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ABSTRACT

This study examines the factors influencing faculty perceptions of mission and organizational culture within community colleges. Using Cameron and Ettington's organizational culture typology, the investigation focused on how faculty in a single state system perceived different cultural types and mission in describing their particular campuses. The four culture type models explored were clan, adhocracy, hierarchy, and market. Individual demographics were also investigated to determine whether they affected perceptions about culture and mission. A survey instrument developed specifically for this study was sent to 660 full-time instructional faculty at seven community college campuses and yielded a return rate of 56 percent. A multiple discriminant analysis of faculty perceptions of culture types correctly placed 40 percent of faculty in their appropriate campuses, suggesting considerable agreement within campuses about their institution's cultures. The additions of variables such as institutional mission and academic or vocational affiliation added accuracy to a total of 54 percent. This accuracy in correctly classifying faculty suggests that culture, mission and disciplinary affiliation all contribute to the uniqueness of the campus. Conversely, the inability to classify 46 percent of faculty was likely due to shared cultural aspects among campuses (market outlook, college transfer mission). Implications and future research are discussed. The survey instrument and table of findings are appended. Contains 94 references. (Author/SKF)

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ED 430 609

FACULTY PERCEPTIONS OF ORGANIZATIONAL CULTURE
IN COMMUNITY COLLEGES

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAII IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF EDUCATION

IN

EDUCATIONAL ADMINISTRATION

DECEMBER 1996

by

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To My Son,

Michael David Isao Shibata

1979 - 1981

and

My Father

Morris Toshio Masumura

1912-1992

ACKNOWLEDGMENTS

A special song, "One Moment in Time," constantly resounded in my mind and inspired me throughout the dissertation process. This theme song from one of the Olympics captures the spirit that carried me through the challenges of my doctoral studies. The words of the song express the commitment of giving my best each day and taking advantage of the best that life has to offer. Then, emphatically, the song proclaims my desire for that one moment in time when I can realize the dream of being more than I thought I could be.

By attaining the doctorate, I realized this dream. Although...as the song goes...I had to face the pain and the constant rise and fall of my emotions in order to taste the sweetness of success, I knew I was not alone. I have many to thank for giving me this "one moment in time."

First, I want to remember my son, Michael, whose brief life gave me strength to endure life's greatest challenges and live my own fleeting life to the fullest. My mother, 81 years old, was my model and a woman ahead of her time. When most women were not even completing grade school education, my mother went to college. I was fortunate that she passed on her values of education to her children.

Members of my committee--Dr. Linda Johnsrud, Dr. Charles Araki, Dr. Joanne Cooper, Dr. Ronald Heck, and Dr. Robert Doktor--encouraged me and provided special guidance as this dissertation evolved. As committee chair and supreme advisor, Dr. Johnsrud has my highest respect. Her scholarly expertise was invaluable as she offered helpful

comments and suggestions on the many drafts I submitted to her. Dr. Heck brought statistics to life for me as he patiently helped me through the analyses of my data. I am truly honored to have had such a distinguished and supportive committee.

The blessing and support of the University of Hawaii Senior Vice President and Chancellor for Community Colleges were critical to my study. I am deeply indebted to Dr. Joyce Tsunoda and her staff who provided statistical data on community college faculty and assisted in sending out the surveys. Of course, the study would not have been possible without the time and cooperation of the hundreds of faculty who completed the surveys for my study. To all community college administrators, faculty, and staff, I would like to express my love and heartfelt thanks.

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Exceptional friends, including Dr. Moss Ikeda, Dr. Christine Des Jarlais, and Dr. Bob Voliter, who all received their doctorates from the same college, shared their experiences as doctoral students and their understanding of the dream that I had. Their empathy and steadfast emotional support gave special meaning to the word "friend."

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Finally, there was always one Person whom I always looked to for guidance--my God. He kept me safe and healthy and always gave me hope. I thank Him and praise Him for giving me the opportunity and talents that enabled me to realize this *one moment in time*.

ABSTRACT

This study examined factors influencing faculty perceptions of mission and organizational culture within community colleges. Using Cameron and Ettington's (1988) organizational culture typology, this investigation focused on how faculty within a single state system perceived distinct cultural types (i.e., market, adhocracy, hierarchical, clan) and mission in describing their particular campuses. Moreover, individual demographics (e.g., age, gender, rank) were investigated to determine whether they affected perceptions about culture and mission. The questions that guided this study were:

1. Can a profile of culture types be identified within and across community college campuses?
2. Do faculty perceptions of each culture type differ among community colleges within a single system?
3. Do faculty perceptions of culture type differ by individual demographic factors?
4. Which of the culture types account for most of the differences in faculty perceptions of culture between campuses?
5. What other cultural dimensions contribute to explaining the differences and similarities in faculty perceptions of their institutional cultures?

A survey instrument developed specifically for this study was sent to 660 full-time instructional faculty of seven community college campuses and yielded a 56% return. Preliminary analyses confirmed the

appropriateness of the culture typology in describing the culture of individual institutions. Individual demographics, however, did not affect how faculty perceived their institutions' cultures.

A multiple discriminant analysis of faculty perceptions of culture types correctly placed 40% of faculty in their appropriate campuses (versus 14% by chance alone) suggesting considerable within campus agreement about their institutions' cultures. The addition of the institution's mission as a variable added 10% more accuracy in classification; and the further addition of academic or vocational education affiliation added 4% more accuracy, for a total of 54% accuracy. The ability of the discriminant function to classify faculty suggested that culture, mission, and disciplinary affiliation all contribute to the uniqueness of campus culture. Conversely, the inability to classify 46% of faculty was likely due to shared cultural aspects (e.g., market outlook and college transfer mission) among campuses. Implications of the study's findings for theory and future research on the organizational culture of community colleges and for leadership initiatives are also discussed.

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CHAPTER 1

INTRODUCTION

"Greatness...is found in the culture of the organization and the spirit and purposefulness of the lives of people who belong to that organization." (Cunningham & Gresso, 1993, p. 25)

Faced with increasing financial stringencies and public accountability, community colleges are being challenged with the need to set priorities regarding their missions, their students, their curriculum, and their governance processes. In essence, they need to focus on their identity and sense of purpose (Chaffee & Tierney, 1988). In order to effect change successfully, leaders of these institutions must understand the existing values and beliefs that underlie the attitudes and actions of the their constituents--the culture of their organizations (Schein, 1985).

Faculty, who compose not only the largest employed membership in the community colleges, but who also have the greatest impact upon the teaching and learning that goes on in their institutions, are central to the effectiveness of community college education. Their own values and beliefs about their community college--what it should be doing, who it should serve, and how it should serve--are crucial in understanding what happens in the community college and why it happens (Seidman, 1985).

Recently, scholars have sought to understand how faculty find meaning in their worklife by investigating the organizational culture of

institutions of higher education. As a result, there has been intensifying evidence that the culture of individual institutions influences the attitudes and behavior of the faculty (Austin, 1990; Kempner, 1990; Peterson & White, 1992; Smart & Hamm, 1993a; Tierney & Rhoads, 1993).

This study proposes to investigate how faculty perceive the culture of the community college and whether these perceptions describe the distinct cultures of the institutions in which they work. The first chapter begins by demonstrating the need to study community college faculty. Then, a rationale for investigating faculty perceptions of the community colleges through a cultural perspective is proposed. Finally, the purpose of the study and the implications of this investigation are presented.

Importance of Faculty

There is no lack of rhetoric expounding the importance of faculty to institutional effectiveness. The Study Group on the Conditions of Excellence in American Higher Education (1984) declared:

> Faculty are at the core of the academic work force, and their status, morale, collegiality, and commitment to their work are critical to student learning. When we allow support for such a critical component of the enterprise to erode...we are compromising the future of higher learning in America. (p. 11)

In parallel fashion, Dale Parnell (1990), well-known leader and advocate for the community colleges, has asserted: "Vital people and vital organizations are interdependent. Perhaps the greatest challenge facing

college and university leaders in the 1990's will be the...retention and renewal of vital faculty members" (p. 23). Faculty are not only crucial to the success of academic institutions, but also to the strength and future of our nation according to Gardner (1983).

There is no debate concerning how important faculty are to the effectiveness of student learning and the achievement of institutional goals. It is widely accepted that the excellence of education lies in the hands of those who interact with individual students on a regular basis and have a primary responsibility for their learning, growth, and preparation for their future and *our* future.

Statement of the Problem

Despite the overwhelming consensus that faculty make the greatest difference in the quality of learning and in the efficacy of their institutions, research has gone wanting with regard to the explanation of faculty behavior and attitudes within the community college sector (Cohen, 1989). Although community colleges comprise the largest segment of higher education with over one third of all institutions of higher learning and approximately half of all first-year and second-year college students in the United States, and though they boast the fastest growing enrollment of postsecondary institutions (Ratcliff, Schwarz, & Ebbers, 1994), research with regard to these two-year colleges is conspicuously lean. With few scholars studying this sector of academe, Cohen and Brawer (1989) have

gone as far to assert that "during most of its history, the community college has been unnoticed and ignored by writers of higher education" (p. 28).

Much of what has been written about community college faculty has been what Cohen (1989) has called "status studies" (p. 57), which describe what faculty have done and what they need in order to justify additional funding. Cohen and Brawer (1977) also note that the research on community college faculty has been limited to specific campuses or program areas--what they describe as "one-shot affairs: a dissertation or thesis written by a graduate student; a compilation drawn together by a professional association; [or] a report from a local or state education agency" (p. x).

Although, recently, more attention has been paid to community college faculty (Cohen, Palmer, & Zwemer, 1986), the issues of what they believe about the institutions they work in and how they make meaning of their work have yet to be addressed adequately in professional literature (Seidman, 1985). Without an understanding of the perspectives of individuals who hold the key to the success of their institutions, Seidman believes that policymakers find themselves in a reactive role instead of a proactive role. As such, he says, they react to problems rather than exercise leadership by seizing opportunities to stimulate faculty vitality and effectiveness.

Conceptual Framework

An understanding of the beliefs and values that faculty share about their work and their workplace conveys an understanding of how faculty find meaning in their worklife (Tierney, 1988). These beliefs and values shape the organizational culture of their individual workplaces (Cameron & Ettington, 1988; Schein, 1992; Tierney, 1988). Previous studies have viewed community college faculty similarly as a collective group of professionals in a particular type of postsecondary institution with common characteristics and inclinations. For example, community college faculty, as a class within the higher education sector, have been profiled as student-centered teachers and not researchers since they regard teaching as their most important activity and de-emphasize research and publication (Ratcliff, Schwarz, & Ebbers, 1994).

In contrast, other studies have highlighted the differences in faculty beliefs and values about their work within and between community college institutions (Cooper & Kempner, 1993; Kempner, 1990; Seidman, 1985; Smart & Hamm, 1993a). For example, Cooper and Kempner highlighted faculty differences within an institution in describing the conflict between "cosmopolitan" and "local" faculty members regarding the mission of a particular community college. Kempner, in a case study of another community college, also noted differences between institutions by contrasting the faculty culture of a middle class suburban institution with that of the predominantly black urban community college investigated by

Weis (1985). The differences in faculty perceptions of their institutional culture affected their approach to teaching and their students' learning.

Since faculty perceptions of their workplace and worklife are indicative of the organizational culture of their institutions, differences in their perceptions about their institutions describe differences in cultures among these two-year postsecondary institutions. The "considerable variations" within this sector of higher education are noted by Clark (1980) and accompanied by a warning by Neumann and Riesman (1980) that it is dangerous to generalize about community colleges because of their individual distinctiveness. Kempner (1990) also adds: "To overgeneralize...is to miss the point" (p. 234).

The distinctiveness of community colleges has been reported in the rare studies that have investigated community college culture. For example, Peterson and White (1992) discovered that there was least agreement among community colleges regarding institutional purpose and other aspects of culture when these two-year colleges were compared to liberal arts colleges and comprehensive universities.

Research has also indicated that the unique cultures of the institutions have various effects on faculty and students. For example, Peterson and White (1992) ascertained that the perceptions of community college faculty regarding the culture of their organizations significantly influenced their motivation and performance. Smart and Hamm (1993a) similarly discovered that specific types of community college cultures were related to particular dimensions of effectiveness such as faculty morale, student development, and external community connections.

Unfortunately, very few scholars have been concerned with analyzing faculty perceptions of the unique context in which they work and the cultural distinctiveness of each community college. Kempner (1990) contends: "This lack of in-depth, empirical investigation that seeks to understand culture and context is...the largest deficit in studies of the community college" (p. 216).

Cameron and Ettington's Culture Types

Cameron and Ettington (1988) suggest that the lack of attention to community college culture is largely due to the confusion surrounding the definition of organizational culture. They note that imprecision and variation exist in the perspectives of writers on organizational culture. Other researchers concur. For example, Tierney (1988) argues that the "widely varying definitions, research methods, and standards for understanding culture create confusion as often as they provide insight" (p. 2). Lacking precision and consensus concerning the construct of culture--especially within the academic setting--researchers do not study the same thing and, therefore, are unable to develop meaningful theory relating to this construct (Tierney, 1988). Major questions wanting answers include: "What does culture mean in the context of academic institutions?" "What organizational properties or dimensions constitute culture?" and "How should culture be measured?" If organizational culture is to survive as a useful and meaningful construct for organizational researchers and practitioners, more empirical research needs to be

conducted to operationalize culture and translate it for particular settings (Cameron & Ettington, 1988; Sackmann, 1991; Tierney, 1988).

A particularly noteworthy study concerning the organizational culture of academic institutions by Cameron and Ettington (1988) tested culture types in describing and defining the culture of 334 four-year institutions of higher education. These researchers were able to accurately classify the academic institutions by four culture types: Clan, Adhocracy, Hierarchy, and Market. The appropriateness of these culture types was also substantiated in other studies of academic institutions to determine how organizational culture related to institutional effectiveness and the satisfaction and motivation of organizational constituents (Hamm, 1992; Peterson & White, 1992; Smart & Lerner, 1993).

In describing faculty perceptions of the culture of their institutions, this researcher has chosen to test Cameron and Ettington's culture type models for their suitability in investigating the distinct cultures of these two-year institutions. Other dimensions and elements that have been identified by previous research as useful in describing the culture of academic institutions will also be explored for their fruitfulness in profiling the distinct cultures of community college organizations.

Literature suggests that organizational culture--the current "single most active arena...of organization-environment research" (Ouchi & Wilkins, 1985, p. 458)--may be the most valuable piece of the puzzle of faculty commitment and performance yet to be investigated in depth in the academic sector. In support of this premise, Peterson and White (1992), reporting on a part of a larger research study on the culture of academic

institutions offering undergraduate education, conclude that when faculty perceive that there is a strong organizational emphasis on the institution's educational mission and goals, they are more satisfied and committed to their work.

