to live it.”

Another role the space sub-committee plays is to limit the influence of campus politics in the space management process. It does this by having an inclusive, broad-based committee make recommendations to the president instead of having the president or another individual “just saying, okay, you’ve got this and you’ve got this and you’ve got this.” It is consistent with the president’s vision of shared governance.

In line with the shared governance model, the space sub-committee’s meetings are transparent and open. Nothing is confidential; members are free to talk about the issues with anyone on campus. The former chair of the space sub-committee said the perception on campus is that the space sub-committee process is open and fair. However, another faculty member said that the space sub-committee’s meetings were closed and it wasn’t clear how they came out with their recommendations. To communicate with the campus community, the space sub-committee submits an annual report in which it summarizing

the issues that were discussed and the recommendations that were forwarded to the president. Although the space sub-committee serves in an advisory role to the president who has ultimate decision-making authority, it was mentioned that it was unlikely that the president would ever go against the space sub-committee's recommendation. In as much as this space sub-committee was established to be inclusive and resolve issues, the VPAF points out that it has been over two or three years since they have had to resolve an issue or make any recommendations. During that time, the VPAF and provost have used the space sub-committee primarily for communication purposes, informing them of changes taking place on campus. "It's only if they don't know about it does somebody get up in arms. Why weren't we told?"

The space planners had a little different perspective on the value of faculty involvement on the space sub-committee and the way that communication takes place. One space planner noted "I think it's an effective model. It helps us make decisions and keep moving and move on a project." And another commented that although multiple opportunities are given to the faculty to provide their input, "those opportunities...are not taken advantage of.... Whether it is a reflection of the committee's influence over the years or just apathy, whatever you want to call it, I don't know." The VPAF commented on this "ebb and flow" of participation, "We have more faculty involvement when there is less trust. And so to the extent we're open when... shared governance, it's easier for the faculty to say you do it. We don't have the time." The VPAF reiterated the importance of the shared governance system, with its inclusive participation and

consultation, by stating that “Our president takes very, very seriously all recommendations from every committee.”

Illustrative Examples

The following examples are illustrative of how space management decisions are made at UB. The first three focus on requests for new space initiated by: 1) a faculty member/director of a new school; 2) the provost, 3) a dean, and the fourth example involves planning for the future. The narrative shows how the space management process worked differently in each example.

School of Public Policy

The School of Public Policy at UB came together from existing units on campus. It started out as a department and then developed into a school. Becoming a school with a more independent identity added to the status of public policy and established its success as a priority on campus. The new director wanted to bring all the parts of the school together in a larger space in order to accommodate growth, to facilitate collaboration and interaction between faculty and students, and to establish a sense of identity for the school. Another driver to locate larger space was the school’s accrediting body which reported that they did not have adequate space to carry out their function.

The search for contiguous space that was large enough to accommodate their current needs and leave some room for growth began on the desirable east campus. Since the new school needed a large space, they were not able to identify enough contiguous vacant space on the east campus and went to facilities for help. The director filled out the required forms and was shown space in various locations on the east campus, but all were

too small, cramped, and in undesirable locations, such as basement space. “They were trying to fit us into very small places.” All the spaces proposed had problems and some were being shown to other departments at the same time. The director noted “It was somewhat frustrating because of that whole process, which ended up really not going any place.” The provost did not recognize the effort the director had exerted and noted that although the school had been “demanding space, they really didn’t go around and identify what they wanted.”

It was not until the provost showed interest in resolving the new school’s space problem, prompted by the accrediting body, that a concerted effort to find appropriate space began. There was not enough space under the provost’s control for allocation to the school, so the provost had to bring the issue to the other vice presidents and the space committee. After discussion with the other vice presidents and consultation with the space committee, the school was offered a dormitory building on the west campus. The provost noted that “we came to them and said we figured out we could give you this space, would you like this building? And they said yes, we would.” The director noted that “when we were offered the building, I had to work with my faculty to convince them that it really was going to be okay to move to the west campus.” Despite being on the “wrong side of the road” and “isolated” from the rest of the campus, a significant benefit was that “the space that we were given was four times what we had previously and that there was a lot of space for students which is what we needed; that our accrediting body kept saying we needed, and so it’s been very good space for us.” The VPAF noted that “They may in fact have more space than they need, but they’ll never admit that.”

The significant increase in the amount of space assigned to the school resolved another potential problem that was looming and concerned the director. The growth in the number of faculty in the school was creating another dimension to their space problem that involved internal allocation of space. As explained by the director, assigned space within the school had developed into

a two-tiered system where people who had tenure had windows and nontenure-track faculty did not have windows and our faculty was growing to the point where we were going to have tenure-track faculty in non-windowed offices....So, the space came at a very good time because we didn't have to make that decision and we had had some nontenure-track faculty who had been here for years and years and years, they would have to move out of their office space so the tenure-track faculty could have the window office.

Although the space is "still not perfect," it was reported that the faculty are very happy with their new space now as it has provided the sense of identity for the school and a sense of connectedness for the students they were hoping for. As a result of the school's consolidation, it was reported that students identified more with the school and were content to have designated space, even if it was on the other side of the road. As noted by the director, "It's their space on the campus, their school on the campus and so they have a space that's theirs and before it wasn't theirs, I mean they shared their space with everybody else." There are also indications that other academic units on campus that are growing may relocate to the west campus as well, adding to the critical mass of academic

activity on that campus and decreasing the disparity in status or prestige between the two geographically separated campuses.

This process to consolidate and identify space for the School of Public Policy took about five years despite the fact that the school had close to \$100,000 of departmental funding to pay for renovations and the director worked at maintaining communication with the decision makers. In retrospect, the director noted that if the program had a higher status on campus, its space problems would have been resolved sooner. When the college moved, all of its former space reverted to academic affairs for reallocation.

Center for Curriculum

The Center for Curriculum, which falls under academic affairs and is in the provost's area of responsibility, had been looking for space for a long time. The Center was dispersed within an administrative building and needed to consolidate in contiguous and centralized academic space to operate more effectively. They needed to be easily accessible to faculty and students. They had requested space and despite several attempts to relocate, nothing appropriate was identified for years. At one point, the space committee recommended a space, but their recommendation was overruled by the vice presidents who had identified another use for that space.

Finally the provost decided that something had to be done, so a space planner was assigned to find space for the center. At this time, the School of Public Policy had moved and their former space was now available. Although that space had been vacant for over a year and other units had started to creep in, a large enough vacant area remained that

could accommodate the needs of the Center. The space committee was not interested in reviewing this move because all the space involved was under the provost's control so they had no need to be involved.

The College of Education

The College of Education at UB has been growing and the dean wants a new building. Since Education has not been identified as a priority and state funding is scarce, the college has engaged in an aggressive fundraising effort to obtain the funds needed to initiate a new building. The location for the building has been approved, but the space committee has no involvement in this project since no other units are involved and no other units will have to be relocated when the college moves to the new building. The VPAF predicts that it may take up to ten years before enough funds are identified and a new building constructed. Despite this long time horizon, another unit has already requested the space the College of Education will vacate in the future. The vice presidents are considering this request. The VPAF is advising against approval and the provost is considering sending the request to the space committee. The VPAF does not want to make a commitment so far into the future that will limit UB's flexibility in making space allocations because, as he noted, if a decision were made now, the unit would try to hold the administration to the decision, "people tend to keep these papers... [they have] long memories, extremely long memories." The unit on the other hand, would like a decision in their favor so they can plan for the future. The VPAF noted that the unit manager "tends to want to do these things. It's not going around the process. It's just jumping it."

Future plans –Science renovation

The science facility at UB was originally built in two parts, one building in the early 1960s and another added on in the late 1960s. The space planner noted: “The architecture, the design, the space, the systems, everything reflected that period of time with minimal or no renovations since.” About 15 years ago UB recognized that the facility was outdated and needed to be replaced. The provost noted:

The decision was made 15 years ago that we needed to renovate this building and we’ve been trying for 15 years to get the money and have not. We thought we had it two years ago and that fell through in the legislature. Got vetoed by the governor for very cultural and political reasons. So we’re still waiting for that building.

In the meantime, the space planners have conducted several studies and faculty and department chairs have been involved in planning the details for a new facility. The faculty are desperate for new facilities and have responded to requests for information to facilitate this project. The current architectural plan, should funding become available, consists of building an addition in a strategic location between the two existing buildings. The addition will be the first step of the project and consist of “state of the art” laboratory space. The new space will be the start of a series of renovation projects in the two existing buildings addressing a common problem with major renovation projects which is the need for “swing space;” space that can be used while the renovation is taking place. As noted by the space planner, this plan will “be more cost effective and can give vacated space, a part of which can serve as swing space.” The VPAF noted that the space

planners have conducted planning studies on this project, but are concerned about the shelf life of these studies.

It's just sort of how long or what's the shelf life? That's what gets us into trouble. We did one for the science complex. We've done two or three of them and unfortunately when we got to the 11th hour and 59th minute, we didn't get the money. So now the whole project is on hold. Our hope is that we will get the money soon enough that we don't have to go back to square one.

Once the new laboratories are built in the addition, the outdated laboratories in the old building can be renovated and converted for different uses with minimal disruption.

Conclusion

As illustrated by this case, UB claims to have a space shortage on campus despite the acknowledgement that there are vacant offices around campus and large areas of space which lay dormant for years at a time. Although the informants talk about space shortages on campus, the space challenges they face are primarily focused on location and quality of space and the shortage of funding to renovate existing spaces. Units that have grown over time have had to spread out around campus to find space to accommodate their growth. This has resulted in units dispersed in different buildings and locations on campus. Many of the space management decisions taking place at UB are focused on consolidating these units in contiguous space.

The purchase of existing buildings for expansion has compounded this problem. While increasing the footprint of the university, the buildings were not originally built for

academic purposes and require extensive renovations and upgrades to be functional. Without funding to retrofit these buildings, units have moved in and adapted to what is available, as was noted in the case of the College of Public Policy moving into a former residential building, complete with disconnected sinks in each office. The space planners recognize the value of space as a significant resource of the university and continue to plan for growth and expansion.

Case 3 - Introduction

Description

University C (UC) is a public research university that was founded in the 1940s as part of a state-wide higher education system. It has grown incrementally since its founding, starting out as a small college and then achieving university status in the 1960s. In the 1990s there was a concerted effort to increase funded research activity at UC, resulting in an increase from \$2M then to over \$52M now. At the same time, UC made a decision to increase enrollments in an effort to be more competitive within the state university system and be on “political par” with the other institutions. As a result, there has been a tremendous growth in enrollments. The student population has doubled in size in the past twenty years and there are now about 28,000 students enrolled at UC of which about 75% are undergraduate students and approximately 60% of the student body attends full time. This significant enrollment growth has resulted in the need for more physical space. To accommodate this growth, UC has been engaged in new construction, renovations to existing buildings, purchases of buildings, and leasing private space in the surrounding area.

UC is located in the city's downtown district and is primarily a commuter campus. It is easily accessible by public transportation and automobile. Currently, less than 10% of student body, whose average age is 26 years old, lives on campus. The university plans to increase the percentage of residential students to 25% in the next ten years. This coincides with their on-going effort to enroll more traditional-aged students, in the 18-22 year old range, who are more likely to want a residential experience on campus. Along with a focus on enrollment growth, UC is also making efforts to increase student success and retention which has had an impact on the types of new buildings that are being constructed. Several of the new buildings on campus have focused on student interests, especially younger students, such as recreation, sports, and residential housing. While these buildings are expected to appeal to and attract new traditional aged students, they are also designed with an emphasis for student retention. Their goal is to build spaces where students can gather and develop a sense of community which they expect to have a positive impact on student retention and success.

Cultural Background

The culture at UC has developed out of this long period of sustained growth and inadequate financial resources. Like many public institutions, UC maintains that it is under funded by the state and that decreases in state funding have resulted in a "make do" and "can do" attitude. In this environment of limited resources, space has become very important and valuable. As one administrator noted: "It [space] is a very guarded commodity. I will say that it has always been a hot topic on this campus because it has always been a very scarce resource....Probably enough said."

Space also takes on a symbolic role in the culture of UC and the amount and quality of space a department or individual controls indicates one's status or prestige on campus. An administrator described how space takes on a more symbolic meaning in an academic setting this way:

We're in an environment where a lot of times, because of convenience, because of cost constraints, people are on a very predictive income trajectory over their life. Somebody knows that if they're an associate professor, they're gonna do this and they're gonna do that. I think people's personal trajectory through the organization being as predictable as it is makes things like spaces really important symbols of their prominence and significance. So it becomes more charged in environments like this...In this environment, it's kind of funny. There are no great pots of gold out there [like in the private sector] for most of these people. So as a result, things like space become very, very important.