Tierney (1988), moreover, asserts that leaders need to understand the culture of their organizations in order to create a more meaningful worklife for members of their organization. Without an understanding of the influence of organizational culture, decision makers and policymakers neglect to consider a very important variable which could profoundly affect the attitudes of the members of an organization and, subsequently, the health and vitality of their institutions (Peterson, Cameron, Mets, Jones, & Ettington, 1986; Peterson & White, 1992; Spencer et al., 1989; Tierney, 1988). Therefore, in light of the lack of research on the beliefs and values of community college faculty and the organizational culture of the various and distinct community colleges and the potential impact that culture has on the attitudes, performance, and welfare of faculty, faculty perceptions of the organizational culture of their unique community college institutions emanate as a cogent construct for this study.

Purpose Of The Study

The overall purpose of this study is to describe faculty perceptions of the culture of their community colleges. Specifically, the study investigates whether these perceptions create distinctive cultures among the campuses of a single community college system. To accomplish this, the study employs

and tests Cameron and Ettington's culture type models in discriminating faculty perceptions of culture between community college campuses. In addition, the study investigates whether these perceptions create a discriminant model of cultural dimensions that defines the uniqueness of individual community college cultures.

The following questions guide the investigation of faculty perceptions of organizational culture in the study:

1. Can a profile of culture types be identified within and across community college campuses?
2. Do faculty perceptions of each culture type differ among community colleges within a single system?
3. Do faculty perceptions of culture type differ by individual demographic factors?
4. Which of the culture types account for most of the differences in faculty perceptions of culture between campuses?
5. What other cultural dimensions contribute to explaining the differences and similarities in faculty perceptions of their institutional cultures?

In essence, the study asks: 1) "How do faculty perceive the culture of their individual institutions?"; 2) "Based on these interpretations, are the cultures of each campus unique?"; 3) "If so, what cultural characteristics explain their uniqueness?"

The scope of the study is limited to the full-time instructional faculty of the seven community colleges which comprise a statewide community college system. The researcher proposes to not only describe the distinct

organizational cultures of these community colleges through the eyes of their faculty, but also to produce a model incorporating the dimensions of culture that are appropriate for studying the culture of these unique institutions of higher education.

Since the community colleges are complex organizations with differences in structure and makeup and differences in the way people experience their work there, it is theorized that there will be similarities as well as significant differences in the way faculty perceive organizational culture within and between campuses. The illumination of how faculty view the organizational culture of the community colleges will render valuable insights essential to a basic understanding of the beliefs and values that exist among the community colleges--what faculty discern their community colleges are about, what they do, and how things are done.

Implications of the Study

Organizations can be viewed as systems of shared meanings and beliefs (Pfeffer, 1981). In other words, organizations are made up of people who possess their own beliefs and values about the organizations that they work in. Pfeffer proposes that it is important for leaders of organizations to understand these beliefs and values and how they are shared. Leadership, he professes, has to do with the management of meaning in organizations. That is, leaders should not be concerned so much with what happens, but with the meaning of what happens. The

meaning of what happens in an organization--the way faculty interpret the culture of an organization--is what this study is about.

Echoing the notion that culture and leadership are unquestionably related, Schein (1992) declares that leadership and culture are "two sides of the same coin" (p. 1). An effective leader, he asserts, is one who understands how culture is created and managed. A shared vision, shared meanings (values and beliefs), and a consensus on how things should be done are all components of the culture of an organization.

Bennis and Nanus (1985), two noted authorities on leadership, similarly advocate that effective leadership embodies attention through vision and meaning found in the culture of an organization. They explain, when an organization is led by an understanding of its culture (its beliefs, values, and ideologies), it operates on its emotional and spiritual resources rather than on its physical resources--its capital, human skills, raw materials, and technology. Elucidating further, they write:

> [Inspired by the shared beliefs and values of the organization], a shared vision of the future...suggests measures of effectiveness for the organization and for all its parts. It helps individuals distinguish between what's good and what's bad for the organization, and what is worthwhile to want to achieve. And most important, it makes it possible to distribute decision making widely. People can make difficult decisions without having to appeal to higher levels in the organization each time because they know what end results are desired. Thus, in a very real sense, individual behavior can be

> shaped, directed, and coordinated by a shared and empowering vision of the future. (Bennis & Nanus, 1985, p. 92)

Tierney and Chaffee (1988) also make a case for the importance of understanding culture in institutions of higher education:

> Our lack of understanding about the role of organizational culture in improving management and institutional performance inhibits our ability to address the challenges that face higher education. As these challenges mount, our need to understand organizational culture only intensifies. As decision-making contexts grow more obscure, costs increase, and resources become more difficult to allocate, leaders in higher education can benefit from understanding their institutions as cultural entities. Indeed, properly informed by an awareness of culture, tough decisions may contribute to an institution's sense of purpose and identity. Moreover, to implement decisions, leaders must have a full, distinct understanding of the organization's culture. Only then can they articulate decisions in a way that will speak to the needs of various constituencies and marshal their support. (p. 8)

Tierney (1988) essentially contends that the beliefs and values that members share about their organization give meaning to their work and existence within their organizations. These shared values address what workers should be doing, why they are doing what they are doing, and how they should be doing their work. Schein (1992) asserts that these beliefs and values affect how workers think and how they behave. Pfeffer (1981) further alleges that agreement on these beliefs and values--the organizational culture--assures continued compliance and commitment to

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the goals of the organizations. Peters and Waterman (1982), in their investigation of major U.S. firms, also conclude that organizational culture is the most important determinant of excellence in organizations.

Recent studies affirm that the people who work in organizations are the most vital sources of organizational success. Investment in human resources rather than in technology or markets provides the best competitive advantage in companies (Pfeffer, 1981). In order to effect better performance and success, leaders must view people as their most valuable resources. Organizations must pay attention to their members' beliefs and values about the organization--what is important to them, how they experience their work life, and what makes their work life meaningful (Pfeffer, 1981; Bolman & Deal, 1989; Schein, 1992). Only then can leaders understand the intrinsic motivators of their constituents--what "makes them tick" and what "turns them on."

Tierney argues that as leaders are compelled to make difficult decisions as a result of decreasing resources and changes in the external environment, they can benefit from understanding their institutions as cultural entities. An awareness of culture allows leaders to articulate decisions in a way that speaks to the needs of their constituents and contributes to the sense of purpose and identity of the institution.

An understanding of what beliefs are shared and not shared informs leaders of the strengths and weaknesses of the organization as they relate to the accomplishment of the goals of the organization. Recognizing how each decision would be interpreted by their constituents, leaders can

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evaluate consequences before they act and can prepare strategy that would reduce cultural conflict and help foster the development of shared goals.

In essence, an understanding of culture would assist a leader in making more culturally appropriate decisions. An insightful interpretation of the organization's culture can enlighten a leader about the more acceptable alternatives that he or she has regarding the decision to be made. In addition, since culture is deeply embedded in each member and endures over time, a leader would not necessarily have to survey its members each time a critical decision is made.

This study contends that organizational culture is a concern not only because it addresses the quality of worklife of faculty members, but also because it provides an understanding of the essence of an institution critical for effective leadership. Leaders who care about the well-being of faculty and the effectiveness of their organizations would benefit by understanding the underlying beliefs and values--the culture--of members of their organizations. Therefore, an awareness of the community college culture as perceived by its faculty would prove valuable to the leadership of those institutions.

Chapter Summary

Faculty are the key to the success of each community college. Their own values and beliefs and their perceptions of the culture of their organizations make their particular institutions distinct. The culture of these distinct colleges that they work in affects their attitudes and

performance within their workplace. An understanding of how faculty interpret their work life and their organization is essential to effective leadership and effective organizations.

This study proposes to investigate the beliefs and values that exist about community college organizations through the perceptions of those who are vital to the strength and success of their institutions--the faculty. The study basically asks: 1) "How do faculty members perceive their community college culture?"; 2) "Are the cultures of individual community colleges distinct?"; and 3) "If so, how are they distinct?"

CHAPTER 2

REVIEW OF LITERATURE

How individuals find meaning in their work setting--their interpretation of what their organization is about and how it functions--is of central importance to the understanding of organizational life, the well-being of organizational members, and the effectiveness of organizations (Cameron & Ettington, 1988; Tierney, 1988). Organizational culture--the beliefs and values that organizational members share about their work and their workplace--is, therefore, an essential construct for the investigation of the basic nature of an organization and the multiple perceptions that members have about their organization. This chapter presents a review of literature related to the study's conceptual framework. The review includes a discussion of the major models of culture appropriate for this study; approaches to the investigation of culture; a profile of community college faculty; the diversity that prevails among faculty; and, finally, the conceptual framework of this study.

Background

Researchers theorize that faculty performance is explained by interactions between organizational variables and individual dispositions, beliefs, and perceptions (Cameron & Ettington, 1988; Kempner, 1990; Peterson & White, 1992; Smart & Hamm, 1993a). That is, faculty attitudes

and behavior are influenced by their institutions' norms and pressures and their own interpretations of their work environment. They conclude that the beliefs and values that faculty share about their institution and their work, which constitute the culture of the organization, influence their role performance and ultimately, student achievement.

During the decade of the 80's, organizational culture emerged as a popular construct for understanding and managing institutions of higher education (Tierney, 1988). Fueled by its widespread acceptance in examining business organizations in best-selling works such as Peters and Waterman's (1982) In Search of Excellence, Ouchi's (1983) Theory Z, Deal and Kennedy's (1982) Corporate Cultures, and Schein's (1985) Organizational Culture and Leadership, the concept of organizational culture also became a focus of investigation in organizations of higher learning.

Armed with evidence that strong, cohesive cultures can inspire and produce high performance in businesses, researchers attempted to study the effects of the culture of academe in search of ways to understand why administrators, faculty, and students behave as they do and what motivates them to be more effective (Kempner, 1990; Peterson & White, 1992; Seidman, 1985; Spencer, et al., 1989). Unable to find answers to questions that seemed to evade logical explanation such as: "Why is the same leader more effective in one college than another?" or "Why is the same action or policy perceived differently in institutions with the same mission?" these researchers turned to culture for further insight.

Heightened interest in "organizational culture" and the diverse studies that it generated, portrayed culture as a panacea for understanding every aspect of organizational life and for curing almost every organizational ill. As a consequence, definitions and research methods varied widely creating as much confusion as insight. Hence, comparative studies and agreement on a theory of culture has gone wanting (Cameron & Ettington, 1988). Frost, Moore, Louis, Lundberg and Martin (1991) echo this concern:

> Given the abundance of research now available, it would seem reasonable to expect a theoretical consolidation of what has been learned from all this effort. This has not happened--for good reasons. Organizational culture researchers do not agree about what culture is or why it should be studied. They do not study the same phenomena. They do not approach the phenomena they do study from the same theoretical, epistemological, or methodological points of view. These fundamental disagreements have impeded the exchange of ideas and the ability to build upon others' empirical work. It has therefore been difficult to clarify what has been learned or how cultural studies contribute to other traditions of inquiry. (p. 7)

In a review to identify the theoretical foundations of organizational culture, Cameron and Ettington (1988) concur that, as a recent research focus, organizational culture is "uneven in quality and, to a large extent, noncumulative" (p. 356). They blame this condition on the deficiency of theoretical and empirical research which is hindered by the lack of a

precise definition of the concept and its differentiation from other related concepts, such as climate.

Without a precise definition, it is difficult to compare studies on culture, to generalize across multiple institutions, or to make significant progress in the development of theory regarding organizational culture. An important task in any study of culture, then, is to define and decipher the components of organizational culture--especially with regard to particular settings.

A major purpose of this study is to clarify the construct of culture as it relates to the community college setting. Important facets of culture will be identified by extant research of culture in institutions of higher education. Then, critical dimensions of culture will be analyzed with the intent of producing a model of culture that provides a conceptual basis for the further investigation of distinctive community college cultures.

Conceptualizing Culture

It has been noted that the lack of empirical research and the confusion of theoretical literature regarding organizational culture can be attributed largely to the confusion and absence of consensus regarding the definition and properties of culture. As a recent research interest, the concept of organizational culture is still inexact, wanting agreement on a common definition of culture (Cameron & Ettington, 1988; Peterson et al., 1986; Peterson & White, 1992; Schein, 1992; Tierney, 1988). Yet, there is

broad consensus that unique cultures exist in institutions of higher education.

For example, Meister (1982) describes the distinctiveness of the organizational culture of two very disparate colleges:

> Seen from the hill at Amherst, Hampshire's curriculum is trendy, its standards lax, its faculty composed largely of ideologues and misfits; its students take their education casually and are given credit for almost anything; it is a remnant of California culture, awkwardly grafted onto the more civil New England scenery. [In contrast,] from the frisbee fields of Hampshire, Amherst looms as a bastion of cultural elitism and authoritarian pedagogy; its curriculum avoids engagement with social issues; its standards are rigid, its faculty is composed largely of ivory tower, Platonic academics; its students are the children of privilege, little doctors, lawyers, or professors-to-be, and are given credit for nothing except what transpires in the classroom. (pp. 27-28)

Burton Clark (1970), in his classic study, The Distinctive College: Antioch, Reed and Swarthmore, describes three private liberal arts colleges, each with unique cultures that contribute to their educational values, their prestigious faculty, the status of students they attract, the governance structures they employ, the missions they profess, and the standards they uphold. The organizational saga of each creates a singular prestigious reputation for these academic institutions.

That unique cultures exist is also evident when one visits different community college campuses. Varied emphases on what is done, how it is

done, and why it is done make the culture of each individual institution unique. It is this distinctiveness between and within institutions that this study is designed to capture.

Models of Culture

Four models of culture are discussed in this section to create the context for investigating the elements of culture appropriate for the study of culture in organizations--particularly academic organizations. The Schein Model presents a widely-held interpretation of culture including what it is, how and why it develops within an organization, and how it perpetuates itself and socializes members within the organization. The Tierney Model is then discussed because it defines culture in the context of academic institutions of higher learning. The Cameron and Ettington Model is presented because its culture type models will be tested in this study to determine whether they are successful in describing the distinct cultures of individual community college campuses. This model of culture types has proven to be fruitful in the quantitative investigation of college cultures by several researchers. Finally, Peterson and White's Model is presented. It not only adapts Cameron and Ettington's culture type models but adds other dimensions of culture that are potentially useful in defining the culture of community college institutions.

The Schein Model

Edgar Schein (1985, 1991, 1992) one of the foremost and most-quoted authorities of organizational culture, presents a widely respected theory of what organizational culture is and how it should be analyzed. He proposes the following "formal definition of culture":

Culture is:

1. A pattern of shared basic assumptions,
2. invented, discovered, or developed by a given group,
3. as it learns to cope with its problems of external adaptation and internal integration,
4. that has worked well enough to be considered valid, and, therefore,
5. is to be taught to new members of the group as the
6. correct way to perceive, think, and feel in relation to those problems. (Schein, 1991, p. 247)

The first and second aspects of Schein's definition of culture suggest that culture consists of patterns of assumptions--"unconscious, taken for granted beliefs," and "habits of perception, thought and feeling"--that are shared or held in common among members of a group. Schein proposes "some underlying dimensions of organizational culture" that capture these assumptions. These dimensions include beliefs and values concerning what is right or wrong and true or false, the basic nature of human beings, and the "correct" way for humans to behave (Schein, 1991). He contends that these dimensions of basic assumptions are implied in most cultural research.