A faculty member noted that "bigger space suggests more authority and more clout," both in terms of departments and individuals. Space allocation may be seen as a matter of equity between colleges and be reflective of the prestige of the dean or the discipline. Not only does the quality and amount of space matter, but the location is equally important. The area around the campus green space at UC is most desirable; it is the area that has been the core of campus activity. One senior faculty member referred to the bank of offices that are adjacent to this area as "geriatric row" because it is primarily

populated by senior faculty members who have earned prime office space as a result of their seniority.

Although university policy stipulates that the university owns all space on campus with the Vice President of Administration and Finance (VPAF) ultimately responsible, there is a sense of ownership at the college and departmental levels. These units have been located in the same place for a long time. As noted by one faculty member, “the existing space allocations, by and large, have been in place for at least 25 years or 20, so they’ve [departments] been like...in one location the whole time,” with limited expansion and contraction over the years. Faculty are said to have “a bit of entitlement kind of mentality.” This entitlement relates to both office and classroom space. As noted by one administrator:

I do think we have this concept of owned departmental space in addition to general space. I think space has been constrained for so long because we’ve been on this steady growth curve, that I think people do get very possessive about space and departments do [too].

Departments do what is described as “camping” on space, putting something or somebody there to hold the space. This effort to acquire or maintain space by departments is evident in this comment made by an administrator, “you know, [they] don’t release it and always try to get more. An answer to do I need space is always yes, whether it is or not. So I think that there’s a little bit of resource grabbing going on.”

Within this culture of growth, the campus community has received two somewhat conflicting messages. One consistent message is that the university intends to continue to

grow and that growth requires more space and resources. At the same time, there is a shortage of space that restricts physical expansion and a shortage of financial resources necessary to address the issues of growth.

Space Management Issues

One facilities administrator at UC noted that the two most valuable things in higher education, are money and space, and since “there hasn’t been a lot of money...space has been a big deal.” Space is a major consideration in UC’s growth strategy and is important to every campus constituency. UC has identified three different priorities in terms of space management. First, they acknowledge that they must work to enhance the student experience to improve retention and student success. Second, they have to preserve academic space as they grow and that means protecting classroom space from being converted into other uses and third, they have to keep the academic departments concentrated in the central campus core.

As a commuter campus, space for students takes on a different dynamic than in a residential institution. Since students do not live on campus, other space has to be made available for students to gather and to develop a sense of community. With student space a priority, spaces that have been designated for student use, such as lounges or community space, are protected from being taken over for other uses and are maintained for student related activities whenever possible. New construction at UC takes on a student focus as well; new buildings have included a student center, a sports complex, and a dormitory. In fact, the students have shown their support for enhancing the student experience and even voted to increase their fees to support the new student center.

There is a concerted effort on campus to maintain designated classroom space since it is commonly a target for reallocation in times of growth. Management of classroom space at UC is both centralized and decentralized. About sixty percent of classrooms are controlled and scheduled at the department or college level and forty percent are considered “general pool” classrooms that are controlled and scheduled centrally by the registrar. In a recent effort to regain central control of more classroom space, it was revealed, to the surprise of some administrators, that the classroom utilization at the department level was actually very efficient. However, despite the efficient use of classroom space and due to their significant growth, a shortage of classrooms still exists.

The campus has a centrally located academic core area where the majority of colleges and departments are located. In order to allow for growth in the academic departments, a decision has been made to move non-academic functions out of the area. This has been accomplished by moving many traditional administrative functions that have no regular contact with students or faculty to the periphery of the campus in order to free up central space for academic uses. One faculty member remarked “that seems pretty radical to me” to be moving the offices of the president, the provost, and the VPAF off the central campus.

UC has adopted a multifaceted space strategy to accommodate its substantial growth. These strategies include: 1) constructing new buildings; 2) renovating older buildings; 3) purchasing existing buildings in the city; and 4) leasing commercial space. By using these four strategies, they have the flexibility to manage space in such a way

that just accommodates their growth, without resulting in excess space or wasted resources. The Associate Vice President of Administration and Finance (AVPAF) supports this strategy of just getting by and contends that an environment with space constraints is a good sign because,

Space is expensive. I think it would be bizarre if it were any other way than it is. If your campus is growing several percent per year, if you had too much space, it means you were misallocating money. You should always feel like you have just barely enough space....So when there's a little bit of a pain felt by the organization that feels somewhat space constrained, that is the indicator. You know, the indicator is we're still operational but we feel space constrained. That's the indicator of efficient use to a certain extent, I think.

However, in an environment with space constraints, inequities exist because, "You cannot be precisely in line with everybody's needs. Somebody is space poor and somebody is space rich at all times." And even space poor and space rich can take on different meanings, for instance, the performing arts department may appear to have excess space with its spacious performance areas and in other departments, "You'll see people packed in like sardines with equipment all over the place." The AVPAF commented that "It's probably rational, institutionally, to keep space tightly constrained. There are winners and losers within that. It's very difficult to make that better." The process that UC uses to manage this space strategy is discussed in the next section.

Space management process

The space management process at UC has several dimensions. The process can be initiated from the top of the organization, like the president, or come from the bottom up and it consists of both a formal and an informal process. Most space on campus is decentralized, which means it is controlled at the college or department level. This allows changes to be made within colleges based on their own criteria and this type of reallocation of space within a college happens quite often. When a college seeks additional space beyond its designated area, then the space management process begins. The dean may identify available space and work out an arrangement with the current owner, contact someone on the space committee for assistance, or submit a formal request to the facilities department.

The formal space management process starts when someone submits a Request for Proposal (RFP) to the facilities department space planners. In this RFP, requestors are instructed to explain in detail, their space needs in terms of function, growth, their ability to pay, and may make suggestions of what space they have identified. The space planners then review the request and look at several variables: the condition of the space, the appropriateness of the space that is being suggested, both in terms of its location, safety, and structural capacity such as its ability to sustain high energy usage and any other specific considerations. After thoroughly evaluating the request, the space planners accept the request, reject the request, or seek more information. Their decision determines when the request will be forwarded to the space committee, which makes the

final decision. When the space committee has made a decision, it is posted on a public website for the university community.

Despite this seemingly open and transparent process, one faculty member expressed surprise about a decision regarding space, “they just decided, ‘they’ being I don’t know who” and when asked about the committee’s decision-making criteria, noted, “You know, that’s interesting and I do not have a clue as to what they actually look at.” One faculty member knew of the space committee and how to request space, but described the process as “very piece meal” in that it responded to requests as they came in but felt that “there’s no big picture, no one’s looking to see how these little piece meal requests work, contribute, and make a coherent whole.” Frustration and aggravation were words mentioned in regard to this process which was described by that faculty member as “a black box” in which decisions were made either by the space planners or the space committee and then not communicated. Administrators noted that sometimes decisions were not communicated effectively and that many requests are made improperly or too late and aren’t even considered.

The informal process consists of talking to the right people and finding out what is happening on campus, sometimes referred to as “doing your homework.” One faculty member noted that there was no notification process indicating if or when space was becoming available, “the only way you got space is that you knew, you got it by keeping your ear to the ground.” For those who know how the process works, the informal work takes place well before the any formal requests are submitted. The informal process is when the “brainstorming” takes place about what sort of functional requirements are

needed and if those who know about space, the right people, can identify a fit. Many options and characteristics are considered at this point. One of the space committee members pointed out that it was necessary for departments to take a proactive role to get their space needs known.

We're growing space continuously and we're listening to people's requests about what they need. So if you're silent, if you're out there in the campus community and you're silent, we don't know about you and you're not gonna ever hear us come along and say who needs space, we've got some extra space. Maybe that's not the best way, but it's the realistic way. We're saying that if you really need space, you're gonna find your way to the space committee, you're gonna find your way to the office of administration and finance and ask the people who are involved in that and you're gonna ask.

For those who don't hear about space through informal channels, they start the process by working with the space planners in facilities who then assist them in identifying space options. In some cases this can be too late to access desirable space. Many space requests are initiated once

it becomes public that there is a group moving out of a space....I think I hear people would like this to be even more transparent than it already is. They would like to have had a formal RFP process so anyone could have had this space. But the deal had already been done. There's still a feeling that some of these decisions are being made in a vacuum.

The goal is to have all the details worked out between units in advance of submitting a formal space request and the space planners play a critical role in working out the details in this informal part of the process. The space planners described their role as helping

to foster networking on campus, to look for opportunities with a long term perspective and to build bridges....We try to help them [requestors] and guide them to present it [their request] in a way that it will meet their needs and still get approved.

One space planner noted:

when one department or one college wants to have space that is currently held by another college, ... we refer them to work with the other college to come about a solution that both of them can support and then come back to us.

It is the space planners' responsibility to prepare a comprehensive evaluation of each request before forwarding it to the space committee for action. If everyone is in agreement, then the space planners and committee only have to confirm the availability of resources and ensure that the plan does not conflict with other campus priorities.

Although many discussions regarding space take place outside of the formal space committee meetings, all official decisions require space committee deliberation. If the space committee deems that the information provided by the space planners is inadequate, they send the request back for more detail.

A space committee member acknowledged that with all the back and forth among requestors, space planners, and the space committee, the differentiation between the formal and informal process can be “murky.”

Data

Data is necessary to help keep track of space and space needs on campus. The space planners maintain a database that contains all the space-related specifications such as, square footage, type of space, function, and current use. This database is updated annually so that any changes that have been made at the department level can be included. Typically changes that are made at the college or departmental level are not reported to facilities when they happen because a department is free to reassign the space under its control. When new space is requested, the space planners evaluate the request in terms of a department’s personnel, new hires, and their existing space. The space planners noted:

We keep track of all the departments and the space that they currently have and how it’s being used. So when the space requests come in, we take a closer look at that and use that information to see how the growth could be accommodated.

The requestors need to specify the intended purpose of the space so that any proposed space can be evaluated in terms of functionality, is it the right kind of space? Will it be adequate for the purpose? The space planners have data consisting of floor plans, assigned space designations, and they know the quality, condition, and utilization of space on campus. They are often aware of strategic changes happening on campus that

affect how space will be used and if new space is likely to become available. They keep a log of space requests so they can facilitate trades between departments or colleges.

The space planners have and maintain the data necessary to determine suitability based on buildings specifics, but enrollment and academic data used in the decision-making process come from other sources. For instance, enrollment data is collected by the institutional research department and data on academic program growth, from academic affairs. Financial information is also an important factor in determining the financial implications of space requests. Financial data are available at the college or department level as well as the office of administration and finance. All these data are considered by the space planners as they evaluate each request. Their findings are provided to the space committee as background information for their decision making deliberations.

Since much of the space at UC is managed at the college or department level, department personnel also have to keep track of how space is being used. An associate dean noted “We start with some really rudimentary stuff, like an inventory of who’s where. That’s really hard to keep track of in its own way.” One large college at UC has control of three buildings on campus, with different college administrators in charge of managing the space allocation in each. Each year departments are asked to identify their space needs for the coming year and identify if it is for personnel or program growth. The college is obligated to find space for tenure track faculty, but instructors and adjunct faculty typically have to share space. If they cannot identify space within their college’s allocated space, a request for additional space must be made.

Resources

Space is recognized as a major resource at UC that is not only subject to economic challenges in an under-funded environment, but in an urban space-constrained environment as well. The value of space is accentuated by the fact that real estate is limited within their urban environment and that they have an identified footprint in the city with boundaries limiting their expansion. This limitation on physical space has resulted in UC leasing property in commercial buildings in close proximity to the campus. The AVPAF noted that leasing property has been a vital part of accommodating the tremendous growth that has occurred over that past ten to twenty years. As space becomes more constrained on campus, the university has given departments with available funds preference to lease additional space, for instance, to house a grant-funded research project. In some cases, moving grant-funded projects into leased space frees up departmental space for other needs. Other units are moved into leased space based on their function. For instance, administrative functions have moved out of the campus core to leased space. These decisions on how to use leased space are made by the space committee, who looks at the big picture, or overall needs of the campus in terms of strategic growth and institutional priorities.

Leased space plays a big role at UC. It has been identified as a convenient way to accommodate their rapid growth. In addition to leasing space for their own institutional needs, UC also leases out campus space to private and non-profit organizations. These organizations typically have a symbiotic relationship with a campus department and close proximity is mutually beneficial.

When space requests are submitted, “one of the criteria in our space evaluation is economic impact.” The space planners and space committee look at the financial implications of each request. Where is the money coming from for this project? And does the requestor have the money to build this? There are three major sources of funding space-related projects: state funding, institutional funding, and college or departmental funding. Targeted state funding is typically used for new construction, major renovations, and deferred maintenance. In many cases this state funding requires matching funds from the university to carry out the project, funds that may come from institutional sources or philanthropy. Institutional funds are used to facilitate strategic moves that have a university-wide impact and have been identified as critical to its mission or growth. The facilities department has a modest budget for general repairs and upkeep, and to address technology upgrades in general pool classrooms. College or departmental funds are used for smaller projects, such as a redesign of current space, upgrades to current space, and in some cases, programmatic expansion.

Departments are expected to fund space requests through their operating budgets. This can come from cost savings in other areas such as personnel or through revenue generating activities such as conferences, research funding or philanthropy. One of the first things reviewed in any space request is an identification of funding. Departments and colleges that have available funds are generally permitted to go through with their plans as long as they do not affect other departments or “consume any space that was already campus owned.” As noted by the vice provost, “My sense is...if they have the funding available to do it then [they can do it]...but that’s a big if.” If a department cannot fully

fund its request, then they would have to work with the space committee to request institutional funding. A request would typically go from the department, to the dean, to the provost, and on to the VPAF (through the space committee). With the challenges of the current budget environment, the AVPAF indicated that request would be scrutinized. In some case, institutional funds could be used to help pay for moves or facility upgrades. If a department is requesting space for grant-funded research, they are expected to use those funds to acquire, remodel and furnish space as needed. The AVPAF noted a difference between projects that use institutional funds and those that use external funds. Institutional funds are closely scrutinized by the AVPAF for cost saving opportunities which usually result in minimal finishes, on the other hand, when departments use external funding, they typically purchase better quality finishes like mahogany and results are “usually pretty lavish....You’d think that when people are managing their own money that they’d be leaner but in fact, the reverse is true.”

If a space request is identified as a presidential or institutional priority, it will be centrally funded. If an institutional priority affects a department’s space, the department is not required to contribute financially to the move or upgrade. There is a funding protocol related to the origin of the space request. If a department initiates the request, they must fund it; if the request comes from an executive level, then the institution funds it.

Historically, faculty have not been directly involved in space issues. Administrators noted however, that as space becomes more closely identified or

associated with resources, faculty will become more interested and it will become “something that they’ll need to advocate for.” For instance, an administrator noted:

the faculty has expressed some concern about ... saving money by having our own buildings or you know being more efficient with our own use of space rather than leasing and if we didn’t have to lease would we have more money for faculty salaries.

There was some mention at UC about consideration of a “pay for your space model.” The impetus behind that model is the assumption that if there are economic implications associated with space, it would be better utilized and departments would be more conservative in judging how much space they needed. The suggested model would incorporate space costs in a department’s operating budget. Not only is this model being considered at the administrative level to help control requests by colleges, but also at the college level to manage departmental requests. One dean commented on how this model could relieve some of the pressures associated with decision making at the college level. It could provide a more “objective yard stick...and reduce the likelihood that faculty will see it as all subjective” but he added, “it’s gonna be subjective and political anyway.” Another example of how this funding model might help colleges identify more useable space was relayed in a story about a funded-research project which had occupied designated space for many years and then, when the project was complete,

the department held on to the space. So we’re gonna try and pry it from their grip based on grant, external funding revenues. In other words, you’re not producing any external grants...you can’t really justify

occupying that space over some other research effort that is generating dollars.

An administrator commented that “if we try to introduce something here and we start charging the University for space, it would be a very bloody battle.” In times when financial resources are scarce, the AVPAF noted:

Departments should feel like wow, we’re really packed in here. And the institution should feel wow; we’re really packed in here. In order to grow, we need to buy incremental space. That’s the way it should be, provided you’re in a resource constrained environment.

This comment is descriptive of how UC accommodates its growth, on an as needed basis.

Space Committee/governance

There is a formal space committee at UC made up of all senior level administrators. There is one representative from the provost’s office and all other members are associated with the VPAF, including two AVPAFs and the facilities director. There are three staff members who provide specific space related information; they are space planning staff and a representative from the registrar who is knowledgeable about classroom space. The committee meets at the beginning of each term and additionally if necessary. Most of the preparatory work for the meetings is conducted via email or by communicating through a designated, password-protected space committee website.

This committee has gone through some changes in the past few years that have resulted in a fundamental shift in the level of decision-making authority. Originally, the

provost and VPAF were active members of the space committee along with assistant VPs in their respective areas. Trying to get both the provost and the VPAF at meetings became problematic and hampered the efficiency of the committee. Meetings were difficult to schedule so the committee tried to conduct its business via email. This transition was described by a space committee member:

Well, we tried for about the last year. It got too problematic to try and get them to meetings so we started having the meetings electronically....[The space planners] were emailing everything. You can imagine emails....A horrible evil thing. And it was very difficult for us all to stay caught up with it and on the same schedule and things. We tried that for a little over a year and then the VPAF and Provost decided that they were just gonna pull out of it because they recognized it wasn't working as well as they wanted. We were hearing from faculty and deans that they wanted this to be a more open process.

Decisions made by email discussions were not open or transparent to the campus community and as noted earlier, one faculty member remarked that it appeared that decisions were made in a "black box" and that "meeting by email...sounds like no meeting at all."

When the provost and VPAF removed themselves from this process due to time constraints, they designated their assistant vice presidents, who were knowledgeable about space issues to assume this responsibility. The VPAF described this transition, "The Provost and I...decided we don't need to be in this minutia...we both finally

decided, what the heck were we doing sitting here listening to 20 square feet for you know, program x.” Delegating the responsibility of evaluating requests for space and making determinations to the AVPs resulted in a more open and transparent process. Now, regular meetings are held and decisions are posted on a website for all to see. Decisions are of four types: 1) request accepted; 2) request accepted with conditions; 3) request pending more information; or 4) request rejected.

Each committee member brings specific knowledge from their area to the committee, but as noted by a committee member, the overarching institutional goals considered in this decision-making process are student retention and enrollment growth. For instance, one issue that arises is reallocation of “general pool” classrooms for other purposes such as research or office space. As noted earlier, with classroom preservation a priority at UC, classrooms are taken out of the general pool only as a last resort. Other institutional priorities the committee considers is building research capacity and enhancing the student experience. One committee member noted:

Myself, I consider things like the proximity of the building, the walk, the student experience. We are all very committed to the student experience and trying to make decisions the best that we can based on both our own experiences working on campuses. Many of us have taken classes on campus so we know the chairs in that building are terrible or something. We know the things that we try to keep in mind as we’re making decisions on who goes where.

As described by another space committee member, the decision-making process of the committee is informal and has developed over time.

We have matured this process over the years in that we have certain expectations coming into the space committee meeting that the staff is making the recommendation and the projects really have been fully vetted to such an extent. We may have questions and things we want to test against their research but basically we generally are accepting the recommendation of the staff at that point. And taking that against the university policies and goals that are coming out, I think that's sort of nebulous still at this point....We have these things in the back of our mind, all these research projects and the President's goals and all these things that have been part of our culture for the past year and few months that the President has been here now....But there has been a tremendous amount of documentation and research and a process and administrative policy development during that time. I would say those things are all in our mind as we are making these decisions, but I don't know that it's been formalized in our process yet.

Although the president has the official final decision-making authority regarding space, decisions are usually made by the space committee with the VPAF and provost serving as the appeals committee. The members of the space committee are kept well informed about campus priorities and are trusted to act in the best interest of the institution, the VPAF noted, "If I didn't trust them, I wouldn't be giving them the job."

There is no direct relationship between the space committee and shared governance at UC. There is no direct faculty representation on the space committee, the representative from the provost's office acts on behalf of the faculty. When asked if faculty have requested direct representation on the committee, the vice provost responded, "I know we're not unique in this, but there are so many meetings around, so many things that it's just a matter of how many meetings can faculty serve on." The Faculty Senate does not have a space committee of any kind. Faculty may participate in space discussions at their departmental level or on campus-wide ad hoc committees, such as committees that consider future space needs or consider new building design. This participation is voluntary and advisory in nature. The faculty is unionized and the only mention of space in the contract is in reference to office size standards and basic furniture and equipment requirements.

The Faculty Senate was viewed as strong by an administrator and weak by a faculty member, although both noted that it has recently come under stronger leadership. There is some friction between the Faculty Senate and the Faculty Union. There are concerns over developing a better working relationship with the campus administration and with the decreasing percentage of tenure-track faculty. The Faculty Senate, viewed as too big by one faculty member, has broad membership which includes tenure-track faculty and nontenure-track fixed-term faculty that work more than 50% time, representatives from all academic groups, and some administrators. There are two faculty unions, one that includes tenure-track and fixed-term faculty and one that includes adjunct faculty. With the primary union made up of two distinct groups of faculty, "it

makes it difficult for the union to advocate as one entity because they're really separate audiences.”

A faculty member who has been active in both the Faculty Senate and the Faculty Union confirmed that there is no faculty involvement in space management decision making. She commented that the Faculty Senate was too big and ineffective:

It relies primarily on an extensive committee apparatus and relies primarily on those committees to generate business. The committees don't meet over the summer so they dither around all fall and they finally get going by December and then they report all at once.

Another faculty member noted that the senate cycles through periods of excitement followed by periods of apathy. An administrator in the senate thought it was disorganized and represented the voice of long term employees with one-sided views on the issues, “It does not lead to a real well organized effort to have more influence on something.” The only mention of shared governance was in reference to younger faculty who “ask more questions about shared governance and the need to be included in the decision-making process.” There has been a large growth in younger faculty who are said

to bring in a totally different approach. But they sometimes get sideways with the older faculty because they are so strikingly different than people who are two or three generations removed from them and have a much different perspective of what the can-do attitude means, even though they might not be happy about it or something like that.

Illustrative Examples

The following examples illustrate how UC addresses specific space management issues on campus. These examples show how UC has worked to accommodate rapid growth, to find space for an expanding center, relocated a school, renovated an older building, and accommodated tight space constraints.

City Block building

One of the ways that UC has accommodated such rapid growth is by leasing space in existing buildings near the campus. Their strategy as described by an AVPAF is

to acquire an existing building that usually does have tenants in it and then our goal over time is to work that building both financially and on a space continuum to eventually take over that space and use it for university purposes.

For example, the AVPAF described the case of the City Block building:

We had a few functions; we had the top floor of the building already. We'd determined that we needed one swing space for the renovations of two buildings on campus... We also determined that with our growth need, we needed to get more classroom space down [near] the core of campus and so what we determined to do was to go [to City Block] on a lease basis with an option to buy, to make it an administration building where we could put those types of functions out of the core of campus and open up that core for academic purposes.

Functions that were permanently moved to City Block include the offices of Administration and Finance, Academic Affairs, and Human Resources. Funded-research projects have moved there as well as other offices that were moved temporarily while renovations were taking place on the main campus.

Finding space for a free standing Center

The following is an example of how the Space Committee expects agreements regarding space to be made and worked out before they are submitted for formal consideration. In this ongoing case, the unit that needs additional space is a presidential priority so the request is also a priority and it is especially important that adequate space be identified. The unit is a free standing center that has outgrown its space in the over crowded Business College building. The Business College is already strapped for space and although it is a popular college on campus, it has been traditionally under-funded. Because the two units are closely related and collaborate on multiple projects, the space committee asked the dean of the Business College and the director of the Center to

talk and see if they can come to a joint proposal to come back to the space committee and I think what they're looking for is some kind of a compromise between the two departments so that one isn't advantaged over the other.

The space committee wants the relationship between the center and the Business College to continue, despite the hardship that will cause for the College. The space committee is optimistic that these two units will come to an agreement because they have so much in common and overlap on many fronts.

Relocation of the School of Education

The School of Education was given beautiful space in a new building at no cost to the School. As noted by an administrator, this decision was made as a

compensatory action. It [the school] is not a hugely popular, high money, high donation, or high revenue generator. It's none of those things.

They've been boxed into a small and somewhat dismal space for a long time. We just gave them a much better, nicer space...It was a redress for years of suffering.

When the School vacated the space they had occupied, another department in the same College was able to expand and consolidate parts that had been "sprinkled out over five different buildings," alleviating the difficulty of running a unit which is so dispersed. As the associate dean said, "I mean how could you, how can you have any kind of control or communication with that?"