According to Schein, another way to understand the content of culture is to determine the dimensions of culture based upon the tasks that an organization must resolve externally and internally in order to survive. To do this, one must identify the "external adaptation tasks" and the "internal integration tasks." External adaptation tasks include the development of consensus on the mission, functions, goals, and tasks of the organization; how these should be accomplished and evaluated; and what should be done should the goals not be achieved. Internal integration tasks require the development of consensus on who should be a part of the group; how members get, maintain, and lose power; how people should relate to each other; what behaviors should be rewarded or punished; and how to explain unexplainable events. Schein alleges that if all of the things a group has learned about its external and internal tasks could be determined, then, one could claim to have described the culture of the group or organization.

Schein also suggests that in order for individuals to share basic assumptions, they must have experienced a common history. Therefore, it is implied that an organization must have a history and a sufficiently stable membership to permit some common learning to occur.

The sharing or consensus of the basic assumptions is a critical aspect of the definition of culture. The congruity of members' perceptions concerning what the organization is all about, what it should do, and how it should do it is integral to the definition of the culture of an organization. Within an organization, smaller groups may share mental models and form

subcultures; however, there must still be consensus within these subgroups if a culture is to exist.

The third and fourth part of the definition recognizes that in order to develop and maintain stability and succeed, an organization must learn how to solve its problems of internal integration and the problems it faces as it interacts with its external environment. As beliefs and values about how things are done and how things ought to be done are tested repeatedly, they become validated and automatically accepted as the correct way to think and behave. The more often these beliefs are tested and proven true, the more they are validated in the eyes of the constituents of the organization and "the more they come to be taken for granted and drop out of awareness" (Schein, 1991, p. 250). This invisible and unconscious nature of culture contributes to the difficulty in deciphering and analyzing it.

According to Schein, the beliefs and values are externally validated by how successful the organization is at accomplishing its tasks. Internally, the beliefs and values are validated by how successful the organization is in providing meaning, structure, and predictability to its members in order to reduce anxiety and promote stability.

An inherent quality of culture is its endurance. Beliefs and values about the organization are passed down from one generation of members to another. In doing so, the culture of an organization seeks to perpetuate itself. Schein maintains, in the fourth part of his definition of culture, that culture reproduces itself by teaching its basic assumptions to new members through a socialization process. This socialization process is based upon the premise that the new member will learn these assumptions as a result of

a need to avoid the pain of uncertainty and meaninglessness and as a result of a need to conform to the controls of norms reinforced by other members of the organization. Without an understanding of the culture of the environment, a newcomer is unable to understand or predict actions or reactions that occur. Therefore, acculturation can be seen as an anxiety reduction function and a desire to do what is acceptable in the work environment.

The final part of Schein's definition proposes that "if we make basic assumptions about different aspects of reality, those assumptions will influence perceptions, thought, and feeling as well as overt behavior" (Schein, 1991, p. 251). The important point posited here is that the mental models of the beliefs and values of an organization about how things *are* and how things *ought to be* affect members' attitudes and behavior in their worklife. Schein explains that organizational culture impacts upon behavior by "teaching" its members the "correct" way to think and behave in the organization. Addressing the human need for stability, consistency, predictability, and meaning in life, organizational culture creates pressure on its members to conform to this "correct" way of thinking and behaving. In essence, what Schein postulates is that human thinking and behavior can be influenced by external forces--the values and beliefs of the organization.

The Tierney Model

Tierney's (1988) cultural model is consistent with that of Schein's. In his effort to provide a working framework to diagnose culture for the

researcher of collegiate institutions, Tierney begins by broadly describing culture. He submits:

> 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 an instrumental and a symbolic level. (p. 3)

In order to better understand the culture of an institution, Tierney suggests that one ask: "What holds this place together? Is it mission, values, bureaucratic procedures, or strong personalities? How does this place run, and what does it expect from its leaders? How are things done around here?" (Tierney, 1988, p. 3).

According to Tierney, culture is shaped not only by powerful, external factors such as demographic, economic, and political conditions, but moreover by strong forces that derive from the "values, processes, and goals held by those most intimately involved in the organization." The perceptions of the intimate organizational participants are molded by the interaction of the norms, ideologies, and attitudes that have been passed down through the history of the organization and the values and beliefs that the participants bring with them in search of meaning and their reason for existence in the organization. Therefore, the culture of the organization cannot be understood only by analyzing its structure; it must also be understood by scrutinizing the members' interpretation of what the structure means to them.

After a year of searching through cultural research to identify components of culture, Tierney concluded that there was enough evidence

to support a framework for the study of culture in higher education. Upon conducting an intense analysis of a state college, he delineated and explicated key dimensions of culture. These dimensions form a basis for the study of culture in collegiate institutions. Tierney called these components of culture the "essential concepts" which must be investigated to describe the culture of academic institutions. These "essential concepts" included the college environment, mission, socialization of members, information dissemination, decision making strategy, and leadership. He conceded that, although these concepts for the study of academic culture were not comprehensive, they comprised fundamental key elements of culture that would help nurture collaborative efforts in the study of the culture of institutions of higher education.

The Cameron and Ettington Model

Schein and Tierney largely advocated qualitative methods of inquiry involving interviews and lengthy observations to discover the essence of the culture of an organization. Cameron and Ettington (1988), however, sought to simplify and blend the rich descriptive qualitative observation approach with the multiple comparison quantitative survey approach to investigate culture. To accomplish this, they developed scenarios (one for each culture type) on four attributes of culture to create four culture types which they labeled "Clan," "Hierarchy," "Adhocracy," and "Market." The researchers described the blending of the qualitative and quantitative approach this way:

> In qualitative methodologies, respondents are stimulated to report underlying cultural assumptions and values by responding to probing interview questions or by telling stories. Another way to obtain the same result is to write scenarios describing certain types of organizational cultures and to have individuals rate the extent to which each scenario is similar to their own organization. In this way, cultural information can be obtained from multiple perspectives and on multiple organizations. The key is to stimulate individuals to make an interpretation of their organization's culture in more than a superficial way. This is done by construction of word pictures for respondents that they can use as reflections of cultural attributes. (p. 375)

Word pictures, or scenarios, were composed for each culture type under the attributes: "institutional characteristics," "institutional leader," "institutional glue," and "institutional emphases." Cameron and Ettington chose these attributes because they were used in studies by numerous researchers including Wilkins and Ouchi (1983), Quinn and Cameron (1983), Smircich (1983), Deal and Kennedy (1982), and Mason and Mitroff (1973) to identify the particular characteristics of each culture that represented cultural congruency or fit. In other words, the dominant institutional characteristics, leadership style, bases for bonding or coupling, and strategic emphases present in an organization are critical attributes that must be aligned with culture type to produce cultural congruency.

Each of the four culture types was created by constructing a scenario for each attribute characterizing the culture type. For example, the scenarios that made up the Hierarchy model were, by attribute:

- Institutional Characteristic. Institution C is a very formalized and structured place. Bureaucratic procedures generally govern what people do.
- Institutional Leader. The head of institution C is generally considered to be a coordinator, an organizer, or an administrator.
- Institutional "Glue." The glue that holds institution C together is formal rules and policies. Maintaining a smooth-running institution is important here.
- Institutional Emphasis. Institution C emphasizes permanence and stability. Efficient, smooth operations are important. (Cameron & Ettington, 1988, p. 376)

The mental pictures of each culture type have their psychological underpinnings in Jung's (1923) "psychological archetypes." Jung's archetypes organize individual's beliefs, values, and interpretations of reality into categories and "can be used to shed light on organizational and institutional differences" (Mitroff, 1983, p. 59). For example, Mason and Mitroff (1973) found differences in the type of stories told by members describing the culture of their organizations. These stories were categorized by Jungian dimensions. Mitroff and Kilmann (1976), in identifying various organizational culture types, also used the Jungian symbols SF, ST, NF, and NT to describe the different cultures. (S stands for "sensing;" N, for "intuitive;" F, for "feeling;" and T, for "thinking").

These categories were used to create Cameron and Ettington's (1988) four types of culture: Clan, Hierarchy, Adhocracy, and Market. Cameron and Ettington argue that "the Jungian framework is a frequently used and highly reliable model for organizing the shared underlying assumptions and interpretations used by individuals that subsequently become manifest as organizational culture" (p. 371).

The framework is consonant with Quinn and Rohrbaugh's (1983) competing values model of organizational effectiveness which identified characteristics of effectiveness that were seemingly opposite from one another. They can be seen graphically in Figure 1. The horizontal axis in Figure 1 is grounded on one end by an internal focus, short-term orientation, and smoothing activities such as eliminating stress. The opposite end is characterized by an external focus including long-term time frames and achievement-oriented competitive activities. On the vertical axis, one end emphasizes flexibility, individuality, and spontaneity, and the opposite end emphasizes on stability, control, and predictability. According to Cameron and Ettington (1988), the vertical axis "identifies the distinction in organizations between soft, human concerns and hard, control concerns. It also identifies a dynamism-stability distinction" (p. 371).

The culture type diagonally across a particular culture type in the quadrant in Figure 1 is the opposite culture type. For example, the Clan culture possesses opposite characteristics from the Market culture, and the Adhocracy culture possesses opposite characteristics from the Hierarchy culture.

ERIC

Flexibility
Individuality
Spontaneity

TYPE: CLAN
LEADER STYLE: Mentor, facilitator
BONDING: Loyalty, tradition
STRATEGIC EMPHASIS: Human resources, cohesion

TYPE: ADHOCRACY
LEADER STYLE: Entrepreneur, innovator
BONDING: Innovation, development
STRATEGIC EMPHASIS: Growth, acquiring new resources

Internal emphasis
Short-term orientation
Smoothing activities

External positioning
Long-term time frame
Achievement-oriented activities

TYPE: HIERARCHY
LEADER STYLE: Coordinator, organizer
BONDING: Rules, policies
STRATEGIC EMPHASIS: Permanence, stability

TYPE: MARKET
LEADER STYLE: Producer, hard-driver
BONDING: Goal accomplishment
STRATEGIC EMPHASIS: Competitive actions, achievement

Stability
Control
Predictability

FIGURE 1
Types of Organizational Culture

Note. From "The Conceptual Foundations of Organizational Culture" by K. S. Cameron and D. R. Ettington. In Higher Education: Handbook of Theory and Research (p. 372) by J. C. Smart (Ed.), 1988, New York: Agathon Press, Inc. Copyright 1988 by Agathon Press, Inc. Reprinted by permission.

Cameron and Ettington labeled the four types of cultures that originated from this framework "Clan," "Hierarchy," "Adhocracy," and "Market" not only because they were consistent with the Jungian dimensions, but because they were also in accord with other studies which identified culture types. Three of the four culture types--Hierarchy, Market, and Clan--were congruent with Ouchi and Price's (1978) "social organization mechanisms." The fourth type, Adhocracy, was supported by other culture researchers as another major culture type (Bennis, 1973; Mintzberg, 1979; Toffler, 1980).

Figure 1 also displays the culture types in four separate quadrants described by the attributes of culture along two primary emphases: 1) the internal-external orientation, and 2) the flexibility-stability emphases. In the upper left quadrant, the Clan culture (internal/flexible) is like a family which emphasizes shared values, goals, decision-making, and the development of human resources. It is highly personal and informal, bound by loyalty and tradition, and usually evidences high morale. Teamwork, consensus, and participation are valued. In relating to the external environment, they are generally reactive. Internal behaviors are guided by congruence of beliefs, trust, and inherited mores. Clans are usually guided by leaders who are mentors, or father or mother figures.

The Hierarchy culture (internal/stable) in the lower left quadrant characterizes a formal highly-structured organization governed by rules and regulations and tightly-defined roles. It values efficiency of resources, security of employment, predictability, and longevity. The leader is usually a coordinator, an organizer, or an administrator.

The upper right quadrant, the Adhocracy culture (external/flexible) is characterized by a dynamic, growing, proactive, entrepreneurial system that encourages innovation and new ideas. Individual initiative, freedom, and uniqueness are valued in this culture and it is committed to development and progress. Its leader is generally considered to be an innovator, risk-taker, or entrepreneur.

Finally, the lower right quadrant, the Market culture (external/ stable) is found in an institution that emphasizes competitiveness, achievement, and customer orientation. The institutions are proactive, goal-driven, attuned to their environment, their competitors, and their customer needs. Market cultures value productiveness, competency, hard work and achieving desired outcomes. Leaders of this culture are considered hard-drivers and producers.

The location of each of the culture types in the larger model illustrates how each culture, consistent with the competing values model and the Jungian framework of cognitive types, possesses opposite characteristics from the culture type diagonal to it, yet shares some of the same characteristics with the cultures next to it. Cameron and Ettington found that very few organizations can be characterized solely by a single culture. They report: "Most organizations have attributes of more than one of the cultures, and paradoxical cultures often characterize organizations" (p. 373).

Cameron and Ettington's culture type models were successfully employed as independent variables in several studies of academic institutions to determine their impact on the effectiveness of the institutions

and the attitudes of their members. In their own study of four-year colleges and universities, they found that their culture type models were powerful discriminating variables correctly classifying 100% of the institutions in the study "after knowing their scores on the organizational attributes" (p. 381). The models also revealed significant differences in culture types among the institutions. In addition, their study revealed that the effectiveness of the institutions was related to the type of culture present--more than even cultural "congruence" or "strength."

In a study using measures of Cameron and Ettington's culture types, Smart and Hamm (1993a) investigated the extent to which the effectiveness of two-year colleges differed in terms of their dominant culture type. As a result of their survey of 1332 faculty and administrators in 30 community colleges, they demonstrated that culture type made a significant difference in the perceived effectiveness of these colleges. Colleges with a dominant Adhocracy culture were perceived to be most effective in that they had the highest or second highest adjusted mean score on all nine scales of effectiveness.

A third study which implemented an abbreviated version of Cameron and Ettington's culture type scenarios will be discussed next since it includes other dimensions of culture incorporated into this study.

The Peterson and White Model

Peterson and White (1992), in their study of the culture of ten colleges and universities including three community colleges, employed a survey instrument called the "Organizational Climate for Teaching and

Learning" developed at the National Center for Research to Improve Teaching and Learning. The survey adapted Cameron's culture type models and included other dimensions deemed appropriate for this study based upon research identifying the cultural properties of colleges and universities. Some of the additional cultural variables included: "Educational Purpose" (the objectives of undergraduate education); "Governance Style" (the way decisions are made); "Organizational Change Orientation" (how the institution approaches change); and "Educational Mission and Goals."

Peterson and White's Educational Purpose and Educational Mission and Goals dimensions address the primary mission and objectives of undergraduate education. According to Schein (1985), "the core mission, functions, and primary tasks of the organization vis-a-vis its environment" (p. 52) are external adaptation tasks which address not only the organization's "reason to be" and its identity, but its ultimate survival. He contends, "As the members of an organization develop a shared concept of their core mission, and as this concept enables the group to survive in its environment, it becomes a central element of that group's culture and serves as the underlying context in which goals and the means for achieving them can be specified" (p. 55).

Peterson and White also examined Governance Styles to determine the extent to which decision making is perceived of as collegial, rational, political, autonomous, or anarchic. Schein's (1985) external adaptation task for an organization in defining its culture includes the development of a consensus on the means to accomplish the purposes of the organization.

This involves the way decisions are made in an organization. According to Schein, the decision making style of the organization reflects the basic design of tasks, division of labor, organization structure, reward and incentive systems, control systems, and information systems.

Finally, Change Orientation is assessed by "a measure of the future versus current orientation of change strategy and the internal organization versus external environment locus of control" (Peterson & White, 1992, p. 184). The results indicate the degree to which institutions respond (current/internal), resist (current/ external), adapt (future/external), or lead (future/internal) in making institutional changes. Schein (1985) identifies this dimension as an essential part of an organization's culture. He contends that the need to bring consensus on "what to do if a change in course is required and how to do it" (p. 63) is a crucial external adaptation task for an organization in defining its culture.

In another study, Peterson and other colleagues (Peterson et al., 1986) include the mission and goals of the institution; governance structure and leadership style of administrators; curricular structure and academic standards; student and faculty characteristics; student-faculty relations; and institutional size, location, and physical environment in identifying key elements of the college culture. They maintain that the characteristics of each element and their interactions with each other create a unique culture for each institution.

The models discussed in this section represent major works that address the conceptual framework of this study. Because the construct of culture is so broad, the dimensions of culture analyzed in this study

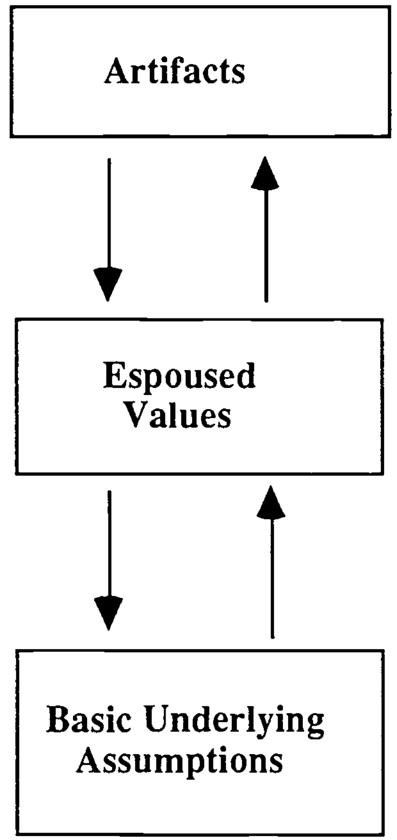
consider only major and critical indicators of culture as indicated by previous research on culture as well as commonalities in the definitions of culture found in the models discussed in this section.

Levels of Culture

A major problem in the study of culture is that the various aspects of culture do not lend themselves to simple observation or data collection. Schein (1992) explains that culture manifests itself at various levels. In order to mitigate some of the confusion of the definition of culture, he suggests that culture must be differentiated by these levels of manifestation.

Schein arranged his levels of culture in ascending order based upon the degree of their visibility to an observer (Figure 2). They range from the deeply embedded and unconscious level of "basic underlying assumptions" to the very tangible and observable level of "artifacts." The level of "espoused values," the middle level, is the level at which this study is investigated. It is the level at which members communicate their perceptions of culture.

According to Schein, artifacts and espoused values can be considered manifestations of the basic assumptions, the essence of culture. Artifacts, the most visible level of the culture, includes the "constructed physical and social environment" such as the architecture of the physical environment, the language used, the technology, and any visible or audible behavioral patterns. Cultural research on this level includes studies by Berg and Kreiner (1990), on the physical space of buildings; Huff (1983), on the



Visible organizational structures and processes (hard to decipher)

Strategies, goals, philosophies (espoused justifications)

Unconscious, taken-for-granted beliefs, perceptions, thoughts, and feelings (ultimate source of values and action)

FIGURE 2
Levels of Culture

Note. From "What Is Culture" by E. H. Schein. In Reframing Organizational Culture (p.252) by P. J. Frost, L. F. Moore, M. R. Louis, C. C. Lundberg, and J. Martin (Eds.), 1991, Newbury Park: Sage Publications, Inc. Copyright 1991 by Sage Publications, Inc. Reprinted by permission of Sage Publications, Inc.

language of different subgroups within a graduate school of management; Peters and Waterman (1982), on myths and stories; and Deal and Kennedy (1982), on overt behaviors such as the manner of dress, greetings, and rituals.

Although culture at the artifacts level is easy to observe, it is not easy to interpret. For example, a weekly staff meeting may be translated by one observer as a "ritual" symbolizing participatory management, and by another, as a means of authoritative one-way communication and information-giving. In other words, the observer can describe what he or she sees but cannot discern the meaning underlying a specific artifact unless the observer experiences the culture as a "native" (Tierney, 1991). Schein (1992) believes that artifacts are not reliable indicators of basic assumptions; nevertheless, they can reasonably serve as manifestations of basic assumptions.

The level of espoused values is the more immediate manifestation of basic assumptions. Espoused values are the values that are advocated by members of the organization, especially by administrators and other influential leaders. Schein (1992) maintains that if the espoused values are reasonably congruent with the underlying assumptions, then the articulation of those values can serve to identify the culture of the organization. It cannot be assumed that all espoused values are manifestations of basic assumptions. Just as Argyris (1976) asserts that espoused values (what people say) are not necessarily consistent with "theories-in-use" (what people do), Schein (1985) also maintains that espoused values may not be aligned with the basic assumptions. However, espoused values constitute

the culture that members can more easily describe. It is at this observable and awareness level that both quantitative and qualitative analyses of a larger population can be more expeditiously conducted.

Recent studies affirm that cultural investigations at the espoused values level are able to identify and validate dimensions of culture (Allaire & Firsirotu, 1984) as well as explain organizational phenomena such as organizational effectiveness (Cameron & Ettington, 1988; Marcoulides & Heck, 1993) and motivation (Peterson & White, 1992). Marcoulides and Heck reason: "While we acknowledge that organizational culture is holistic and socially constructed by its members, we believe that at least some visible aspects can be measured and can yield important information about the influences [of culture]" (p. 211). Based on these studies and others which validate the use of group members' perceptions as manifestations of culture, the espoused values level was chosen as the level of inquiry for this study.

The most invisible subconscious level of culture, the level that underlies and influences the more visible levels of culture, is the level of basic assumptions. According to Schein (1985, 1992), these assumed realities are a result of solutions that have worked repeatedly over time and validate what should be done, how it should be done, and why it should be done. These realities become so ingrained and taken for granted that they become the unconscious basis for thought and behavior. Like Argyris' (1976) "theories-in-use," basic assumptions are implicit beliefs that dictate how people should think, feel, and act. They involve basic mental

processes of individuals which have a powerful influence on attitudes and behavior.

Schein (1985, 1992) maintains that the basic assumptions that individuals possess address the underlying philosophical issues of humanity. He describes these "underlying dimensions of organizational culture" as 1) the organization's relationship to its environment; 2) the nature of human activity; 3) the nature of reality and truth; 4) the nature of time; 5) the nature of human nature; 6) the nature of human relationships; and 7) homogeneity versus diversity. These basic assumptions are perceived as the implicit premises upon which espoused values and artifacts are founded. In other words, these basic assumptions undergird the manifestations of culture at more visible levels.

Because this level of culture is the least visible to the researcher, it is usually experienced through ethnographic research and interpreted through patterns of manifested values, behavior, and artifacts. Comprehending the basic assumptions of culture by experiencing it as a "native" can be a lengthy process. Schein, therefore, suggests that "if one wants to achieve this level of understanding more quickly, one might attempt to analyze the espoused values, norms, and rules that provide the day-to-day operating principles by which the members of the group guide their behavior" (Schein, 1992, p. 18). In other words, the researcher can productively analyze culture through the more visible manifestations of culture including espoused values--the level of analysis for this study.

Culture Versus Climate

In literature, the term "climate" has been frequently used synonymously or interchangeably with "culture." Because culture and climate have been so often confused, Peterson and White (1992) have made an effort to contrast the two concepts. This contrast is presented to provide further insight into the definition and description of culture.

Culture, a more holistic construct that incorporates climate, develops over a longer period of time than climate. According to Schein (1992), culture is "the deeply embedded patterns of organizational behavior and the shared values, assumptions, beliefs, or ideologies that members have about their organization or its work" (p. 12). In order to become deeply embedded Schein believes that the beliefs of culture must be tested over time and become widely accepted and assumed as the correct way to think and act. Climate, however, is focused on more specific phenomena within an organization and, like the weather, can change from day to day or moment to moment. It is defined as "the current, common patterns of important dimensions of organizational life or its members' perceptions of and attitudes toward them" (Peterson & White, 1992, p. 181).

Another distinction between culture and climate is the premise that culture is more difficult to identify than climate because it deals with implicit content--that of beliefs and values. Climate, on the other hand, is based on more explicit content such as moods that are more easily communicated and observed. The culture of an institution has been typed

as "clan ," "hierarchy," "market," or "adhocracy"; while the climate of an institution has been viewed in terms of its positiveness or negativeness.

A final contrast between culture and climate is that climate may change easily as leaders come and go in an institution; however, the strength of culture provides continuity for an institution's deep-seated ideologies, beliefs, values, and expectations created over time and inherent in the minds of its members. For example, Cunningham and Gresso (1993) suggest that intense inservice training efforts may bring changes in faculty behavior for a period of time; however, unless the culture of the organization is changed, faculty will revert back to their traditional behavior. Changes in behavior do not necessarily imply that beliefs and values held deeply by individual members have changed. Behaviors and attitudes that have to do with the deepseated culture of the organization are lasting and not easily changed. Cunningham and Gresso conclude: "Culture...existed long before the latest structural package or behavioral practice was tried and will exist long after both have evaporated" (p. 32).

Peterson and White (1992) summarize their distinction of culture and climate by saying that "culture represents those aspects of organizational and higher educational life that provide important meaning to [each member's] life and work in and for the institution; whereas, climate is more akin to changing conditions around us" (p. 181). Culture, then, comprises the deepseated basic values and beliefs which govern thoughts and actions and appeal to the individual's higher purpose in life. Climate, on the other hand, characterizes the mood of the moment.

Approaches to Investigating Culture

Two approaches to the investigation of culture have been mentioned frequently as ways of organizing the various studies relating to organizational culture (Cameron & Ettington, 1988; Ouchi & Wilkins, 1985; Peterson et al., 1986; Tierney, 1989). Peterson and others (1986) in their review of literature on the culture and climate of higher education institutions identify these two approaches as: 1) the functional approach and 2) the critical approach. The functional approach represents a "holistic" paradigm which focuses on what the organization as an entity agrees upon to be the values, beliefs, and ideologies that characterize their organization. This approach views culture as those values and beliefs that are espoused and advocated by members--especially leaders--of the organization, and the norms and expectations of the organization that exert pressure on its members to conform to the predominant way of thinking and acting.

The functional approach is primarily rooted in sociology, focusing on the socialization and function of members within an organization. Because the assumption is that the values and beliefs of the organizational culture function to socialize members of the organization in the customary ways of the organization, culture is most often found as an independent variable in literature to predict behavior or performance (Cameron & Ettington, 1988).

The "critical" approach, on the other hand, is usually studied for the sake of understanding the culture of the organization by uncovering how

individual members of the organization interpret the underlying assumptions of their work life (Geertz, 1973; Peterson et al., 1986; Tierney, 1989). This approach, which generally treats culture as a dependent variable, relies heavily on an anthropological perspective of uncovering the deepseated feelings of individuals. The assumption is that members can agree *on* the values and beliefs that the organization has but may not necessarily agree *with* them. Therefore, the critical approach views culture as that which individual members agree upon regarding what the beliefs and values of the organization *should be*.

Ouchi and Wilkins (1985), after a historical review of literature on culture, also chose to categorize the current developing theory on culture according to these two approaches. They called the functional approach "macroanalytic theories" and the critical approach "microanalytic theories." In comparing the two approaches, they write:

> The macroanalytic theories have in common an attempt to understand the culture of a whole group or subgroup, the functions that culture performs in maintaining the group, or the conditions under which the group and its culture and subcultures develop. The microanalytic theories present culture as something that resides within each individual and can be understood through the cognitive processes of sense-making, learning, and causal attribution, or by probing the unconscious mind. (p. 471)

Schein (1992) describes the macroanalytic culture as one which teaches new members the correct way to think, act, and feel with regard to their role in the organization. The microanalytic culture, however,

emphasizes culture as a personal approach to the significance and meaning of their role in the organization. Microanalysis of culture reveals how members as individuals agree or disagree with the predominant macroanalytic culture.

The two approaches--the functional/macroanalytic and the critical/microanalytic approaches--have differed in their purposes as well as in their methodology for acquiring data. These differences will be discussed next.

The Functional or Macroanalytic Approach

Researchers employing the functional or macroanalytic approach in analyzing culture generally intend to understand culture in order to gain insight on how to better manage organizations. Describing the intellectual foundation and intent of this approach, Ouchi and Wilkins (1985) posit:

> The study of organizational culture is rooted more deeply in sociology than in any other intellectual tradition. Critical both to sociology and to the study of organizational culture is the idea of an organization as a social phenomenon that has its own features which distinguish it from an environment on the one hand and from the individual desires and predispositions of its members on the other. The organization [is treated] as an independent variable almost exclusively, paying attention to the effect of organizational culture on employee participation and morale. (p. 469)

In utilizing this approach, researchers assume that culture is an objective and observable construct. Its abstract realities can be codified,

understood by the members of the organization and by the researcher, and measured or counted. Therefore, culture can be operationally defined into its empirical components and statistically analyzed and manipulated.

The functional approach is found in both qualitative and quantitative studies that dissect the values and beliefs of the organization into dimensions. It often employs quantitative instruments such as questionnaires and surveys or a combination of quantitative and quasi-qualitative methods such as questionnaires having structured limited responses as well as open-ended questions.

The Critical or Microanalytic Approach

The overarching premise of the critical or microanalytic approach is that the culture of an organization is defined in whatever way its participants describe it and experience it (Geertz, 1973; Goodenough, 1971). The cultural world is in the eyes and the minds of its beholders. It is, as Geertz put it, "webs of significance" that humans spin in search of meaning. It is the individual member's interpretation of what happens and what should happen. For example, when an administrator cuts five percent off each department's budget during a budget shortfall, one member may interpret this action as a fair strategy, another may consider it a lack of leadership, while still another may view it as a lack of support for the college.

The purpose of the studies that embody the critical approach to culture is to reveal the realities of the organization's constituencies as well as to understand "the nonrational, underlying assumptions that drive

organizational behavior and the shared interpretive schema of organizational members" (Peterson et al., 1986, p. 15). Culture, in this context, is defined as the "shared meaning" and "the unconscious mental operation" of organizational members (Geertz, 1973; Goodenough, 1971; Schein, 1985, 1992). Using this approach, common themes of shared perceptions are elicited to interpret culture. Investigators subscribing to the critical approach usually do not view culture as a tool for increasing the effectiveness and efficiency of an organization; but, rather, a way of understanding and describing the organization through the perceptions and feelings of its participants.