Renovation project

The Department of Fine Arts was housed in a former elementary school built in the early 1900s. The infrastructure was old and inadequate and the building configuration was not appropriate for an art department. The department had requested help from the space planners and the space request "articulated the growth [and] space needs in the building." They couldn't afford to renovate the building using departmental funds because the project was too big and the university was not financially prepared to fund the renovation either. When state funds became available through a deferred maintenance program, the building was "pushed to the top of that list" based on criteria such as the age

of the building, the potential inhabitants, and public access and use of the building. The major work that was considered deferred maintenance was structural and included upgrading electrical and HVAC systems. In this particular case, the department's temporary relocation to another building for the two-year renovation period was able to be included in the overall project costs.

Although the Department of Fine Arts did not have to use their own funds for the major work of upgrading the building, they did have to use departmental funds to remodel the interior space. When the department requested that the interior space in the building be reconfigured to meet their departmental needs, they had to contribute departmental funds and funds raised through philanthropy. The department resisted an historical renovation for this building which would have restored it as an early 1900s elementary school building. They resisted this because that design was not functional for their department and the space needed to be reorganized to fit the needs of the department. They wanted a contemporary building with dramatic architectural features that could be a showpiece for the campus.

Examples of Space Constraints

This is an example of how the rapid growth at UC is affecting the way one college deals with space constraints. "Each year I send them [the space planners] my list of 18 spaces needed by 6 different departments and they don't answer so I solve it myself." Since adjunct faculty are entitled to office space according to their union contract, in order to abide by the contract the associate dean solved the problem this way, "I've got an office with 27 instructors in it...I guess that's efficiently using space...you know what

that means, that means none of them use it. They have a place to put their books.” The associate dean noted that other people have to work in cramped conditions as well:

A lot of people, five or six people who work in a program are all in that one office across the hall here and you know, that’s maddening when you have to do it that way, but that’s how bad the shortage has been for us.”

The associate dean who related this story was in an office shared with an administrative assistant with a partition down the middle.

Conclusion

This case illustrated the challenges a university faces when it experiences rapid growth. The use of leased space helped to alleviate space shortages and provided swing space when other buildings were being renovated. Decisions regarding space needed to be made quickly, so an executive level committee familiar with university priorities was given the responsibility to review requests vetted by space planners and make decisions. Giving this decision-making authority to a committee enabled the provost and VPAF to focus on other institutional priorities associated with their rapid growth.

Summary of Case Study Findings

These three case studies varied in significant ways as indicated in the preceding descriptions. At the same time, some interesting similarities in the three cases exist. All three cases exhibited an explicit demonstration of the faculty/administration divide where a significant amount of distrust or misunderstanding exists between the two. In all three cases, the faculty role in space management was not significant. This was the case in campuses with faculty unions and in the campus without a faculty union. And, despite the

existence of decision-aids that were described in the literature review, none of the campus indicated that they were utilized in their space management decision-making process. Further observations and discussions of cross-case phenomena are presented in the following chapter.

CHAPTER 5

DISCUSSION

Conceptual Perspective Revisited

The conceptual perspective used to organize this study delineated the approaches of 1) decision making procedure and process, as procedural rationality (Dean & Sharfman, 1996), 2) decision making efficiency, as action rationality, and 3) decision making effectiveness, as decision rationality (Eckel, 2002). The conceptual framework considered these descriptive aspects of rationality as discreet ways of thinking (Figure 1.); however, the findings of this study suggest that these types of rationality are much more integrated with each other. (See Figure 6.) The interplay of these concepts of rationality, viewed within the theoretical definition of limited rationality and the political frame, reveal the complexity of decision making in public higher education.

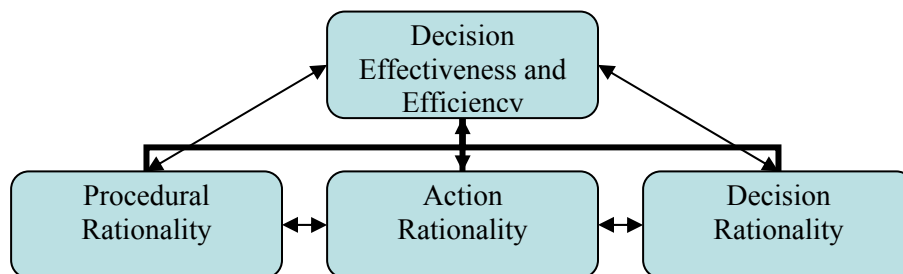


Figure 6. Conceptual Perspective Revisited

The following section explores this complexity, examining how institutional politics, priorities, and change influence space management decision making in public higher education.

Politics, Priorities, and Change

The three institutions for this study were chosen based, in part, on their similarities. Yet, they all differed in their primary space management issues: quality of space, location of space, and quantity of space. Despite these differences, they represent examples of how, regardless of the overarching issues, campus politics and priorities impact space management decision making and how space management decision making affects and is affected by institutional change. This discussion returns to the research questions and uses examples from the study to illustrate how space management decision-making occurs within the context of public higher education: 1) In what ways do internal and external politics shape space management decision making? 2) In what ways do university priorities shape space management decision making? and 3) What is the relationship between space management decision making and institutional change?

1. In what ways do internal and external politics shape space management decision making?

Politics play a significant role in space management decision making and are a constant factor that the decision makers must consider. As one provost commented: “I think it’s [space] a very political decision and I think that’s what I started to say in the beginning is that it’s not a rational decision, it’s a very emotional decision. I think because maybe because faculty has so little that it becomes an ownership [issue]...”

In order to understand the impact of internal and external politics in these cases, a brief description of Bolman and Deal's (2003) political frame provides a foundation for the discussion. Politics and the influence of powerful individuals and interests groups are intertwined in public higher education and they should not be considered as negative influences as is often the case. Bolman and Deal (2003) suggest that:

A jaundiced view of politics constitutes a serious threat to individual and organizational effectiveness. Viewed from the political frame, politics is simply the realistic process of making decisions and allocating resources in a context of scarcity and divergent interests. This view puts politics at the heart of decision making. (p.181)

Their practical definition of politics which focuses on the process provides a useful perspective for understanding organizational decision making. Their political frame "views organizations as living, screaming political arenas that host a complex web of individual and group interests" (Bolman & Deal, 2003, p.186). As such, the power dynamics of the political frame in higher education are revealed in the formation of coalitions that are based on the interdependency of the players: faculty, staff, administration, students, and external stakeholders. The diversity of these groups and their different goals and cultures "implies that political activity is more visible and dominant" and the scarcity of "resources suggest that politics will be more salient and intense in difficult times" (Bolman & Deal, 2003, p.188). The political frame also acknowledges the role of power in this environment of competing interests and scarce resources and defines it as "the capacity to get things done" (p.188).

Eckel (2002) has suggested that action rationality contributes to “actually getting things done” and is therefore employed in the political frame, choosing to do things that are politically acceptable. Politics and power are revealed in the three cases of this study in terms of: a) people with positional power, personal power, or power based on their knowledge and expertise, b) resources, c) ownership and control, and d) external influences.

Power of people. The relationship between people and the power they have in space management decision making takes several forms. In this section I discuss the different ways in which people utilize their power. The informal aspects of the space management processes described can leave the decision-making process open to the political influences of powerful individuals or interest groups. In many instances, success in obtaining space is based on personal relationships, “who you know,” both in terms of finding out what space is available and in successfully getting the space your unit wants or needs. In addition to complying with formal space request processes such as filling out the forms, one faculty member noted, “I think you have to do much more political [work] than that and then if you don’t start talking to people and working with people that even if you go through the process that will not get the space.” You have to talk to the right people to find out what is available, and then you have to work with the right people to get your request considered and to keep it a priority.

Individuals do have power based on their positions, but positional power is not only based on hierarchical ranking, it is also based on one’s position within the space management process. For instance, provosts have power due to their roles as chief

academic officers, but space planners also have power based on their access to information and their role as conduits of space requests to the decision makers.

First we will look at the role of hierarchical positional power. On several occasions, it was mentioned how influential the provost was in obtaining space. The director of an academic unit noted that:

Once the provost decided that we needed space, then it was much easier and things moved along much more quickly and prior to that time there were a lot of dead ends so we were told that we could have space in different places. We applied for space in different places, but it just got so my wheels kept spinning until finally the administration decided that we really did need space.

In this instance, although it took over five years to find appropriate space, the director credited her own ability to navigate the internal campus politics as being critical to their eventual success. The director noted the importance of “keeping in touch with the provost on a regular basis” and talking to the president and the VPAF to remind them that the school “needed space ...and each time we came up for accreditation, say you know, this is gonna be a problem, we’re gonna need to talk about this and you’re gonna have to explain to them why we don’t have the space yet.” The director also noted the importance of creating and maintaining a communication link with the chair of the space committee, another individual with positional power:

...talking to him, making sure everything was in order, asking on a regular basis if they needed any more information...and letting people know that

we did have money and we could afford to do this. That we were going to contribute as much as we could to the project.

Recognizing the importance of developing these personal and political connections came from the director's own experience serving as chair of the faculty senate and from having "done a stint in academic affairs" as interim vice president and associate vice president as well as serving in a system-wide capacity.

Having positional power also has its drawbacks in terms of taking "politically incorrect" action. For instance, a provost acknowledged that a political oversight was made when he neglected to meet personally with the dean and the faculty of a college that was ordered to give up space.

I should have been smart enough to know that the dean has to say "Oh, I didn't want this." How can they then face the faculty? I should have just gone over from the very beginning, taken it head on with the faculty meeting and said "You know I have to do this. Yell at me all you want, whatever."

This oversight prompted the provost and AP to make a better effort to include faculty in future planning processes and to reach out to those faculty who had been helpful on other space issues in the past. This effort accomplished two politically important functions, one to obtain faculty input and the other to be able to show that they had been inclusive in the process (Procedural rationality).

Another way internal politics can play a role in space management decision making is when issues of labor relations are involved. For instance, when the AVPAF

recommended the purchase of a new building, the VPAF thought the timing of the purchase would cause personnel problems on campus. Although the recommendation was based on opportune economic and strategic timing (evidence of the use of decision rationality), it was inappropriate due to other recent campus actions (counteracted by the use of action rationality). The AVPAF recalled an exchange with the VPAF:

So my boss will say we just cut union salaries 4 ½%. We can't buy this building right now. It's the whole sort of interplay of campus decisions that go on. You know, that's sausage making. It's not a clear process at that point.

With the campus in continuous growth mode, the AVPAF acknowledged that new space has to be acquired “every year in order to just keep functioning and we're very tightly packed now. But we can always get smarter about the way we do things.”

It was noted that some people will try to by-pass the hierarchical process by going straight to the president or one of the vice presidents to get support for their project, but in most cases, their request will be referred back to the department or college level or to the space committee. One AP noted that although attempts to circumvent the process could happen, “I don't think any of them would blatantly go behind the provost's back and complain about things directly to the president.”

The existence of space committees on campus serve two purposes, one is to bring individuals with different expertise and perspectives together to deliberate on space issues and the other is make the process more open and transparent, thus eliminating opportunities for negative political influences in the process. The chair of the space

committee at UB noted that one of the reasons the space committee was established was “to remove as much of that [politics] as humanly possible, which is never completely possible...” and to be consistent with the president’s vision of shared governance. The space committee at UC however, operated with an emphasis on the expertise of its members and carefully guarded information about their actions. To accommodate the University’s needs, the AVPAF at UC noted:

We’re quietly acquiring spaces continuously....I won’t say it’s kept secret, but I think it’s functionally secret for a lot of reasons. One, you’re obviously not gonna tell the campus about something you’re negotiating on....We don’t necessarily broadcast every move that we’re making on space because it would cause people to wonder why.

The presence of a space committee on campus did have a neutralizing effect of political influence at the institutional level, however, it was noted that politics and positional power were more prevalent at the college or department level. Since the space committees only considered projects with identified funding approved by the college dean, a former space committee member noted:

the one that got the funding [at the college level] had a leg up in terms of the criteria the committee would go by, but again that would be determined before they got to the committee, so the committee really did everything it could to stay out of the political issues and that’s really the purpose...of the committee.

There were other examples of positional power and political influence, such as the faculty member who would not comply with requests of space planners, or the dean who would not take direction from the AP. The saying that “who you know is more important than what you know” was exemplified in a comment indicating that a department chair can show favoritism to “buddies” in the department by assigning bigger and better space.