Tierney (1989) presents four assumptions of this critical approach to organizational culture. First, the culture that exists in the minds of the organization's participants is not necessarily understandable by others since it is the individual interpretation of each respondent. Second, all individuals interpret reality differently, although commonalities may be found across individual interpretations. Third, culture, as an abstract reality, cannot be codified. Fourth, culture is a biased interpretive process between the researcher and the researched. In essence, Tierney's contention is that a critical analysis of culture is very difficult to conduct.

Since the critical culture is difficult to observe directly, it is often understood by capturing the interpretation of the "natives" of the organization through intense observations and interviews with them. Though time-consuming and often criticized for their investigator biases, critical investigations of organizational culture have been endorsed by researchers such as Tierney (1989, 1991). He maintains that this method of

investigating individual perceptions of culture allows the voice of the individual to be heard and recognized. Therefore, he argues, the "critical agenda" is essential in accounting for the various voices of individuals in organizations and in empowering all people.

An advantage of the functional or macroanalytic approach is that it can describe the cultural characteristics of the organization as a whole by many more members in a shorter period of time. The advantage of the critical or microanalytic approach is that it can capture the rich and deep-seated descriptions that members have of their institutional culture.

This study largely adopts the more holistic macroanalytic approach in describing faculty perceptions of the culture of their institutions. In doing so, this investigation is concerned with patterns of shared beliefs and values that characterize the culture of their organizations as a whole. It is not the primary intent of this study to capture the deeper philosophical meanings underlying the manifestations of culture. Instead, this study proposes to investigate the patterns of faculty perceptions of culture that characterize their institutions.

Community College Faculty

Although literature about community college faculty is scarce compared to the abundance of literature with regard to 4-year college and university faculty, several key resources provide current information which describe community college faculty. Some of these publications include the second edition of the ASHE Reader Series: Community

Colleges, edited by Ratcliff and others (1994), The Academic Crisis of the Community College by McGrath and Spear (1991), The American Community College by Cohen and Brawer (1989), "Two-Year College Faculty: A Research Update" by Keim (1989), and In the Words of the Faculty by Seidman (1985).

Current data collected by the National Center for Education Statistics in the 1994 Digest of Education Statistics report that community colleges employed approximately 235,000 faculty in the fall of 1991--over one-fourth of all full-time and part-time faculty in higher education. Only about 40% of the community college faculty were full-time compared to approximately 70% of faculty at 4-year colleges and universities.

Cohen and Brawer (1989) report that most of the community college faculty hold master's degrees; however, few took formal coursework which prepared them to teach at these colleges. They note that community college faculty view their primary role as teachers and not researchers. Therefore, they rarely conduct research or publish (one of the reasons why there is very little research on community college faculty). Although these two-year college faculty are more concerned with their discipline than their counterparts in the secondary schools, they relate less to their discipline than their university counterparts. They conduct four or five classes per term versus the two or three that university professors teach. Most of them (60%) are part-timers and many hold other jobs in addition to their teaching. More than half are men and at least two-thirds of the faculty are 40 years or older.

Keim (1989) adds that about 90% of the faculty are Caucasian; approximately 20% hold doctoral degrees; they average over 10 years of teaching experience; and most want to remain in their current positions. Despite studies that show that community college faculty have a weak affiliation with their discipline, Keim reports that more than 70% of full-time faculty belong to national professional associations and more than 25% have published at least one article. Of interest is the fact that more than 40% of the faculty had at one time attended community colleges.

McGrath and Spear (1991) describe the community college faculty culture as an "oral culture." Faculty are not expected to write and few do. Even communication is usually more verbal than written. McGrath and Spear also describe the community college faculty culture as a "practitioner's culture." They say these faculty do not focus on the intellectual, the abstract, and the theoretical. They instead focus on what is practical for the students. They collect stories and experiences rather than theory. Being student-centered, they deal with the day-to-day problems of students who drop out more than drop in. Their uncertainty of what happens to these high-turnover students and, moreover, their uncertainty surrounding the mission of the community college, create a predicament of how to evaluate their own successes as faculty. What motivates most of these faculty is the gratification they feel in satisfying their students' needs, whatever they may be.

According to Cohen and Brawer (1989) community college faculty are generally more satisfied than faculty of other institutions of higher education; however, this satisfaction is related to the conditions under

which they enter the institution. Older faculty members from secondary school positions or from industry are more satisfied than younger faculty who considered themselves college-level teachers and expect more prestige and better prepared students.

Diener (1985) concluded from his survey of community college faculty that they generally derived their satisfaction from intrinsic work-related factors such as student achievement, their own intellectual growth, working under flexible and relatively autonomous conditions, and association with stimulating peers. Milosheff (1990) similarly found that faculty perceptions of their students, the intellectual quality of the institution, and their perceptions of the department and the departmental colleagues significantly influenced community college faculty job satisfaction.

Despite reports of general satisfaction with their work, community college faculty have been described as "isolated, immobile, ambivalent, and stagnant" by many authors including Kempner (1990) who studied the effects of faculty culture on instruction in a suburban community college. A great part of the dissatisfaction that these two-year college faculty experience stems from poorly prepared students. As far back as 1978, London, writing about the culture of the community colleges, noted that these students adversely affected faculty morale. More recently, Seidman (1985) pointed out that community college faculty resented any activities that made the colleges seem like social welfare agencies instead of colleges.

It is no wonder that McGrath and Spear (1991) called the faculty culture "a weak and disordered intellectual culture" in which faculty fail to

understand their students as well as their role. Seidman (1985) blames the institutional culture--that of trying to be everything to everyone with no focus on their mission--as the problem that causes faculty role ambiguities. He says that community college faculty do not know whether they are more like high school teachers or like college professors. McGrath and Spear (1991) noted that community college faculty are almost always called "teachers." The few faculty called "Doctors" set them apart from their peers who strongly reject their identification with scholarship. In fact, those faculty committed to research and publication face accusation of "elitism" and criticism for not caring enough for students (Seidman, 1985).

The dichotomy between teaching and research has plagued the faculty since the community college's inception. Seidman reports that separating research from teaching efforts has affected faculty aspirations, intellectual energy and renewal, and job satisfaction. Because of the underprepared students they teach and the institution's lack of emphasis on research, they feel that they are inferior in rating and prestige in the higher education sector (McGrath & Spear, 1991).

According to McGrath and Spear, although community college faculty are "drawn into and reshaped by the culture of open access" (p. 140), they still yearn for the traditional image of the college academic. Seidman (1985) maintains that the community college reputation of being "second-best," its lack of emphasis on research, and the guilt that its faculty feels about having to lower their academic standards and expectations for students have lead to a weakening of faculty morale.

Case (1991), also cites factors that have affected faculty morale. These include fiscal stringencies, enrollment shifts and turnovers, changing societal expectations, competition from other education providers, loss of mobility, overuse of part-time faculty, and decline in faculty authority. He criticizes administrators for neglecting the professional development of faculty and for failing to include them in planning, change, and decision making.

While echoing Case's concern regarding the lack of opportunity for professional development and faculty involvement in decision making, Seidman (1985) notes community college faculty paradoxically resist participation in decision making. He reveals that faculty complain about expectations to serve on committees and participate in community service although these responsibilities present opportunities for involvement in decision making and change. These complaints are found in faculty expressions of frustration with their lack of control of their time. Faculty argue that besides their fifteen credit hour teaching load, they are expected to reach out and care for the total student and be totally accessible when on campus. Because faculty consider the students their priority, committee and community work become frustrations rather than opportunities for involvement.

According to McGrath and Spear (1991), community college faculty, unlike university professors, typically have lengthy careers in a single college. They point out that there is neither upward nor horizontal movement usually available to these faculty. More like secondary schools in their occupational structure, community college faculty--whose main

purpose is teaching--have few ways of exhibiting their competence and excellence. Except for traditional practices such as tenure and promotion and academic rank, these faculty have very few ways of distinguishing themselves in the academic sphere. Scholarly accomplishments are considered irrelevant and excellence in teaching is viewed as being difficult to evaluate. Therefore, by virtue of admission into the community college ranks and by virtue of longevity, the faculty in general are presumed to be competent teachers. "To suggest otherwise is a serious violation of the professional courtesy expected within an egalitarian organizational culture" (p. 140).

While teaching is a recognized priority for faculty at these "teaching institutions," faculty resist being evaluated on their teaching performance. The source of this resistance is seen as cultural--"the code of the guild":

> The journeyman illusion is that all faculty members are created equal, be they part or full-time, Ph.D. or B.A., published or not--one might even say competent or not--since the defining feature of a journeyman system is that competence is entirely a matter of initial certification. A faculty so organized naturally splinters: toward isolated and autonomous jobbers with no professional future beyond maintenance of membership in the guild, toward loss of corporate identity. (McGrath & Spear, 1991, p. 141)

The lack of career mobility and the absence of a reward or evaluation system compound faculty role ambiguities. However, role ambiguities and career advancement are viewed unevenly by various community college faculty. Vocational education faculty who come from

vocational schools or industry view their community college experience as a career advancement socially and economically (Seidman, 1985). Observing the growth of their students through a sequence of courses offering progressive technical skills, these instructors perceive themselves as mentors and find their work highly satisfying. Liberal arts faculty, on the other hand, who typically see their students for only one semester and experience a more traditional academic indoctrination to the professoriate, are less satisfied with their community college role. Kuh and Whitt (1988) attribute these contrasting perceptions of work to differences in expectations and to previous educational and personal experiences.

Although community college faculty vary in the ways they perceive and experience their worklife, the thematic problem that overwhelmingly resounds in literature about these faculty is their role ambiguity. These faculty wonder whether they should function more like secondary teachers catering to the diverse needs of all students, or more like academic professors enforcing the intellectual rigor expected of students in higher education. They also ponder how committed they should be to teaching versus research and the advancement of their discipline, and how they should balance equity for all students and excellence in their standards.

Related to role ambiguity is the confusion community college faculty have about their mission. Kempner (1990) revealed that the faculty he studied in a northwest community college of 11,000 students lacked a sense of common purpose and mission that hindered student learning. Seidman (1985) similarly found that many of the community college faculty he interviewed were unsure of their college's direction. In another study,

Cooper and Kempner (1993) discovered faculty disagreement over the direction and mission of the community college led to cultural conflict.

The previous description of community college faculty highlights the diversity of their backgrounds and the confusion they have regarding their perceptions of their institutions and their work. An assumption of this study is that these various backgrounds and perceptions of faculty describe and shape the culture of the institutions in which they work. The next section addresses the diversity of faculty in higher education and how it affects and is affected by the distinct cultures of their institutions.

The Diversity of Academic Faculty

Numerous studies of organizational phenomena and behavior in academic institutions have determined that there are differences in faculty perceptions of their institutions both within and across institutional types (Blackburn et al., 1986; Bowen & Schuster, 1986; Finkelstein, 1984; Peterson & White, 1992). For example, Blackburn and others (1986), in their extensive literature review on faculty, conclude that "the academic profession is not a singular body but rather is made up of many subcultures" (p. 6). Similarly, Finkelstein, synthesizing a multitude of studies regarding the American academic profession, reports: "Faculty are as different from each other as they are from the population at large" (p. 225). He suggests that these differences are a result of their predisposed values which influence their selection of the institutions they work in and the socialization occurring within the diverse institutions. He

also maintains that, although faculty behavior is reported to be more dependent on their own values than on the institution's, it is institutional type, prestige, and the institutional context [culture] that make the most significant difference in "every dependent variable" including research activity, academic role, preference for governance, and their relationship with other faculty and students. Therefore, he warns us: "It is neither intellectually defensible nor operationally useful [to generalize about faculty as a whole] except in the broadest way" (p. 226).

Literature presents further evidence of cultural diversity among faculty. For example, Ruscio (1987) claims that distinct disciplinary histories, ways of doing work, and career lines have created diverse professions among academics. Additionally, Clark (1987) reports that particular institutional missions have resulted in variation across faculty priorities and workload. Blackburn and Lawrence (1995) concur, citing differences in "properties" of individual faculty and their work environments.

According to Austin (1990), four primary determinants of "faculty culture" influence faculty beliefs and values about their work. They are: the academic profession, the discipline, the "academy" as an organization, and the type of institution. Elaborating on each determinant, Austin explains that the image of the academic profession influences both the expectations and self-concepts of faculty. Faculty as an academic profession can be characterized similarly as a collective group that engages the following values: the belief that the purpose of higher education is "to pursue, discover, produce, and disseminate knowledge, truth, and

understanding" (p. 62); autonomy and academic freedom in teaching and research; commitment to intellectual honesty and fairness; collegiality; and commitment to service for society.

Membership in a discipline, another determinant, creates different orientations to the work role of faculty. The member's discipline reinforces "assumptions about what is to be known and how, assumptions about the tasks to be performed and standards for effective performance, and assumptions about patterns of publication, patterns of professional interaction, and social and political status" (Kuh & Whitt, 1988, pp. 77-78).

Socialization in a discipline begins in graduate school where novices learn the language, style, symbols, traditions, appropriate activities, and folklore of their respective disciplines (Austin, 1990). Disciplinary values are, then, shaped by the "invisible college" of colleagues who seek to preserve the culture of their discipline (Kuh & Whitt, 1988).

Another determinant of faculty culture--the central values of the academy--have historically guided the philosophy, purpose, and work of colleges and universities. Traditional beliefs--such as the belief that the academies are involved in the "good work" of producing and disseminating knowledge for society and in the intellectual development of students--influence how faculty perceive their work. Therefore, faculty, believing that their work is important for the good of society, accept the rewards of collegiality, autonomy, and intellectual discovery and sharing even for lesser financial gains (Austin, 1990).

Institutional type, the last determinant of faculty culture described by Austin, is regarded by Finkelstein (1984) as the critical factor that makes

the significant difference "in every dependent variable" he has examined relating to faculty including research activity, academic role, preference for governance, and faculty relationships with students and other faculty. Although academic institutions, seen collectively, are said to possess a traditional common culture, each institution individually also possesses a unique culture determined by its distinctive mission (Austin, 1990) and the perceptions of its members (Tierney, 1988).

Finkelstein (1984) suggests that, this unique culture ("institutional context") makes a significant difference on faculty roles, activity, preferences, and relationships. An understanding of the diverse beliefs and values of faculty, then, is crucial to the understanding of the distinctive cultures of the institutions in which they work since members' perceptions describe and shape their organizational culture (Schein, 1985).

In the previous section that describes community college faculty, the argument was made that community college faculty are themselves considerably varied and fragmented in their beliefs about their roles and the mission of the institutions they work in. This author has also noted that literature regarding faculty perceptions about their two-year institutions and their work is noticeably scarce. In light of this lack of knowledge about the diverse perceptions of the individuals who hold the key to the success of their institutions, this study intends to explore the cultural beliefs and values that community college faculty have about their institutions and their work.

Conceptual Framework

It has been said that the "product of work is people." That is, the work that people do provides meaning and a reason for existence. People elicit meaning from their work life through sense making, an interpretive process that forms the basis for understanding behavior, events and actions (Kuh & Whitt, 1988). Organizations, then, are viewed as networks of shared meanings and perceptions held by their constituents (Kuh & Whitt, 1988; Pfeffer, 1981).

The construct of organizational culture concerns the beliefs and values organizational constituents share about their organization and the meaning they find in their work. In the evolution of an organization's culture, individual beliefs and values interact with those of the institution's to continually create and recreate what is acknowledged to be important and meaningful about the organization (Schein, 1985). According to Morgan (1986):

> [Culture is] a process of reality construction that allows people to see and understand particular events, actions, objects, utterances, or situations in distinctive ways. These patterns of understanding also provide a basis for making one's own behavior sensible and meaningful. [Culture is] an active living phenomenon through which people create and recreate the worlds in which they live. (pp. 128, 131)

The meaning people construct from events and actions is influenced by a complexity of factors including their perceptions about what their

organization does and how it does it (Peterson & White, 1992; Schein, 1985; Tierney, 1988). Cultivated by their predisposed backgrounds and experiences, members bring to the workplace their own diverse beliefs and values and expectations of how the organization "should be." These various inclinations and perceptions of members interact with the prevailing beliefs and values of organization to shape the culture of the organization (Kuh & Whitt, 1988; Peterson et al., 1986). As differences in member perceptions of their organizations emerge from their varied backgrounds and experiences, perceptions of organizational culture differ across institutions as well as within institutions resulting in unique institutional cultures (Schein, 1992).

Diversity is a central property of American higher education. Within the academic community, many researchers have warned that faculty are such an uncommonly diverse profession that it would be unwise to characterize them similarly (Blackburn et al., 1986; Finkelstein, 1984). Clark (1983) concurs, maintaining: "It is the nature of academic systems to be increasingly pluralistic in the production of patterns of thought and in the precise definitions of proper behavior (p. 106). With regard to the community colleges, the few investigators of faculty culture in this postsecondary sector have found marked variations in the perceptions that these faculty have about their institutions and their work (Clark, 1980; Cooper & Kempner, 1993; Seidman, 1985). The diversity of these perceptions have resulted in divergent views of the culture of their academic institutions and distinct community college cultures (Cameron & Ettington, 1988).

Inasmuch as diversity characterizes faculty, diversity also demarcates institutions of higher education. According to Ruscio (1987) academic institutions are destined to become more distinct as they fight for their niche within the higher education market. Accordingly, faculty who find their identity and meaning within their institutions will grow increasingly fragmented. He posits:

> Higher education in the United States is clearly evolving toward sharper distinctions among institutions. Inevitably, for the professoriate, a more diverse set of interests is being built around the local conditions for each institution. It would not be amiss to speculate that separate professions or separate cadres of academics, each with its interests endemic to its own institutional setting, may sprout, root, and endure. (p. 364)

Ruscio (1987) maintains that "community colleges are perhaps organizationally the most confusing [institutions of higher education], since enormous variation exists within that sector" (p. 336). Ratcliff, Schwarz, and Ebbers (1994) concur and support the notion that community colleges are becoming increasingly diverse. In the preface of their 1994 edition of the ASHE Reader Series on community colleges, they expressed amazement at how varied community colleges had become since their previous edition five years before. They questioned why variations had not been recognized among these two-year institutions which comprise over one-third of the institutions of higher education in the nation. They report:

> There are two-year institutions with exclusively vocational-technical missions and there are those with primary aims of providing the first

two years of the baccalaureate degree. There is great variation in the aims, missions, geographical scope, governance, curriculum, students, programs, and services among community colleges. Yet, there has been little examination to date of the extent to which this variation is greater within community colleges or between them." (p. xvi)

In light of the growing diversity among faculty and the institutions that influence their attitudes and behavior, this study investigates the various beliefs and values that faculty have about their institutions and their work and whether these perceptions describe unique cultures among the community colleges. In doing so, this study also proposes to develop a model that will be fruitful in investigating the distinctiveness of the cultures of individual institutions in this special sector of higher education.

Chapter Summary

Organizational culture is a broad and elusive construct. There is no consensus on a definition of organizational culture or its content; nor is there a single approach that has been used to investigate organizational culture. However, in organizational literature, organizational culture is a construct that addresses the very foundation of individual thinking and behavior. As such, it is a crucial investigative construct for an understanding of how members interpret their work and their workplace to create meaning in their worklife.

Very little attention has been paid to the beliefs and values that community college faculty, as members of an important segment of the higher education profession, have about the culture of their institutions. We know that this special group of teaching professionals hold fragmented perceptions of their workplace and their worklife. This study investigates their perceptions of organizational culture in order to describe the cultures of individual institutions and to determine whether distinct cultures exist within the community college sector of higher education.

With few empirical studies identifying cultural dimensions that describe the cultures of community colleges, this study turned to a particularly fruitful investigation of the culture of academic institutions. This investigation by Cameron and Ettington (1988) tested the culture type models they created and found that they classify four-year colleges with exceptional accuracy. Their culture types were employed successfully by other researchers including Smart and Hamm (1993a) and Peterson and White (1992) to determine how culture types as independent variables were related to factors of organizational effectiveness and motivation. This study examines their culture type models for their appropriateness in describing and discriminating the cultural distinctiveness of seven community college campuses and attempts to create a cultural model that includes other cultural dimensions that highlight the unique cultures of individual community colleges.

CHAPTER 3

METHODOLOGY

This chapter presents the research methodology of the study. First, a rationale is developed for the quantitative approach to this study. Then a discussion of the research design, data source, instrumentation, and data collection procedures follows. Finally, the variables and data analysis techniques of the study are discussed.

Rationale for Quantitative Approach

As a relatively new construct in understanding organizations, organizational culture has been largely investigated for the purpose of understanding culture for its own sake with the intent of building theory (Peterson & Spencer, 1990). Therefore, qualitative methods that include interviews, observations, focus groups, and document analyses have been the primary method of studying culture (Tierney, 1991).

More recently, research has identified significant cultural dimensions that have proven useful and valid in measuring organizational culture. Employing quantitative survey instruments, researchers have analyzed components of organizational culture to determine their significance in relation to management issues such as institutional effectiveness (Cameron & Ettington, 1988; Marcoulides & Heck, 1993; Smart & Hamm, 1993a) and job satisfaction (Ouchi & Johnson, 1978; Peterson et al., 1986).

Culture consists of values, beliefs, and traditions that form the basis for behavior. Proponents of the qualitative method for studying organizational culture (Geertz, 1973; Tierney, 1990) argue that culture is so deeply embedded within the individual consciousness that these submerged values and beliefs can only be tapped by long-term and time-consuming investigations and observations in which the researcher becomes a "native" of that culture. However, others such as Frost (1991) and Marcoulides and Heck (1993) believe that at least some perceptions of these values and beliefs can be estimated quantitatively and, therefore, have value in cultural studies.

This study uses a quantitative approach to the investigation of organizational culture. It is the assumption of this investigation that the organizational culture of an institution is the perceptual manifestation of the deeply-embedded values and beliefs of its members. Therefore, the most basic level of organizational culture--the "taken-for-granted" subconscious values and beliefs of the organization--can be revealed through the more conscious and observable manifestations of culture. This awareness level of culture is found in the espoused and perceived values and beliefs that are widely held and communicated and which are, in turn, revealed in the attitudes and behavior of group members (Schein, 1992). These perceptions (for example, their range and strength) can be estimated through surveys that have been proven valid and reliable in previous studies based upon a conceptual framework of culture (Cameron & Ettington, 1988).

This researcher recognizes that there is little agreement on the definition of culture, including what should be measured and how it should be measured. No one theory is likely to capture all of the dynamics of complex organizational processes (Marcoulides & Heck, 1993). Culture has proven to be a complex construct having a multitude of potential elements that are interrelated. In order to study the effects of culture systematically, choices needed to be made regarding the cultural dimensions that are potentially relevant and useful to the study. Fortunately, researchers, including Cameron and Ettington (1988) and Peterson and White (1992), have applied quantitative models that operationalize "organizational culture" providing us with tested instruments that have successfully measured the construct quantitatively in academic settings. These instruments and previous research identifying common and critical components of organizational culture form the basis for the measures of organizational culture employed in this study.

This study sought to analyze these measures (dimensions) of culture for their ability to describe and discriminate the cultures of individual community college campuses. In so doing, the dimensions found to be most productive in describing and discriminating the cultures would create a quantifiable model that would define culture for future research.

Research Design

This study proposed to describe community college faculty perceptions of their institutional culture and to examine the cultural

dimensions that might be used successfully in distinguishing the unique cultures among the community colleges. Cameron and Ettington's (1988) culture type models were tested for their validity, and other dimensions of organizational culture were also examined to determine their additive predictive power in correctly identifying distinct cultures among individual campuses.

Data measuring faculty perceptions of organizational culture were collected through a survey sent to 660 full-time instructional faculty at seven community college campuses in a single state community college system. Preliminary descriptive analyses were performed to describe the respondent population and to describe the data gathered in terms of means and standard deviations. Then, multivariate analyses of variance (MANOVAs) were performed to determine whether there were significant differences between individual characteristics of faculty and their perceptions of their institution's culture type; whether there were significant differences between the four culture types across institutions; and whether there were also significant differences among other organizational characteristics such as Mission, Objectives, and Philosophy across campuses. Subsequently, multiple discriminant analyses were performed to determine what accounted for any differences in perceptions of organizational culture between individual campuses and to determine which cultural dimensions were the best discriminators of organizational culture among the community colleges.

Data Source

Population

This study sought to explore the organizational cultures of all the community colleges within a single state system by surveying the total population of full-time instructional faculty. A list of names was generated by the Office of the Chancellor for Community Colleges one week before the survey was sent out. (Data collection procedures are discussed later in this chapter.) Of the 660 surveys mailed, 364 surveys returned were usable and 4 were unusable. Three faculty members were reported to have left their jobs resulting in a final population count of 657. Of that population, the total response rate was 56%.

Instructional faculty were chosen as subjects of this study because they are vital to organizational effectiveness and student learning. Since the study proposes to examine the construct of organizational culture, full-time faculty were also chosen because they are presumed to have had greater exposure and awareness of the culture of the institution than part-time faculty.

Institutions

Under the governance of the larger University of Hawaii system, all seven community colleges are part of a single state community college system led by the Chancellor for Community Colleges, who also holds the rank of Senior Vice President in the University of Hawaii system. Four community college campuses are located on the island of Oahu and a single

campus is located on each of the islands of Kauai, Hawaii, and Maui. A 1995 University of Hawaii Community Colleges Report indicates that the campuses range in enrollment from approximately 1,500 students at the smallest institution to over 7,500 students at the largest. The campuses vary widely in their program offerings. For example, one community college is noted for its industrial/technical programs, another is noted for its health sciences programs, and one of the smallest community colleges emphasizes courses that are transferable to four-year colleges and universities. The youngest of the community colleges has been in existence for 22 years, and the oldest, for 74 years--even before it was called a community college. Variations such as these which characterize the community colleges in the current study suggest that each campus has carved out a somewhat unique niche in its environment.

The community colleges were established in 1965 as "open door" colleges. These postsecondary institutions are responsible by statutory mandate for offering vocational education to any high school graduate or adult age 18 and over. According to the 1995 Community Colleges Report, Facing the Future, programs in vocational fields range from cosmetology to welding in 1994. Transfer, remedial, and community service courses are also offered. More than 26,000 students are enrolled in credit programs throughout the system and more than 80,000 people have taken advantage of noncredit courses including apprenticeship training, short-term computer and business skills, and customized employee training. The 1995 report also proclaims the following community college mission:

> To provide all qualified people in Hawaii with equal opportunity for a quality college and university education; to create knowledge and gain insight through research and scholarship; to preserve and contribute to the artistic and cultural heritage of the community; and to provide other public service through the dissemination of current and new ideas and techniques. (p. 36)

Within the context of this mission, the UH Community Colleges have the following "special objectives":

- To broaden access to higher education in Hawaii by providing the opportunity for any high school graduate or adult aged 18 or older to enter a quality educational program within his or her community.
- To specialize in the effective teaching of diverse liberal arts and sciences so that Community College graduates are prepared to enter the workplace or advance with confidence toward baccalaureate degrees.
- To provide vocational and technical training that prepares students for immediate employment and supplies the paraprofessionals, technicians and craftspeople needed by Hawaii business and industry.
- To offer continuing education in the form of general and customized employment training, as well as noncredit instruction that emphasizes personal enrichment, occupational advancement and career mobility.

- To contribute to the cultural and intellectual life of communities throughout Hawaii by sharing leadership, knowledge, problem-solving skills and informational services; by offering forums for the discussion of ideas; and by providing venues in which community members can both exercise creativity and appreciate the creative works of others. (Facing the Future, p. 36)

The following purposes are reflected in the broad mission and "special objectives" of the community college system: open access to all "qualified" students, transfer education, vocational and technical education, continuing and community education, and research. It should be noted that remedial education is not specifically addressed as a system-wide purpose. Currently, although remedial education comprises a substantial enrollment of the total student population, the systemwide leadership direction is leaning towards the de-emphasizing of these courses.

The current Chancellor has served one of the longest terms in the community college system's highest position. She began as a faculty member and rose to the position of Provost of one of the community colleges before being selected as the chief administrator of the statewide community college system in 1983. In the document, Visions: Toward the 21st Century, A Guide to Educational Development for Hawaii's Community Colleges (1990), she promotes the individuality of each campus in responding to the needs of their communities while encouraging the commitment of each campus to the systemwide mission. She maintains: "We should neither impose a single set of standards from above, nor should

individual campuses proceed as if their actions do not affect others throughout the system" (p. 39).

At the time of this study, the entire State was experiencing a lengthy recession. In July 1995, the State Tax Director announced that, for the first time since statehood, Hawaii collected less general fund taxes than it did the year before (Yamaguchi & Kresnak, 1995). Reflecting this financial situation, the Ku Lama (July 7, 1995), the newsletter of the University of Hawaii system, also reported that the University was facing its "most severe budget crisis since the 1970's."

During the 1995-96 fiscal year, the community college's budget was expected to be reduced more than it had ever been reduced in its previous history. The expected consequences included program cuts, fewer classes, larger classes, less money for equipment and travel, less clerical support, and no salary increases. Despite the stability of the systemwide administration of the community colleges, the severe financial crisis experienced by the colleges had the potential of affecting the organizational culture of the institutions. In fact, the University's President declared: "A budget reduction of this magnitude will require major restructuring of many programs, and we all need to be prepared to radically alter our thinking about how we have done business in the past and how we will do business differently in the years to come" (Manke, July 7, 1995, p. 1). It was in this context that the study was performed and in this context that the timeliness of this study bears particular importance.