Departmental power varies considerably in terms of the department’s ability to acquire and maintain space. Some are better advocates for their needs and some end up being in the right place at the right time. “It’s just the luck of the draw. Are you part of the next building that’s getting built?” Competition between departments for space resources is ongoing and inequities exist, some departments have figured out how to get what they need better than others. As one AVPAF noted, “If your department happens to be popular in the external environment, resources may come your way.” For example, cycles of popularity have included education, nursing, health sciences. Some of these academic priorities are dependent on local employment needs or economic development.

Effective advocacy depends on several things; it depends on the quality of the message, the status of the messenger, and access to decision makers. An influential dean can have a significant impact on the ability to get projects funded or to get them on the priority list. Several informants noted that informal meetings or chance encounters with the president, vice presidents, or space committee members could elevate your priority level or at least bring your issue to those who have the power to act on it.

One of the ways that the internal politics of positional power plays a role in decision making is seen in the way people treat each other. Although the space planners

may be lower on the administrative hierarchy, they have power in the information they hold and the information they release. Space planners talked about departments that exhibited a sense of entitlement and were uncooperative or unwilling to compromise. One space planner noted that a department's demanding approach of "just give us what we want and you pay for it and you figure it out because it's your problem, created a scenario that cost them another five, six years to get [their project] started." When that department's leadership changed and the new person was more cooperative, the space planners were more willing to work with them toward their goals. So in this case, the department's approach was politically wrong, instead of getting cooperation from those who could assist them reach their goal, they got resistance. They failed to realize the political importance of developing collegial relationships with people who were critical in the process. As in politics in general, there are winners and losers in space management. It was described as a game in which "some people play nice and some people won't."

Power of resources. The truism that "those with resources have power" was evident in terms of space allocation. Resources refer to both financial resources and space resources. In all three cases, departments were responsible to identify funding sources to carry out their relocations or renovations. Space requests did not get to the decision making point until funding had been verified. This put some units at a disadvantage as it was noted: "There are programs that just have more money and their donors have more money. Their faculty produce more money. When it comes to their incremental space decisions, they make them first and they put the cash on the table." An AP indicated that

faculty researchers with more external research funding were treated better and with more respect than those with less. They were assigned more and higher quality space and were offered more accommodations.

Pre-existing space allocations also served as a departmental resource. Many units were able to use their previous space allocations as bargaining chips for more and/or better space. And in one case, the VPAF noted that departments with excess space (resources) could turn them back to the provost as a measure of goodwill, a move that could increase their political capital.

Power of ownership and control. While some space management issues were politically charged that was not typically the case on campuses with general classroom buildings. Buildings designated for general classrooms were unique in that they were managed centrally and multiple departments shared the space in the building for classrooms and offices. Reallocating space in those buildings with predominantly shared space was less political than reassigning space in a building that was viewed as having a single purpose use, such as the science building or the education building.

Power of external influences. The process of meeting the requirements for approval for a large project for a public university was described by one VPAF as multifaceted and consequently, time consuming. Not only did the project need to get three approvals, one at the campus level, the system level, and the state level, but actually the approval process consisted of five levels, since the state level itself consisted of the state coordinating board, the governor, and the legislature. Each of these levels needed to be successfully navigated to get a project approved and funded. Two factors were said to

contribute to a project's success, one is if the project has been identified as a statewide priority and the other is available funding. If a project has identified funding that does not rely solely on state funds, it has a much better chance of success. This is particularly true of requests for new buildings which are more attractive to fundraising efforts.

UC has tackled the issue of their status within their state by expanding their enrollments. Twenty years ago they made a strategic decision to concentrate on enrollment growth. As a result, they have emerged as a major player that is "on political par" with the other state institutions. They now have about the same number of students as the flagship university and they are continuing to increase enrollments. They have established themselves as a major employer in the city and a driver of economic development. The positive impact they have developed in the city has become more important as they expand physically outside of their defined footprint. By way of strategic growth, they have politically positioned themselves as a major player at both the city and state level.

Both internal and external politics can play an important role in shaping space management decision making on campus. As illustrated, internal politics are related to the influence of powerful individuals and interest groups and become visible in terms of positional power, effective advocacy, timing, and financial resources. External politics are based on national or state economic development needs, employment needs, available financial resources, campus advocacy at the state government level, and the "currency" of the desired program, meaning is it timely and does it have a broad appeal to the general public.

2. In what ways do university priorities shape space management decision making?

As with many things in public higher education, identifying and defining university priorities can be difficult. The influence of multiple stakeholders in university decision making can result in academic priorities that are established at different levels of the state-wide university system and societal and economic priorities that are identified from outside the system. When these multiple priorities align and are integrated into strategic plans, universities have the opportunity to make significant accomplishments.

University priorities are often aligned with state priorities. States may adopt a particular focus for public higher education or identify specialties or centers of excellence for specific institutions within their system of public universities. These priorities along with directed public funding drive how an institution grows. For instance, many public universities are focusing on mathematics and science, or health sciences in particular. Universities that align themselves with these areas identified by the state as a high priority are likely to receive more financial support.

System-wide priorities driven by governing boards can shape campus space management decision making by identifying centers of excellence, appointing presidential leadership, and by providing targeted funding. In this way, system-wide priorities influence the development of institutional strategic plans, which then identify institutional goals and priorities. At UA, the chancellor of the state-wide system has worked with university presidents to identify centers of excellence on their campuses. These centers of excellence can align with existing institutional strengths and incorporate existing community strengths and identified economic and employment needs. For

instance, a university could identify health sciences as a center of excellence in a community with several hospitals and health centers that not only need qualified employees, but offer training and internship opportunities for students.

As previously mentioned, UB is concerned about its status within the state system; consequently, accreditation of its academic units has been identified as a priority. This was evident in the way space was assigned to the new School of Public Policy. To satisfy the regional accrediting body, the School was relocated in a building that accommodated the identified space needs. It was not until the provost made the new School's space problem a priority that a concerted effort to find appropriate space began.

An institutional priority identified at UC relates to strengthening and building partnerships with the city. The partnerships are related to economic development and are quite complex as they deal with student housing, expansion, and public transit. The university has been strategic about collaboration with the city and the private business sector. They don't want to compete with these entities in terms of economic development, so they have to pay attention to their past practice of allowing independent groups to locate in campus space. They are currently discouraging departments from giving away free space to non-profits with which they collaborate.

A university's strategic planning process typically identifies several broad goals and areas of focus with identified priorities designed to meet those goals. The administration's responsibility is then to balance these priorities on campus. The centers of excellence at UA emerged from major points in the strategic plan and were identified in a collaborative effort between the president, the provost and the chancellor. Once the

centers were identified, administrators noted that addressing those priorities, “will drive both space and funding decisions.”

Although the system’s chancellor indicated to the new president what the state’s priorities were for UA, and one of the president’s roles is to push forward on the system’s priorities, it was clear that it would not be well received on campus to usurp a building designed and built for another college to accommodate the center of excellence identified by the chancellor. Even influence from the chancellor of the state-wide system could not override campus politics and priorities on this space issue. A compromise between the president and the provost resulted in designating a section of the new building to the identified center of excellence. This example illustrates the interplay of decision and action rationality. Although decision rationality might have resulted in taking advantage of the new building to house the center of excellence, action rationality tempered the decision by introducing a compromise.

One associate dean, empowered by having his college identified as a center of excellence, said that since his college has been identified as a priority, he can feel confident that the college will get the space resources needed to operate effectively. The associate dean pointed out: “...our college is almost the highest priority in the university. And so from that standpoint, we’re growing. Its right smack center to the mission and vision of the development of the university.”

While state-wide priorities have significant influence on campus decision making, positional power on campus also plays a role in how institutional priorities are addressed. Space requests are prioritized based on where they originate and requests from the

president take precedence. For instance, “When the president has an initiative and he’s decided to run with it, then you find the space.” Or, “If the president decides something is gonna happen, then you know, the space committee will find the space.”

Several examples indicated that priorities identified by the provost were likely to be given preferred space assignments. This was evident in the case of the Center for Curriculum at UB. This center was identified as a priority, and even though it took a few years, the Center was consolidated and located in a central location on campus. Another provost priority that originated in the strategic planning process was the technological upgrading of classrooms. This project, although very costly, was integrated into to all building renovation plans.

Universities also develop their own priorities based on their areas of strength, on areas of need in their communities and on priorities established by institutional leaders. For instance, a president with an interest in science or performing arts may make those areas a priority or provosts can favor growth in areas of their personal interest. In some cases, these leaders are hired for their prominence in a certain field if that is the area that has been identified as an institutional priority. In addition, priorities can be identified in the strategic planning process. Several informants at one institution talked about the way the new president transformed the strategic plan into an action plan or creative plan. The provost described it as “a rolling plan instead of a fixed so many years plan,” a plan that is more flexible and can be updated annually.

Since positional power is significant, then institutional priorities will change with changing leadership. For instance, the new president at UB made shared governance a

priority and set up space management decision-making processes that incorporated the spirit of shared governance. The campus-wide space committee at UB is an example. The space committee paid attention to managing space available within the priorities established by the university's strategic plan. For instance, the former space committee chair noted that when there were conflicting proposals presented to the committee, decisions were made that promoted the university's priority "to promote teaching and research...as opposed to administrative space or some other sort of non-teaching on non-research appointed space."

At UC, it is recognized that the role and responsibility of the space committee members is to consider institutional priorities in their decision making, which is why there are strategic appointments to the committee rather than university-wide representation as at UB. "[The vice provost] is sitting there thinking about institutional objectives and academic planning objectives and I'm [the AVPAF] sitting there thinking about campus physical objectives." The space committee acts on behalf of the provost and the VCAF, so institutional priorities are communicated directly to the committee through the AVPs. The committee is expected to keep an institutional perspective. A comment was made that faculty members are not represented on the space committee because they tend to focus on departmental or college priorities instead of institutional priorities.

The conflict of competing priorities was evident at all three universities. Each institution identified centers of excellence and academic building priorities, particularly the need for new science facilities, but the newest buildings on campus did not have an

academic focus. The new buildings on campus focused on other priorities associated with enrollment growth and attracting and retaining traditional-aged students. Each campus had either a new student center or recreational building or both, while all struggled to get funding to upgrade science facilities. The high cost of constructing new science buildings resulted in incremental renovations and upgrades of older buildings, rather than new construction. Recreation centers and student centers, some built with student generated fees or public/private funding were constructed to improve student recruitment and retention.

Other ways in which priorities influenced space management decisions can be seen in the construction of two buildings at UB, the student center and the performing arts center. The student center was constructed because getting commuter students involved in campus life was identified as a priority and the performing arts center was constructed to bring the public to the campus and show them the value of the institution. The performing arts center was viewed as a “hallmark building;” one that invoked pride in the institution and in its place in the state-wide system.

Decision making at UC is driven by two preeminent institutional priorities included in their strategic plan: enrollment growth and student retention. These priorities were expressed by the AVPAF:

But I think our general trends, we're gonna grow for quite awhile. We intentionally said we're gonna be a full blown institution. We always had that mission, but we're gonna promote further growth. We're gonna support it when we need it. We're not gonna hold back. It has helped. I

mean it's made us on political par with these other institutions. So I think it was a great strategy....

Anytime space requests can be linked to strategic plan priorities, an argument to support the request is strengthened and that may be able to counter historical or traditional ways of thinking. The strategic plan has to be flexible enough to take advantage of unexpected opportunities, such as the availability of deferred maintenance funds to renovate a building or funds for new construction.

The campus-wide planning processes which were intended to identify priorities, such as strategic planning, master planning, and academic program planning, were decentralized and lacked integration which negatively affected their overall effectiveness. The space planners indicated that when integrated strategic planning, master planning and programmatic planning take place, projects are much more successful. In this way, plans for expansion of programs and enrollments can be considered as they relate to space and future space needs. This type of planning leads to better space management in terms of functional consolidation, renovations, and the development of swing space. The VPAF agreed that master planning and strategic planning should be better integrated and noted that there is pressure from the state system and the legislature to do so.

Even though areas are identified as high priority, the inability to fund them opens the way for other priorities with funding to take precedence. For instance, while the science building at UB has been the number one priority for over fifteen years, a student center and a performing arts center have been built while the science center is still waiting funding. In another example, a space planner noted that, "one of the most

successful colleges here on campus [cannot] even be consolidated in one location.” Since this college has not been able to establish itself as a funding priority, it has engaged in a private fundraising effort to construct a new building.

Independent of any institutional planning or priority setting, external factors can affect the priority of projects and require immediate attention. For instance, buildings that are not in compliance with state and federal building, fire, and safety codes must be addressed despite their position within the priority list.

When institutional priorities are aligned with external priorities, synergies exist. For instance, the current focus on energy conservation, sustainability, and green technologies has situated related academic departments in a preferred position. They may benefit from funding initiatives that come from outside the institution that can contribute to programmatic growth, new construction, renovation or all three.

3. What is the relationship between space management decision making and institutional change?

The relationship between space management decision making and institutional change appears to be a two-way relationship. As institutions grow and change focus, space management decision makers have to consider the impact of new pedagogies and new ways of operating on spatial design and functionality. Within departments, some space management decisions have been made to accommodate changing needs and to establish efficiencies and higher utilization. These decisions in turn promote change within the institution. Since physical space is hard to change and expensive, strategic decisions need to consider institutional politics (action rationality) and be based on institutional priorities (decision rationality).

Internal changes in UA illustrated a significant effect on space management decisions. Most evident is the change in leadership associated with the new president. This change resulted in the reconfiguration of a building under construction to make room for new priorities. Changes in enrollment numbers and patterns resulted in a college expansion into another building. A change in technology affected how classroom scheduling takes place and returned control of most of the classrooms to a centralized system. This change in scheduling had an effect on changing the institutional culture by altering the sense of entitlement and ownership in regard to classroom space.

An example of how space management can drive academic change can be illustrated in the formation of the College of Performing Arts at UB. A former president supported the construction of a new theatre to bring the public on campus and to have a hallmark building on campus. In order to justify having a “state of the art” theatre on campus, the current president supported the creation of a college of performing arts. As this new college grows the space allocations on campus change, other units have been moved from existing buildings to provide space for performing arts faculty and studios. This example indicates how a space can drive change, how a new theatre led to the formation of a new college, and how change can drive space management decisions, how other units were moved on campus to accommodate the new college.

The new president changed the organizational structure of the UB by consolidating operational units from six vice presidents to three vice presidents. This change turned the campus from a decentralized, “dean-centric system of colleges” to a more centralized, coordinated system with more power at the vice president level. This

change has affected space management by enabling fewer people to make major space management decisions, resulting in more coordination and consensus among decision makers. This more centralized system has reduced the “silo mentality” which focuses on individual departments and colleges and has redirected the focus to encompass overall campus concerns.

Along with the administrative reorganization, the establishment of the shared governance committee structure at UB has resulted in the campus community acting as a group and having more input in space management decisions. This change has resulted in a more open and transparent process; from an informal process in which one person made decisions, to a more formal process in which the issues can be discussed in an open and inclusive forum. A space planner noted:

My personal understanding is that positive change is always welcome. Some people take longer to understand the change and the impact or possible impact of the change than others. That is, in my opinion, natural because that depends on what they’re involved with in understanding the big picture.

The inclusive nature of the committee structure at UB enables more people to be part of any change and to get a better understanding of the “big picture.”

At UA, an institutional effort focused on changing their image and level of prestige resulted in a change in the focus of space management decision making. With a strategic change from serving non-traditional students to traditional-aged students, they have had to focus on different types of building. The changes include new buildings,

better facilities, higher entrance requirements, and upgrading the quality of the faculty. Faculty view the change with skepticism. One faculty member said, “you have a sort of a cautious optimism that underlies the skepticism. UA has been a testing ground; so many things have been practiced on us as a community and as a university.” It was noted that a self-study soon to be underway at UA, “will document the change the institution has undergone – all the faculty will see what we have been able to accomplish.” One faculty member noted that the composition of the faculty is also changing and that the newer faculty have a different view on space, ownership, and territorialism that will have an impact on the way space is managed on campus in the future.

At UC the relationship between space management and change is intricately linked. The university could not have grown in such a substantial way without effective space management. The space management process was changed to accommodate the institution’s rapid growth. The membership and operations of the committee was designed for efficient and effective decision making, creative thinking, and quick actions. The process is designed so that space on campus remains vacant only long enough to retrofit it for its next purpose. The VPAF noted that the committee’s actions would be hampered by faculty membership because of the slowness of their decision making and their parochial interests. The rapid growth on the campus has led to different space management decisions which now include leasing space in local buildings and purchasing new buildings close to the campus.

Considering all of the changes that have taken place on campus, the uneven growth and the change in priorities, one VPAF predicted a change in future building

design, “So I think there will be less and less single purpose buildings. To be flexible, I think because we don’t know what’s gonna be the next hot spot, you better not lock yourself into this is science, this is arts.”

Not only can this relationship of space management and change be seen in terms of acquiring new space, it can be seen in the way space is incorporated into visions of the future. One faculty member expressed the importance of looking at space in a more functional and esthetic way. He noted that there was too much attention to space data such as square footage and not enough attention to the actual quality and design of space. In his view, space planners view space

in terms of mathematics, of providing square footage as needed to meet the demands of growing enrollment. I guess that primarily, looking to the future, nothing’s very different from seeing the vision of the campus, its growth and its transformation and where design and good architecture can contribute to that purpose.

He went on to say:

Facilities is supposed to look at the overview, understand the overview in terms of square footage and the types of space that meet the needs of teaching and administrative needs of the institution and no one’s looking at quality. No one’s looking at how those are packaged in a way that makes, you know, a good impression beyond, you know, and to the public that come into those spaces...a special, special quality...both the environments are publicly beautiful and designed well.

This perspective which introduces form and design into a process which primarily focused on function changed the way in which one college was renovated. The space became a living environment which serves as a teaching tool itself and as a showpiece for the university.

The way space is managed in an office environment can have an effect on how people work together and change their perspectives. When UC relocated administrative functions to the City Block building, they were able to introduce spatial changes at the same time. They took advantage of the system's/modular furniture which was already in the leased space and assigned a dean and other administrators into open office space or cubicles, "big cubes, but cubes." The AVPAF noted:

We did it because we're asking a whole bunch of other people to go into cubicles. We're saying we're gonna get out of this model of an office and we're gonna go to [open space].... We've asked administrators to go into systems furniture offices. We did it ourselves first to demonstrate. See, it's not really difficult. But that was huge. It's still a really difficult cultural shift.

Embedded in the culture at UC are concerns about personal space, regardless of whether it is an office or a cubicle. It is part of the culture to advocate for more and better personal space, consequently, when office size and location were off the table, the discussion turned to the height of the cubicle walls. The AVPAF noted: "It just becomes one of these things where you focus on the little because it's what you got."

Another example of how space management decisions affects how people work involved the faculty in the art department. Initially, the art department was rather small and the faculty had decided to share open office space, all faculty had space in one area where they could easily interact with each other and share ideas. When their space got renovated however, they decided that since the department was growing and they wanted to attract new faculty, they would have the space designed to include private offices for faculty. The change from open, shared offices to private offices changed the dynamic of the work environment and resulted in less frequent discussions among faculty and interchange of ideas.

The theatre for performing arts exemplifies change on another level. The president who promoted the theater was interested in engaging the community with the campus. By building a theatre, the public was drawn to the campus and impressed by the building. This increased the stature of the institution in the minds of the community. When the new president came, he was able to build on this increased awareness of the campus, and direct the focus inward and transform the theatre from a non-academic purpose to an academic purpose by forming a college of performing arts.

The way change in space management is instituted and explained also has an impact on how it is accepted. If it comes from within a unit rather than being imposed upon by other entities, then people are more likely to accept it. For instance, a space planner noted that if a plan to reorganize a floor was suggested by facilities to improve space efficiencies, it might not go over as well as if the same plan was the result of two departments working together and coming up with the same reorganization plan. It is also

important for the reasons behind the change to be clearly articulated. Communication was also identified as a key component of successful implementation of change; by providing correct and timely information about why space is being reallocated or reconfigured.

Institutional structural changes which can have an effect on space management decision making includes administration consolidation, commitment to the community, centralization, shared governance, and integrated planning processes. Together they can all contribute to viewing the campus as an integrated institution in which space management plays a major role in institutional change efforts. By portraying the “big picture” to all constituencies on campus, space management with an institutional focus can result in a more unified campus where institutional priorities are known and understood.

Research Propositions Revisited

This study enhances the understanding of space management decision making in public higher education institutions. As shown in the individual case studies, the three universities in this study address space management decision making in various ways. With a better understanding of how decisions are made and the different campus constituencies that participate in the decision-making process, it is appropriate to revisit the propositions made earlier in this research study.

Proposition 1: A defined space management decision-making process leads to effective and efficient decision making.

Dean and Sharfman (1996) noted that having a documented process was important for effective decision making in a business setting and was instrumental in

limiting the effects of political intervention. Eckel (2002) suggested that having a process was important, even if it was not followed. Based on their research I proposed that the same might be true in space management decision making in public higher education. My research findings suggest that institutions actually have two processes, one that is a written, formal process and another verbal, informal process. The formal process was established by the technical agents, the space planners or facilities department. Its purpose is to identify the particulars about a space request, for instance, how much space is needed, what it will be used for, and can the requestor afford to pay for any changes. An undocumented informal process, however, takes place on both sides of the formal process. Not only is it engaged in before making a formal request, to find out what viable alternatives exist, but it is also used by the primary decision makers to determine if the request is aligned with the institutional priorities (Procedural rationality).

No one could really describe the decision making criteria used to make the final determination. They indicated that institutional priorities were key determinants, but these priorities were not necessarily aligned with the institution's mission. For instance, a mission statement may indicate broad aspirational goals such as enhancing the quality of life in the urban area and providing access for lifelong learning, but the current institutional priority is to attract traditional-aged students to grow enrollments and revenue (Action rationality – what can be done now? and Decision rationality – how effective is what we do now for our long term goals?).

The existence of a formal process for requesting space is an important part of the overall decision-making process. This formal step requires requestors to fully explain

their needs and requires space planners to document the request and investigate options to accommodate it. It is the only part of the process that is clearly open and transparent. However, the fact that a formal request process is required; a formal communication in response to the request should also be required. This communication would validate the process and inform requestors of the next steps. It was indicated that this communication was not consistently carried out.

In light of these findings, this proposition is still relevant, although it is acknowledged that in addition to a defined formal process, an informal process also exists.

Proposition 2: Decision making on space management issues is more effective and efficient when made by a joint committee of all stake holders.

The three cases illustrate different roles for campus stakeholders and different committee structures and membership. The role of the space planners was significant in all cases based on the information they provided to the space committee. The space planners managed data and information about space on campus and were skilled in evaluating requests with an institutional perspective. They were the technical experts in the process, while final decision makers were the strategic and political experts. In one way, the space planners were gatekeepers in the process and were more powerful than they thought. As evaluators, they made the first decisions about feasibility of the request and decided if the requestor had provided enough detailed information regarding need, utilization, and financing. Space planners had the power to forward requests to the space

committee with recommendations or to return requests to the sender seeking more information.

The space planners were viewed differently by the other constituents on campus; some thought of them as knowledgeable and competent, others as rigid and obstructionist. In some instances, the relationship between the requestor and the space planners was integral to the outcome. In one institution, the space planners talked about being disrespected and treated poorly by some requestors, in which case, they were less likely to accommodate their requests or work with them in an amicable way. In another institution, the space planner was viewed by a senior faculty member as unresponsive and inexperienced.

The final decision makers at each institution, whether a group of executive administrators or a formal space committee, relied heavily on the information and recommendations from the space planners and valued their expertise and knowledge about space on campus. In instances where the final decision makers needed more information than the space planners provided, the decision was delayed until the information was provided. It was the role of the space planners to ask requestors all pertinent questions regarding their request. In some instances, requestors went around the process and directly contacted the final decision makers. In these cases, they typically got information and advice and were redirected to go through the established space request process (Procedural rationality).

The role of the faculty in space management decision making was informal and had the most impact at the departmental level. Administrators commented that faculty

were not interested in participating in space related issues and that they were too busy due to other priorities and committee obligations. However, one administrator (who was a former faculty member) indicated that faculty were intentionally excluded from the process because they were slow to make decisions and had a parochial outlook. Other administrators noted that the faculty were disorganized as a group and consequently marginalized. Institutions with faculty unions in particular seemed to have less of a role for faculty in space related issues due to conflicting priorities with the faculty senate. On the campuses where there were both a faculty senate and a faculty union, the two were described as obstacles to involvement. The faculty senates, with their complicated committee structures, were seen as ineffective in addressing space issues in a timely manner and their efforts were fraught with departmental positioning and in fighting. The faculty union operated in parallel with the senate and resulted in a fragmented faculty voice. In fact there was no “faculty” voice due to the different agenda and membership of each group. In the one institution without a faculty union, the faculty senate and its subcommittees incorporated a more unified voice which in turn was more influential at the executive level.