Instrumentation

In light of the scarcity of research existing on the organizational culture of community colleges, there was no widely-received instrument that could be considered valid for this study. Therefore, an instrument addressing the conceptual theory of this study--one that would explore the organizational culture, specifically of community colleges--was constructed. The items included were based on existing measures of the culture of academic institutions and an extensive literature review identifying major dimensions of organizational culture in institutions of higher education. The instrument (Appendix A) was developed to describe the beliefs and values of individual community colleges as perceived by a vital segment of each institution--the full-time instructional faculty. One hundred twenty items were grouped into three dimensions: 1) Organizational Purpose, 2) Organizational Governance, and 3) Faculty Worklife and Motivation. These major content dimensions of culture have been frequently used to study organizational members' beliefs and values about their institution and the "central sense of meaning" they find in their colleges or universities (Peterson & White, 1992).

Section One: Organizational Purpose. In this section the respondents were asked about 1) their perceptions of the predominant beliefs and values of their institution and 2) their own beliefs and values regarding the Mission, Objectives, and Philosophy of their institution by indicating their perceptions of the importance of each item to their institution, and how important each item *should be*. A response of "1"

indicated that the factor was of low importance, and a response of "5" indicated the factor was of high importance.

Section Two: Organizational Governance. Culture type was the focus of investigation in section two. Although this section was labeled Organizational Governance, it contained the attributes that comprise Cameron and Ettington's culture types.

Two instruments--the Organizational Climate for Teaching and Learning (OCTL) survey and the Institutional Performance Survey (IPS)--included a section on Cameron's culture type models to measure the organizational culture of colleges and universities. The OCTL survey, developed at the National Center for Research to Improve Postsecondary Teaching and Learning (NCRIPTAL), studied faculty and administrator perceptions of organizational culture in relation to their motivation and individual performance. A total of 1,123 faculty and 381 administrators from three community colleges, three private liberal arts colleges, and four comprehensive universities participated in the study by Peterson and White (1992) which used the OCTL survey. The OCTL was found to have good content validity, high reliability, and the ability to show significant differences among institutions and across institutional types (Peterson et al., 1991).

The IPS, developed by the National Center for Higher Education Management Systems (NCHEMS), was used successfully to survey the effectiveness of 30 community colleges in terms of their dominant culture type (Smart & Hamm, 1993a). The validity of the IPS is supported by Zammuto and Krakower (1991) who found that the IPS organizational

culture scales correlated with measures of organizational characteristics such as centralization, climate factors such as trust and morale, and strategy orientations such as reactive and proactive inclinations. They asserted that the IPS met the "criteria of internal consistency, predictable relationships with other organizational phenomena, and discrimination among groups" (Zammuto & Krakower, 1991, p. 109).

The Cameron and Ettington culture type models were simplified and adapted for this section of the survey. The attributes of each culture type included Institutional Emphases, Institutional "Glue," Institutional Leadership, and Management Style. Another attribute, Decision making, from Peterson and White's (1992) OCTL survey was also included in the culture type model to increase reliability. Three additional governance characteristics of culture from the OCTL survey included in this section were: Change Orientation, Reward/Evaluation System, and Faculty Governance.

Faculty perceptions of organizational culture type were measured by a Likert scale ranging from a response of "-2" indicating that the respondent strongly disagreed with the statement to a response of "+2" indicating that the respondent strongly agreed with the statement. After each group of organizational characteristics, each faculty respondent was asked to choose one characteristic that he or she valued most.

Section Three: Faculty Worklife and Motivation. In this section faculty were asked about their perceptions of the beliefs and values concerning their worklife and motivation in their institution. The scale ranged once again from low importance to high importance. After

responding to the items under Faculty Worklife, faculty were asked to indicate which one factor had the most positive impact on the meaning of their worklife in the institution, and which factor had the least positive impact on the meaning of their worklife. At the end of the subsection Motivation, they were asked to indicate which factor motivated them the most.

A space was left for comments. This comment section provided opportunity for additional responses and also served to triangulate data gathered.

Section Four: Respondent Information. The fourth and final section solicited personal demographic information including academic rank, tenure status, number of years at the institution, discipline/department, gender, age, and ethnicity.

Pilot Test

The survey was pilot tested by seven full-time community college instructional faculty--one from each of the seven community college campuses. They were chosen to provide a balance with regard to gender, ethnicity, and disciplinary or program affiliation.

The researcher called each faculty member individually to request their assistance in pilot testing the survey. Each was asked to complete the survey, mark up the survey with comments, return the survey within two weeks, then discuss the survey with the researcher individually. Questions asked of the testers included:

- Was anything about the survey confusing?
- Was there a threat to confidentiality?
- Was the survey too long?
- Did the survey address how faculty find meaning in their work life?
- How can this study benefit faculty?
- What did you like/not like about the survey?

As a result of the pilot test, there was no change in the content of the survey. Comments by the testers were very positive. All felt that the survey would provide valuable information. One respondent remarked: "It made me think: 'Why do I work at the college?'" Although one faculty member thought the survey was too long, most indicated it took approximately 30 minutes to complete. There were more suggestions regarding grammar and format for easier reading than suggestions regarding content.

Data Collection Procedure

One week before the survey instrument was mailed on January 29, 1996, the Office of the Chancellor for Community Colleges produced a mailing list and mailing labels for all full-time instructional faculty at the seven community colleges under the University of Hawaii system. Using the entire population, 660 surveys were mailed to the faculty with a cover letter written by Dr. Linda Johnsrud, UH-Manoa College of Education Associate Professor. A return address envelope was also enclosed. Each

survey was coded with a number to facilitate follow-up mailings. The cover letter and survey assured the complete confidentiality of individual responses.

In order to increase the response rate, a reminder was sent nine days after the initial mailing to all 660 faculty members whether they returned the surveys or not. The reminder included a letter from the researcher requesting the completion and return of the survey in support of her doctoral study. At the same time, the researcher asked each campus to include a reminder notice in their campus bulletin.

Finally, a third mailing was sent out three weeks after the initial mailing to those faculty members who had not yet responded. The third mailing included another survey not coded with a number, a cover letter by the researcher noting a deadline for responding, and a return envelope. (Copies of the survey letters are included in Appendix B.)

After the deadline, the raw data from 364 usable responses were coded and entered into the SPSS statistical program for analysis. The preliminary descriptive analysis of the faculty responding to the survey showed that the respondent population closely reflected the total population of the full-time faculty of the UH Community College system in terms of representation by campus, gender, age, rank, tenure, and disciplinary or program affiliation. The only demographic factor not reflective of the total population was "highest degree earned." (See Data Analysis section in this chapter.)

Limitations

As in all research requiring perceptual responses of those surveyed, the data gathered are only as accurate as the honesty of the responses of each individual. Attempts to improve the integrity of the responses included assurances of complete confidentiality in the survey's cover letter and directions introducing each section of the survey. It is not possible, however, to control for all factors that influence individual responses within a study. The reader should also bear in mind that this study captures the impressions of the respondents at the time they are reacting to the questions.

As noted previously, the construct, organizational culture, focused upon in this study is a broad and complex construct that is difficult to define and, therefore, investigate. In light of the elusiveness of the construct, this study proposes to create a model of organizational culture identifying cultural dimensions that would prove beneficial in the future research of community college culture.

This study is limited to seven campuses within a single community college system. Although similarities may exist between the community colleges in this study and other community colleges, caution should be taken in generalizing the results of this study to other comparable institutions.

Variables

Faculty Demographics

Data on individual characteristics of faculty were collected to determine whether these individual factors had any effect on faculty perceptions of organizational culture. Researchers such as Austin and Gamson (1983) found that individual characteristics such as age, stage in career, and gender may predict faculty members' perceptions of the academic workplace and their commitment to undergraduate education. The demographic attributes of faculty were coded as follows:

- Campus, a categorical or nominal variable identifying the faculty workplace, where 1 = Honolulu, 2 = Kapiolani, 3 = Leeward, 4 = Windward, 5 = Hawaii, 6 = Kauai, and 7 = Maui.
- Tenure, a categorical variable, where 1 = tenured and 2 = non-tenured.
- Gender, a categorical variable representing a faculty member's gender, where 1 = female and 2 = male.
- Ethnicity, a categorical variable representing a faculty member's racial or ethnic background, where 1 = Japanese/Okinawan, 2 = Caucasian, 3 = Hawaiian/Pacific Islander, 4 = Chinese, 5 = Korean, 6 = Filipino, 7 = Portuguese, 8 = African American, and 9 = Other.
- Age, an ordinal variable measuring age intervals, where 1 = 22-35, 2 = 36-45, 3 = 46-55, 4 = 56-65, and 5 = over 65.

- Academic Rank, an ordinal variable representing a faculty member's position, where 1 = instructor, 2 = assistant professor, 3 = associate professor, and 4 = professor, and 5 = other.
- Number of Years at the Institution, a continuous variable measuring the number of years the faculty member worked at his/her current institution.
- Highest Degree, an ordinal variable that measures the highest degree that the faculty member has attained, where 1 = high school, 2 = bachelor's, 3 = master's, 4 = doctorate, and 5 = other.
- Teaching Experience, a continuous variable measuring the total number of years of teaching experience possessed by the faculty member.
- Work Experience, a continuous variable measuring the total number of years the faculty member has worked in business or industry.
- Discipline, a categorical variable that measures the discipline, program, or department with which the faculty member identifies. This characteristic was grouped into two categories: general education and vocational education.

Descriptive analyses on other survey items have been included in Appendix C, but further analyses are not reported here.

Culture Type

A major purpose of this investigation was to clarify the construct of organizational culture as it relates to the community college setting, and to identify important dimensions of culture that may prove useful in future investigations of community college culture. Since Cameron and Ettington's (1988) culture type models have tested successfully as discriminators of culture in academic institutions, this study attempted to validate the usefulness of their models in a community college setting.

Cameron and Ettington's culture types were selected as variables that would describe and discriminate the culture of individual community colleges for several reasons. First, the researchers developed a quantitative assessment instrument for analyzing culture types that has been used by other researchers (Hamm, 1992; Peterson & White, 1992; Smart & Hamm, 1993a) to study the organizational culture of institutions of higher education. Second, their model was also found productive in discovering relationships between culture type and dimensions of effectiveness (Cameron & Ettington, 1988). Third, their instrument is brief but powerful. It identifies the type of culture or culture-type blends that are dominant in institutions of higher education. In Cameron and Ettington's study, their one-page instrument was highly successful in correctly classifying 334 four-year colleges and universities by culture type and in predicting their effectiveness. Finally, the culture type models were selected because they are based upon a theoretical framework supported by extensive research discussed in Chapter 2.

In creating their four culture types, Cameron and Ettington constructed "brief scenarios...that described dominant characteristics" of each culture type. Their instrument contained four subsections by attributes of culture type: Institutional Characteristics, Institutional "Glue," Institutional Leader, and Institutional Emphases. The four culture types were represented by an item in each of the subsections as alternatives that described their institutions.

This study also incorporated Peterson and White's (1992) adaptation of the instrument that relabeled the Cameron and Ettington's subsections: "Institutional Emphases," "Institutional Glue," "Institutional Leadership," and "Management Style," and shortened the scenarios. Peterson and White's scale, "Decision Making," was also added into the models to create the four culture types. (See Figure 3.) The items in the five attribute scales that relate to the Clan culture type, for example, are the institution's concern for its faculty and staff; cohesion and teamwork among faculty and administrators; leadership style characterized as a mentor, a harmonizer, a parent-figure; management style characterized by teamwork, consensus, and participation; and decision making described as collegial, with widespread participation. Specifically, the items from the instrument that composed the four culture type models were as follows:

- Clan: numbers 37, 42, 48, 53, and 58
- Adhocracy: numbers 38, 43, 49, 54, and 60
- Hierarchy: numbers 39, 44, 50, 55, and 59
- Market: numbers 40, 45, 51, 56, and 62

The items in this section ask about 1) *your perceptions* of the *predominant* values concerning the governance of your institution and 2) *your own* values concerning the governance of your institution.

Please circle the appropriate response indicating the extent of your agreement with each statement below. For example, a response of "-2" indicates that you strongly disagree with the statement. A response of "+2" indicates that you strongly agree with the statement.

	SD -2	*D* -1	*Neutral* 0	*A* +1	*SA* +2
Institutional Emphases					
My institution defines success on the basis of:					
37. Its concern for its faculty and staff.	-2	-1	0	+1	+2
38. Its innovativeness and ability to take risks.	-2	-1	0	+1	+2
39. Its efficiency and stability.	-2	-1	0	+1	+2
40. Its competitiveness among institutions.	-2	-1	0	+1	+2
Institutional "Glue"					
The "glue" that holds **my institution** together is:					
42. Cohesion and teamwork among faculty and administrators	-2	-1	0	+1	+2
43. A focus on innovation and development.	-2	-1	0	+1	+2
44. Formal procedures, rules, and policies.	-2	-1	0	+1	+2
45. Performance and goal accomplishment.	-2	-1	0	+1	+2
46. There is no "glue."	-2	-1	0	+1	+2
Institutional Leadership					
The leadership style valued **at my institution** is best characterized as:					
48. A mentor, a harmonizer, a parent-figure.	-2	-1	0	+1	+2
49. An entrepreneur, a delegator, a risk taker.	-2	-1	0	+1	+2
50. An authoritarian, an organizer, an efficiency expert.	-2	-1	0	+1	+2
51. A hard-driver, an achiever, a competitor.	-2	-1	0	+1	+2
Management Style					
The management style **in my institution** is best characterized by:					
53. Teamwork, consensus, and participation.	-2	-1	0	+1	+2
54. Individual initiative and freedom.	-2	-1	0	+1	+2
55. Secure employment, conformity, predictability.	-2	-1	0	+1	+2
56. Competitiveness, performance, and achievement.	-2	-1	0	+1	+2
Decision making					
Academic decision making **at my institution** can be best described as:					
58. Collegial, with widespread participation.	-2	-1	0	+1	+2
59. Formal, dependent upon the hierarchical structure.	-2	-1	0	+1	+2
60. Autonomous, giving academic units freedom.	-2	-1	0	+1	+2
62. Political, depending upon who has power.	-2	-1	0	+1	+2

FIGURE 3
The Culture Type Attribute Scales

Respondents were asked to describe their institution by indicating the extent to which they agreed or disagreed that each of the culture type items characterized their campus. The items were rated: Strongly Disagree (-2), Disagree (-1), Neutral (0), Agree (+1), or Strongly Agree (+2).

Mission, Objectives, and Philosophy

Mission, Objectives, and Philosophy are other cultural dimensions that were developed especially for this study by the researcher to address the organizational culture of community colleges. Drawn from literature reviews on this sector of postsecondary education, these items attempted to decipher the unique cultures of community colleges characterized by their primary purpose. Only the items examining how important each item *is*, not how important each item *should be*, were used to measure each dimension. Therefore, items 1 through 4 comprised Mission; items 9 through 15 addressed Objectives; and items 23 through 29 constituted Philosophy. These items were ordinal scales ranging from low importance to high importance.

Data Analysis

Preliminary Analyses

Preliminary analyses were conducted to provide a demographic profile of the respondents. Means and standard deviations were also calculated to describe the responses on each of the survey items.