What was evident was that faculty involvement in space management decision making did not exist at the highest level. At UA, the Committee on Classroom Space of the Faculty Senate was inactive and became ineffective due to disagreements between colleges. At UB, a space committee with full campus representation was rarely called upon for advice and most decisions were made by consensus between the vice presidents. At UC, there was no identified faculty representation on space related issues and their

committee consisted exclusively of executive level administrators, with the associate provost representing academic affairs.

Faculty had the most input about space at their college or departmental levels. When space needs exceeded available space within the college, then a campus-wide decision was required. This decision came from a body, as in UC, or individuals, as in UA and UB, who had broad knowledge of the campus space situation and institutional priorities. The focus on institutional priorities excluded faculty from the discussion as it was generally believed that faculty were focused on individual, departmental and college priorities over institutional priorities.

As indicated by space planners in this study, the most effective time for requestors to meet with space planners is in the early planning stages of any request. The space planners typically have more knowledge about available space on campus and are adept at planning space configurations that can accommodate departmental needs as indicated by the requestor. The reluctance of requestors to work closely with the space planner can have a negative effect on the successfulness of their request. It is important for requestors to let their needs be known. This was evident at UC when the AVPAF noted that as space became available, it was important to know who needed what.

My research findings suggest that space management decisions seem to be more effective and timely when made by executive level administrators that are knowledgeable about both institutional priorities and the institution's financial standings. Space planners have an important role in evaluating requests and providing reliable information to the decision makers and requestors have an important role in translating their needs to the

space planners. However, space planners and requestors did not have enough knowledge of institutional priorities to participate in the final decision-making process.

These findings support revising this proposition in the following way: *Decision making on space management issues is more effective and efficient when made by a committee of executive level administrators with expertise in space issues who have accurate data and complete knowledge of and commitment to institutional priorities.*

Proposition 3: Decisions on space issues are more effective and efficient when the primary decision maker is focused on space without multiple distractions.

As illustrated in this study, the primary decision makers often delegated their authority to associates. All three universities acknowledged that the president had the final say in all space-related matters, however, only one institution indicated that the president was actually called on to make a space-related decision. At UB, the only non-unionized institution, the president was described as siding with the all campus committee on space when controversies arose. In two of the institutions, the provost and vice president of administration and finance are closely involved in deliberations regarding space, although in all cases, the provost has a designee in the office that has a major space-related responsibility. Since academic affairs is the largest area in the universities and its activities consume the most space, the involvement of the provost's office is expected and a natural fit. In under-resourced environments, as all three institutions indicated they were, the vice president of administration and finance also has a significant role and interest in how the limited resources, both financial and space are allocated. UC designated an associate vice president of administration and finance as the

“go to” person on campus while UA and UB designated a vice provost with that responsibility. In all cases, the primary decision makers were part of their university’s executive staff and were well informed of their university’s priorities and financial status enabling them to consider space-related issues from an institutional perspective.

In these cases, provosts and VPAFs were able to delegate most of their space related responsibilities to associates who were able to focus more of their time on space management issues. The provost at UA delegated the role to an associate provost and at UC the VPAF delegated the role to an associate vice president. In fact, at UC, with their incredible amount of growth, two AVPAFs were delegated to space issues, one with a primary focus on financing issues and the other with a primary focus on planning and acquiring new space. At UB, the provost and vice president of administration and finance were able to address space issues on campus with minimal delegation from their offices, but they were able to rely heavily on the university architect/planner for complete information about space. At UC, the ability to delegate space management decisions to trusted subordinates allowed the provost and the VPAF to focus on broader institutional priorities related to the institutions rapid growth and increased the efficiency of space management decision making.

These findings lead to the following revision of Proposition 3: ***Decisions on space issues are more effective and efficient when the primary decision maker delegates authority to trusted subordinates with expertise in space management issues.***

Proposition 4: The role of data and information are valuable in the decision-making process.

Having knowledgeable space planners collect information and make recommendations to executive level staff was beneficial in terms of effectiveness of decision making and efficiency. The role of data and information was important for effective space management, but was only one part of the process. One informant noted that it seemed like data were not considered in the final decision-making process because the decisions were driven by strategic initiatives in which space related data were a secondary consideration.

One point which was important about space-related data was the collection method and the accuracy of that data. In an environment where departments are protective of the space under their control, there are incentives to misrepresent the status of the current space and to exaggerate space needs. This comes from the attitude that is pervasive in under-resourced environments, “ask for more than what you need so that you may actually get what you really need.” As noted by the space planner at UB and the VP at UA, personally inspecting the space served several important purposes. It contributed to the accuracy of the data collected, provided an unbiased view of how the space was being used, and revealed realities that may not have surfaced otherwise, such as the graduate student living in the laboratory. Data-driven models and up-to-date, accurate space inventories are important to maintain an overall view of space on campus, but quantitative data need to be augmented by qualitative data to account for all the variables. Even so, all space assignments cannot be held to ideal standards since so many of the

campus buildings were originally built for other purposes. National standards and guidelines for space allocation are important for new construction, but are less valuable in pre-constructed buildings where “making do” is the mantra. While Proposition 4 is supported by these research findings, it could be augmented in the following way: ***The roles of both quantitative and qualitative data are necessary in the space management decision-making process.***

Implications and Recommendations for Practice

By using the case study methodology, I was able to learn more about how three higher education institutions addressed space management issues and gain a better understanding of decision-making processes in higher education. Based on what I have discovered in this study, I present the following implications and recommendations for practice.

Be aware of your actual space management issues. Perhaps one of the most significant findings in this study is the difference in specific space issues that each university faced. Although the campuses were chosen due to their similarities, each had a unique space-related problem. UA, with its fluctuating enrollment, had a problem with the quality of their space. UB, with a campus sprawling across a wide area, had a problem with the location of space. And UC, with its rapid growth, had a problem with the quantity of space. Although these problems are not unique, they were different for each campus. This accentuates the point that before an institution sets up a process to address their space issues, they need *to identify their specific challenges* and acknowledge that these challenges can change over time.

Establish a decision-making process. The most pressing implication for practice is the evidence of the importance of establishing a process for space management decision making. This process needs to be clearly identified and communicated to the university community. Authority and responsibility for decision making should be delegated to administrators that are knowledgeable about space on campus and institutional priorities. Space planners need to collect and maintain accurate data based on both quantitative and qualitative analysis to make valid recommendations to the decision makers. Having designated personnel to maintain and analyze space data is important in that it frees up the time of higher level administrators and utilizes the skills and expertise of another group of professionals

Institutional priorities need to drive decision making. Only individuals that can bring an institutional perspective should participate at the highest level. Centralization of space is one way to do this. Since space can be a bargaining chip for other needs, central administration should be creative in designing win-win situations in which space is returned to the central pool. For instance, upgrades in the quality of space can be linked to less space needs.

Overall space management needs to be conducted in an environment where the institutional priorities and plans - both short term and long range - are known and there is a clear understanding of institutional needs. This can be facilitated by integrating strategic planning, master planning, and academic planning.

Building names should not identify the function of the building. The institutions studied, particularly UA, have a practice of naming a building for its function, such as,

the Smith Building for Education or the Engineering Building. This practice exacerbated the concept of “ownership” and entitlement” that they were trying to eliminate. By naming the buildings, they were inadvertently encouraging concepts of ownership. At one point, they mentioned that by a certain time, all colleges would have their own building and then talked about the problem of housing different colleges in the same buildings. If buildings were name for historically important people or benefactors and did not include the function, it would be easier to co-locate units in the same building.

Flexibility is necessary for uneven growth and constant change. With increased functionality and flexibility, people and departments can freely move in and out of space as needs changes. Science labs are a good example. The cost of upgrading labs is one of the most expensive undertakings on campus. To consolidate lab space, square feet can be traded for high technology. Shared usage of higher quality space could be a factor in discussions. The same could hold true with classrooms, multifunction classrooms can be shared. Only highly specific use classrooms should be designated for single purpose use, i.e. language labs, computer labs, art, and music studios. Opportunities to make multipurpose usage should be pursued with high quality being the mediating factor.

Recommendations based on findings.

1. Establish a comprehensive request and decision-making process.
2. Communicate the process to the campus.
3. Appoint a space committee with decision-making authority.
 - a. Executive level administrators
 - b. Knowledgeable about institutional priorities

c. Committed to institutional priorities

4. Establish a regular meeting schedule, post minutes and decisions made on a website.
5. Assign space planners to collect and analyze quantitative and qualitative data for the space committee.

Limitations

Limitations to this study are the result of choices made in the research design and the interpretations of the researcher. Although this is a multiple-case study, the findings are limited by the number of institutions - three - and the specificity of the institutions, public higher education institutions in urban settings. As with most case study methodology, there will be limited generalizability of the findings, however, generalizability is often forgone in favor of probing into sensitive areas (Hardy, 1990).

Due to its particular focus on decision making related to the management of existing space on campus, this study did not venture deeply into decisions related to the space management areas of deferred maintenance or new construction. Deferred maintenance and new construction involve decision making around a different set of priorities and funding mechanisms than do decisions around existing space allocation, utilization, and renovation. Although it is evident from the literature that both deferred maintenance and new construction are of considerable importance, they were not under the purview of this study because of the differences in financial scale and process.

Despite these limitations, the findings of this study have shed light on the problems of decision making regarding space management issues and can inform other areas of higher education decision making as well.

Transferability of Study

Earlier in this study, I suggested that “this study may shed light on critical factors of decision making in higher education that could be applied to a broader range of decision-making processes that take place within the academic context” (p.23). Several critical factors that I have identified in space management decision making are indeed transferable to other areas of institutional decision making. These factors relate to who participates in the decision-making process and how decision making is communicated to the academic community.

- 1) It is essential that those participating in the decision-making process are knowledgeable about and committed to institutional priorities. While this observation is not intended to exclude any members of the academic community from contributing to the process, it does acknowledge the importance of keeping focused on “the big picture” of institutional growth and development.
- 2) Recognizing which areas of institutional decision making should be centralized or decentralized is important to maintaining institutional priorities. While some decisions are best made at the departmental level, others are not.
- 3) Decision makers should be fully knowledgeable about the subject in which they are responsible for making decisions and should be provided with accurate and up-to-date data.

4) The decision-making process and the final decisions should be accurately and promptly communicated to the academic community. The importance of these factors were evident in this study on space management decision making and can be applied to other areas as well.

Areas for Further Research

In addition to the areas noted in the “Limitations” section, examining space management decision making on these three campuses brought up other areas of inquiry not directly related to space management that are offered for further research.

The drive to attract traditional-aged students

These three urban, public research universities were initially established to provide access to affordable higher education to their urban populations, but this focus has broadened to include access to larger audiences with a global reach. Decisions are being made with these broader goals in mind. Much of this is driven by changes in state funding mechanisms. State funding originally covered the expenses of operating a public higher education institution, but the state-funded portion of support has declined significantly over the past twenty years leaving institutions desperate to find new sources of revenue. The most obvious way to increase revenues is to increase enrollments, and more and different types of students lead to the need for different types of space on campus. For instance, traditional-aged students need dormitories and areas for activities, unlike typical non-traditional students who live off campus and have family and job responsibilities. Further research on this shift would be valuable for institutions before they change their focus and invest significant resources.

Faculty involvement in decision making

Faculty need to be consulted although they do not need to participate in the decision-making process. Faculty indicate that they want to be informed of the process and to know the status of their requests. There was some indication that faculty were “too busy” to participate on multiple committees. A study on the extent of faculty participation in campus-wide initiatives would shed light on the changing role of faculty and their capacity to contribute to the myriad of committees, commissions, and task forces that make-up campus governance.

The role of faculty senates and faculty unions was raised on both unionized campuses. It was suggested that faculty senates and faculty unions dilute the voice of the faculty. Institutions with faculty unions seemed to have less of a role for faculty in space-related issues. The faculty senate and the faculty union were obstacles to involvement. The faculty senates, with complicated committee structures, were ineffective in addressing issues in a timely manner and were fraught with departmental positioning and conflict. The faculty union operated in parallel with the senate and resulted in a fragmented faculty voice. In fact there was no “faculty” voice due to the different agendas and membership of each group. In the one institution without a faculty union, the faculty senate and its subcommittees incorporated a more unified voice which in turn was more influential at the executive level. Further research on the interaction of the two faculty organizations could inform the faculty on ways to have more institutional impact.

Responsibility-based budgeting/responsibility-centered management

All three institutions talked about responsibility-based budgeting or responsibility-centered management in terms of space management. It was discussed at one institution as a “pay for your space” strategy. Under this budgeting system, units are actually charged or assessed for space allocated to them. This system provides a disincentive for units to “hold on” to space they are no longer using. Essentially, it puts space management decision making in a financial context rather than a cultural context, taking the emotional piece out of the process. The implication of this financial perspective on space management issues is an area open for further study.

APPENDIX A

THE URBAN 21 UNIVERSITIES

City College of New York (CUNY - City College)
Cleveland State University
Florida Agricultural & Mechanical University (Florida A&M University)
Georgia State University
Indiana University-Purdue University at Indianapolis
Portland State University
Temple University
University of Memphis
University of Toledo
University of Massachusetts at Boston
University of Alabama-Birmingham
University of Cincinnati
University of Houston
University of Illinois at Chicago
University of Missouri-Kansas City
University of Missouri-St. Louis
University of New Orleans
University of Pittsburgh
University of Wisconsin-Milwaukee
Virginia Commonwealth University
Wayne State University

APPENDIX B

CARNEGIE CLASSIFICATION DEFINITIONS

Basic Classification Description

Doctorate-granting Universities. With this edition, doctorate-granting institutions are once again differentiated based on an explicit measure of research activity. We now use a multi-measure index rather than the single measure of federal funding used in previous editions. This approach incorporates several improvements: it is not limited to funding; the funding measures used are not limited to federal funding; and the analysis considers both aggregate and per-capita measures of research activity. Using the new methodology, we have identified three categories of doctorate-granting institutions. Because of these changes, the new categories are not comparable to those previously used (Research I & II and Doctoral I & II; and Doctoral/Research—Extensive and Intensive).

We also simplified the degree-production criterion for inclusion among doctorate-granting institutions. Previous editions defined this group as institutions awarding at least 20 doctoral degrees per year or at least 10 such degrees per year spanning at least three fields. For this edition we dropped the latter criterion. Institutions with lower levels of doctoral degree production can be identified using the Graduate Instructional Program classification

1) Doctorate-granting Universities. Includes institutions that award at least 20 doctoral degrees per year (excluding doctoral-level degrees that qualify recipients for entry into professional practice, such as the JD, MD, PharmD, DPT, etc.). Excludes Special Focus Institutions and Tribal Colleges.

RU/VH: Research Universities (very high research activity)

RU/H: Research Universities (high research activity)

DRU: Doctoral/Research Universities

<http://www.carnegiefoundation.org/classifications/index.asp?key=791> 4/16/09

Size & Setting Description

This classification describes institutions' size and residential character. Because residential character applies to the undergraduate student body, exclusively graduate/professional institutions are not included.

Size matters. It is related to institutional structure, complexity, culture, finances, and other factors. Indeed, it is probably the most influential omitted variable in the 1970 classification framework. Residential or nonresidential character reflects aspects of the campus environment, student population served, and the mix of programs and services that an institution provides.

Four-year institutions are divided into four categories of full-time equivalent (FTE) enrollment and three categories of residential character. Neither characteristic implies differences in the quality of undergraduate education, but an institution's location along the two continua generally corresponds to a distinctive mix of educational challenges and opportunities. Because few two-year institutions serve a residential population, these institutions are classified solely based on FTE enrollment.

The residential character measure is based on two attributes: the proportion of degree-seeking undergraduates who attend full-time and the proportion living in institutionally-owned, -operated, or -affiliated housing. It is important to note the variety of situations of students who do not live in college or university housing. Some are true "commuting" students, while others may live with other students in rental housing on the periphery of campus, and still others are distance education students who rarely or never set foot on a campus.

1) M4/NR: Medium four-year, primarily nonresidential. Fall enrollment data show FTE enrollment of 3,000–9,999 degree-seeking students at these bachelor's degree granting institutions. Fewer than 25 percent of degree-seeking undergraduates live on campus (includes exclusively distance education institutions).

2) L4/NR: Large four-year, primarily nonresidential. Fall enrollment data show FTE enrollment of at least 10,000 degree-seeking students at these bachelor's degree granting institutions. Fewer than 25 percent of degree-seeking undergraduates live on campus (includes exclusively distance education institutions).

<http://www.carnegiefoundation.org/classifications/index.asp?key=790> 4/16/09

APPENDIX C

INVITATION TO PARTICIPATE LETTER

Dear Participant,

I am writing to invite you to participate in a research study directed at gaining a better understanding of space management and decision-making in public universities. You have been identified as a person who is involved in space management issues on your campus.

I am a doctoral candidate in the Higher Education Administration Program at UMass Boston's Graduate College of Education. My dissertation research on space management on campus addresses critical issues concerning space, academic cultures, and decision making in the changing higher education environment. I invite you to participate in my related doctoral research project titled "Space and Power in the Ivory Tower: Decision making in public higher education."

I hope that you will agree to participate in my study and share your knowledge and experience in space management issues on your campus.

My primary research question is:

- How are decisions made about space management issues in public higher education and are they related to changing values and priorities, educational effectiveness and institutional mission fulfillment?

Sub-questions include:

- How do internal (e.g., student enrollment, research growth) and external (e.g., economic situation, demographic changes) factors to the institution shape the decision-making process related to space management?
- In what ways do various sources of data and information shape the decision-making process about space management issues in higher education?
- In what ways do the different roles and priorities of administrators and faculty, two major constituencies of higher education governance, shape decision making about space management issues?
- What is the relationship between space management decision making and implementing change in public higher education?

My dissertation committee is chaired by Dr. John Saltmarsh, professor and Director of the New England Resource Center for Higher Education (NERCHE), and includes Dr. Judith Gill, Commonwealth Professor and Graduate Program Director of the Higher Education Administration Doctoral Program, UMass Boston, Dr. Dwight Giles Jr., Professor Higher Education Administration Doctoral Program; Senior NERCHE Associate, and Dr. Anita Miller, Associate Provost of Academic Affairs, UMass Boston.

I plan to conduct face to face interviews with all participants and follow-up those interviews with phone and/or email conversations. The interview will be scheduled at a mutually agreeable time between November 2009 and March 2010 and is designed not to exceed 1.5 hours..

Information you provide will be reported without attributing it to you. You will be asked to sign a release that allows me to audio tape and transcribe the interview. All tapes and transcripts will be destroyed once the study is completed.

I do hope you can participate in this study. Whether or not you choose to participate, please let me know. If I do not hear back from you within one week, I will follow up with another email.

Sincerely,

Sandy Blanchette, Doctoral Candidate
University of Massachusetts Boston
Email: sblanchette54@gmail.com
Phone: 617-287-5534 (office)
508-662-1490 (cell)

APPENDIX D

CONSENT FORMS

Informed consent form and Consent to Audio Taping and Transcription

University of Massachusetts Boston
Department of Leadership in Education
100 Morrissey Boulevard
Boston MA 02125-3393

Consent form for:

Space and Power in the Ivory Tower: Decision making in public higher education

Introduction and Contact Information:

You are being asked to participate in a dissertation research project exploring space management decision making in public higher education. The researcher is Sandra (Sandy) Blanchette, a doctoral candidate in the Higher Education Administration Program at the University of Massachusetts Boston. Please read this form and feel free to ask questions. If you have further questions later, Sandy will discuss them with you at any time. You can reach Sandy by phone at 508-662-1490 or by email at sblanchette54@gmail.com. You may also contact the advisor for this research project, Professor John Saltmarsh, Ph. D., and he can be reached at John.Saltmarsh@umb.edu.

Description of the Project:

The purpose of this research project is to explore the decision-making processes used in higher education institutions for managing space in an effort to get a better understanding of these processes and if and how they promote educational effectiveness and mission fulfillment.

Participation in this research project will take approximately 1.5 to 2 hours for a personal interview and approximately another hour for follow-up e-mails or phone calls, unless we negotiate otherwise. If you choose to participate in this project, you agree to participate in a face-to-face, audio-taped interview with the researcher and communicate with the researcher by email or phone. Participation will take place at a mutually agreed upon time between November 2009 and March 2010.

The interviews will be conducted by me, Sandy Blanchette. In the interview you will be asked general demographic information as well as your insight and experience in space management decision making on your campus.

Along with interviews, I request access to documents that relate to space management on campus, such as written processes, committee notes, and other relevant information. These 'text' documents will be provide additional information about how your campus approaches space management issues and will be used along with your interview narrative to construct and informative case study.

Risks and Discomforts:

This research is of minimal risk. Possible discomfort associated with this project is the emergence of negative or distressful feelings in completing the research interview. You may speak with Sandy to discuss any distress or other issues related to your participation. This research project does not directly benefit participants or institutions, though findings may contribute to a better understanding of institutional decision-making processes that affect how space is managed on campus.

Confidentiality:

Your participation in this research is confidential and every precaution will be taken to protect your privacy. I will not ask you for any personal information that is not directly associated with the purpose of this study. The information gathered for this project will not be published or presented in a way that would allow anyone to identify you. Participants will be assigned pseudonyms which will be used for data reporting. My dissertation committee and me are the only ones who will have access to primary data. Identifying information and audio files will be destroyed when the study is completed.

Voluntary Participation:

Your participation in this study is entirely voluntary. If you decide to take part in this study, you may terminate participation at any time without consequence. You may decline to answer any of the interview questions without consequence. If you wish to terminate participation, please contact Sandy.

Rights:

You have the right to ask questions about this research before you sign this form and at any time during the study. You can reach the researcher Sandy Blanchette at 508-662-1490 or sblanchette54@gmail.com and my dissertation advisor John Saltmarsh at John.Saltmarsh@umb.edu. If you have any questions or concerns about your rights as a research participant, please contact the University of Massachusetts Institutional Review Board (IRB), which oversees research involving human subjects. The Institutional Review Board can be reached at: Institutional Review Board, Quinn Administration Building, 2-015, University of Massachusetts Boston, 100 Morrissey Boulevard, Boston, MA 02125-3393, 617-287-5370, Human.subjects@umb.edu

Signatures:

I HAVE READ THE CONSENT FORM. MY QUESTIONS HAVE BEEN ANSWERED. MY SIGNATURE ON THIS FORM MEANS THAT I CONSENT TO PARTICIPATE IN THIS STUDY. I ALSO CERTIFY THAT I AM 18 YEARS OF AGE OR OLDER.

Printed name of participant

Date

Signature of participant

Printed name of researcher

Date

Signature of researcher

APPENDIX E

INTERVIEW PROTOCOL

Case study interview questions

Interview Protocol for Participants: (What do I want to ask each informant?)

Semi-structured/open-ended questions:

Questions:

What is your official job title?

How long have you been in this position?

First I am going to ask you some questions regarding space management on your campus and your role in it. For the purposes of this study, I am using the following definition of space management: Space management has been defined as “the art and science of maximizing the value of *existing* space and minimizing the need for *new* space” (Hier & Biddison, 1996, p.17). By space management, I am referring to the allocation, utilization, and renovation of existing space for offices, research space, and classrooms.

About space management:

1. Can you explain how space is assigned to departments or individuals on campus?
2. What kind of data is used to assist in decisions regarding space and how is it used? Who is responsible to collect and maintain this data?
3. Who addresses space management issues on campus? Is there a specific group(s) or committee of people on campus who address space management issues? Can you explain how the process works?
4. What is your role in space management on campus?

About institutional culture:

5. How would you describe the characteristics of your institutional culture in general and in relation to space issues?
6. How does your institution react to change? Internal change and external change?
7. What is the role of faculty governance in general and in relation to space issues?
8. Do you have a strong or weak faculty governing body?

About decision making:

9. Do you know if there is a defined decision-making process regarding space management issues on your campus?

10. Do space management decisions reflect institutional priorities and mission?
Are decisions based on a strategic plan or a master plan?
11. Do decision makers consider the organizational culture when instituting change?
Are change strategies consistent with the culture? Are space decisions consistent with the culture?
12. Are decisions about space management regarded as strategic or routine? Is there a financial threshold that drives the process?
13. Is there an emphasis on efficiency (speed) or effectiveness (the right decision, deliberation) in decision making regarding space issues?
14. Does campus politics play a role in decisions regarding space? To what extent?
Who is perceived to have more power and why? Faculty, administration, individuals?
15. Who has the final decision-making authority?

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