Demographic Statistics. As of March 10, 1996, there were 657 full-time instructional faculty at the seven community college campuses. Of the total population, 368, or 56%, responded to the survey and 364 responses were usable. Tables 1 and 2 profile the respondents in terms of frequencies and percentiles on each demographic variable by campus, gender, age, ethnicity, academic rank, tenure status, academic degree, general education/vocational education affiliation, years of experience at their institution, years of teaching experience, and years of work experience in business and industry. Comparisons are made with the total population of full-time instructional faculty where data are available for the particular faculty characteristic.

Campus. Of the respondent group, the largest percentage (26.6%) was from Kapiolani, and the smallest (4.4%) was from Windward. Compared to the total population, the respondents were representative by size of campus and by the percentage of respondents.

Gender. There were slightly more males than females in both the respondent groups and the total population. The respondents were representative of the total population.

Age. The largest respondent age group (40.9%) clustered in the 46-55 range. Ages of all respondents ranged from 26 to 73 years old. The distribution of age groups were similar to the total population.

Academic Rank. Among the respondents, the largest proportion of faculty held the rank of instructor (35.7%), while the smallest proportion held the rank of associate professor (14.6%). The percentages of the respondents closely resembled that of the total population.

TABLE 1
Demographic Data of Full-Time Instructional Faculty

	Total Pop. N=660.	Percent 100%	Respondents N=364	Percent 55%
Campus				
Honolulu	130	19.7	73	20.1
Kapiolani	161	24.4	97	26.6
Leeward	127	19.3	64	17.6
Windward	37	5.6	16	4.4
Hawaii	77	11.6	48	13.2
Kauai	55	8.3	34	9.3
Maui	73	11.1	29	8.0
Missing			3	.8
Gender				
Male	352	53.3	184	50.6
Female	308	46.7	174	47.8
Missing			6	1.6
Age				
22-35	48	7.2	18	5.0
36-45	186	28.2	103	28.3
46-55	306	46.4	149	40.9
56-65	102	15.5	65	17.9
65+	18	2.7	6	1.6
Missing			23	6.3
Rank				
Instructor	236	35.7	131	36.0
Assistant Professor	176	26.7	87	23.9
Associate Professor	96	14.6	55	15.1
Professor	152	23.0	87	23.9
Missing			4	1.1
Tenure Status				
Tenured	415	62.8	228	62.6
Non-tenured	245	37.2	132	36.3
Missing			4	1.1
Total			364	100.0
Degree				
High School	25	3.8	9	2.5
Bachelor's Degree	106	16.1	52	14.3
Master's Degree	401	60.7	228	62.6
Doctoral Degree	46	6.9	52	14.3
Other	82	12.5	19	5.2
Missing			4	1.1
Gen. Ed./Vocational				
General Ed.	347	52.6	192	52.8
Vocational Ed.	313	47.4	163	44.7
Missing			9	2.5

Tenure Status. Tenured faculty comprised 62.6% of the respondents for this study. Both tenured and non-tenured faculty matched their proportions in the total population.

Academic Degree. The highest degree attained by most of the respondents (62.6%) was the master's degree. Very few had only high school diplomas (3.8%). "Other" included other professional degrees, associate's degrees, and certificates. The respondents were representative of every category except "other" and the doctoral degree group. The doctoral group was highly overrepresented in the sample. In fact, the number of respondents with doctorates outnumbered the number reported in the total population by the community college system. One explanation for this discrepancy could be that the category "other," that accounted for 82 faculty in the total population, could have included doctoral degree faculty. Another explanation might be that personnel records did not reflect the status of faculty with recently-conferred doctoral degrees.

General Education/Vocational Education Affiliation. The respondents in this study represented 78 fields of study. These disciplines and programs were grouped into two categories--General Education and Vocational Education. Called "false dichotomies" by Cohen and Brawer (1977), the divisions established between general education and vocational education faculty in the community colleges have been seen as an issue and a subject of particular interest in studies of community college faculty. For example, Earl Seidman (1985) describes the deepening conflict between vocational and "liberal education" faculty as their contrasting disciplinary affiliations frame the differential ways they view their teaching roles.

In this study, the General Education category included faculty teaching natural and social sciences, language arts, humanities, outreach, non-credit, and special program courses. The Vocational Education category included faculty in the service and technical programs such as nursing, food service, automotive, electrical, and business. Of the total population, the General Education faculty (52.6%) just slightly outnumbered the Vocational Education faculty (47.4%).

The response rate of General Education faculty (52.8%) matched their representation in the total population (52.6%) almost exactly, while the response rate of Vocational Education faculty (44.7%) was slightly less than their representation in the total population (47.4%).

Table 2 reports additional faculty demographics by frequencies and percentiles. For these demographics, no comparisons were made with the total population since data were not made available.

Ethnicity. The largest ethnic group that respondents identified with was Caucasian (45%). Japanese faculty made up another large sector of the sample (33.8%). Other ethnic groups each represented less than 6% of the respondent population.

Years at Institution. Faculty were asked to report the number of years they served at their institution. They were profiled in five-year groupings. The number of years faculty spent at their institution ranged from zero to 31 years. About half of the respondents (52.7%) had been at their college ten years or less.

Years of Teaching Experience. Faculty also reported their total years of teaching experience whether it was at their present institution or at

TABLE 2
Further Demographic Data of Respondents

	Frequency	Percent
Ethnicity		
Japanese	123	33.8
Caucasian	167	45.9
Hawaiian/Pacific Islander	15	4.1
Chinese	20	5.5
Korean	2	.5
Filipino	13	3.6
Portuguese	1	.3
Other	9	2.5
Missing	14	3.8
Total	364	100.0
Years at Institution		
0-5	114	31.3
6-10	78	21.4
11-15	56	15.4
16-20	51	14.0
21-25	50	13.8
26-31	11	3.0
Missing	4	1.1
Total	364	100.0
Years of Teaching Experience		
1-5	58	15.9
6-10	71	19.5
11-15	51	14.0
16-20	62	17.0
21-25	60	16.5
26-30	30	8.3
31-35	17	4.7
36-40	4	1.1
Missing	11	3.0
Total	364	100.0
Years of Work Experience		
0	38	10.4
1-5	90	24.7
6-10	54	14.8
11-15	36	9.9
16-20	40	11.0
21-25	22	6.1
26-30	13	3.6
31-35	5	1.4
Missing	66	18.1
Total	364	100.0

other institutions. The number of years ranged from one to 39, with faculty teaching experience evenly distributed between one to 25 years. Thereafter, the percentages dropped dramatically.

Years of Work Experience. Many faculty members worked in business and industry. The data indicate that only 10.4% of the respondents have had no business/industry work experience. (Note that 18.1% of the respondents did not answer this question.)

Descriptive Statistics. Means and standard deviations were calculated for each of the Likert scale items on the survey instrument. For some of the items, respondents were asked to prioritize the one item they valued most or the item that made the most positive or negative impact among a subset of items. These responses were reported separately by frequency and percentage of responses. This information is reported in Appendix C.

Research Questions and Analyses

Research Question One. *Can a profile of culture types be identified within and across community college campuses?* A measure of cultural congruency was developed to determine whether the five attributes that made up each culture type worked as a set to identify patterns of culture types for each campus. The means and standard deviations were computed on the congruency measures for each of the four culture types to assess whether a particular culture type or a blend of culture types could be distinguished within each campus and across the seven campuses.

Research Question Two. *Do faculty perceptions of each culture type differ among community colleges within a single system?* A multiple analysis of variance (MANOVA) procedure was applied to the means of each culture type for each campus to determine whether significant differences existed in faculty perceptions of culture type between campuses.

Research Question Three. *Do faculty perceptions of culture type differ by individual demographic factors?* MANOVAs were run on each of the demographic factors (except disciplinary affiliation, which was examined separately) to determine whether faculty perceptions of culture type differed by their backgrounds and experiences (as opposed to their campus).

Research Question Four. *Which of the culture types account for most of the differences in faculty perceptions of culture between campuses?* The differences in faculty perceptions of culture type among campuses were further explored through a multiple discriminant function analysis to determine which of the culture types best distinguished each campus. This statistical analysis is a follow-up to the MANOVA when significant differences are found between categorical (nominal) groups. The discriminant analysis shows how well each predictor (culture type) correctly classifies individual perceptions of culture into groups by campus. Analyses were conducted with prior probabilities representing overall percentages of faculty by campus (see Table 1). The strength of this analysis is that it addresses the extent to which campuses have unique as well as common elements.

Research Question Five. *What other cultural dimensions contribute to explaining the differences and similarities in faculty perceptions of their institutional cultures?* Discriminant analyses were performed on faculty perceptions of their institution's purpose--mission, objectives, and philosophy--and a final demographic factor, disciplinary affiliation, to determine how each contributed to the explanation of the distinct culture of each campus.

CHAPTER 4

RESULTS

This study investigated: 1) how faculty perceived the culture of their institutions, 2) whether these perceptions profiled the distinct cultures among campuses of a single community college system, and 3) whether these perceptions created a discriminant model of cultural dimensions that defined the uniqueness of individual community college cultures. Current literature indicates that Cameron and Ettington's (1988) culture type models are valid and productive in the investigation of the culture of academic institutions. This study sought to verify these culture type models as appropriate measures of cultural perceptions among community college faculty (questions 1-4). Additionally, this study proposed to expand Cameron and Ettington's models to include other cultural dimensions that further discriminate faculty perceptions of organizational culture between individual campuses (question 5). As a result, the study intended to develop a model of critical cultural dimensions that would portray unique cultural profiles of community college campuses. This cultural model would assist future researchers in identifying the distinctiveness of the organizational cultures of individual community colleges. The results of the data analyses are reported in this chapter and are organized by the research questions for this study.

Research Question 1

Can a profile of culture types be identified within and across community college campuses? Another way of phrasing this question is: "Is there a pattern of agreement on faculty perceptions of culture type at each campus?" This question was included as an initial analysis in establishing the construct validity and the appropriateness of Cameron and Ettington's (1988) culture types in describing the culture of individual institutions.

In order to determine the appropriateness of the models, this study examined whether the five attributes that comprised each culture type appeared to work as a set to characterize a particular culture type. In other words, was there a pattern of agreement on the set of attribute items that made up each culture type? For example, did the respondents who characterized their institutional culture as a Clan culture choose the attributes that related to the Clan culture? Cameron and Ettington called this alignment of choices on a set of characteristics for a specific culture type, "congruence." That is, if the respondents in an institution chose the attributes that were aligned with a certain culture type, then the institution was viewed as having a "congruent" culture.

In considering this research question, it is important to recall how culture types were created in the survey. Adapting Cameron and Ettington's (1988) theoretical model, an item representing each culture type was included in each of the five attributes of culture type: Institutional Emphases, Institutional "Glue," Institutional Leadership,

Management Style, and Decision Making. Respondents were asked to assess each item by indicating the extent to which they perceived it described their institution. For each item, responses could range from Strongly Disagree to Strongly Agree on a five-point Likert scale.

Applying Cameron and Ettington's (1988) notion of congruence, a measure of cultural congruence was created. To develop this measure of congruence for each of the five attribute items that made up a culture type, Agree and Strongly Agree responses were coded "1" and Disagree, Strongly Disagree, and Neutral were coded "0." If, for example, respondents agreed with five of the five items that made up the Clan culture type, the score for that culture type would be 5. If respondents disagreed with all five items--or, to put it another way, agreed with none of the items characterizing a particular culture type--the score would be 0. For this study, a score of more than 2.50 would indicate congruency--that is, the respondents agreed or strongly agreed with the majority of items comprising a specific culture type.

The means and standard deviations of the congruence measures were examined to determine whether Cameron and Ettington's culture type models worked well enough in investigating the culture of community college settings to justify further investigation of these models. Table 3 displays the means and standard deviations of the congruence measures of the four culture types by campus. The range is considerable, from a low of 1.06 to a high of 3.33. The differences in the culture type means of each campus demonstrate agreement as well as disagreement and similarities as well as differences in the perceptions of culture types within

and between campuses. Such variation is important in establishing the model's construct validity. Moreover, this variation suggests that there is discriminant validity in the measures--that is, the culture type models discriminate between campuses. An appraisal of the standard deviations also provides an estimate of the strength of agreement on each culture type. The smaller the standard deviation, the greater the agreement is.

TABLE 3
Means and Standard Deviations for Culture Types by Campus

Campus		Clan	Adhocracy	Hierarchy	Market
Honolulu					
	M	1.92	2.18	2.50	2.35
	SD	1.64	1.75	1.38	1.28
Kapiolani					
	M	2.25	2.47	2.67	2.87
	SD	1.93	1.73	1.46	1.34
Leeward					
	M	2.20	1.25	2.87	2.18
	SD	1.84	1.38	1.19	1.31
Windward					
	M	2.07	1.13	3.27	1.93
	SD	1.44	1.25	1.16	1.10
Hawaii					
	M	1.50	1.06	2.83	1.91
	SD	1.61	1.36	1.40	1.23
Kauai					
	M	3.33	2.70	1.90	1.47
	SD	1.65	1.82	1.18	1.04
Maui					
	M	1.57	2.04	2.69	2.85
	SD	1.65	1.51	1.52	1.19

Although no institution was characterized totally by only one type of culture--that is, all campuses showed a blend of culture types (as Cameron and Ettington also found)--patterns of culture types could be identified, and dominant cultures were evident in some of the campuses. For example, most institutions showed some degree of agreement, or congruency, within campuses on Hierarchy items with mean scores ranging from 2.50 to 3.27. It was also apparent that Windward, Hawaii, and Leeward had much higher scores on Hierarchy (3.27, 2.83, and 2.87, respectively) than other culture type; Maui and Kapiolani were highest on Market (2.85 and 2.87, respectively); and Kauai was clearly higher on Clan (3.33) than other culture types. Notice that Windward's standard deviation score on Hierarchy (1.16) suggests greater similarity of perceptions.

Results of this analysis show that culture types do, in fact, indicate patterns of agreement (congruency) within campuses and patterns of similarities and differences in faculty perceptions of culture across campuses. Faculty across almost all of the seven campuses agreed that Hierarchy was prevalent to some extent in their institutions, and, within most campuses, faculty mutually perceived that a particular culture type dominated. Yet, faculty perceptions differed between campuses. For example, preliminary inspection suggests Kauai could be typed Clan/Adhocracy; Windward could be typed Hierarchy/Clan; and Maui could be typed Market/Hierarchy.

The findings in this analysis confirm that profiles of culture types can be identified within and across campuses. In terms of validity, there is congruence indicated in the agreement of scores by culture type and by low

standard deviations. Moreover, there is discriminant validity between institutions indicated by different culture types that characterize each campus. Therefore, it can be concluded that the culture type models appear appropriate for investigating the culture of community college institutions.

The Cronbach's Alpha was also calculated for each culture type as a measure of internal consistency for the attribute scales used. They were: Clan = .8, Adhocracy = .7, Hierarchy = .5, and Market = .6. All were judged adequate to proceed with the analysis. It should be noted, however, that the hierarchy scale was marginal. Closer inspection revealed that the borderline reliability of this particular culture type was partly a result of the limited number of items (five) that made up each culture type. If any items were removed, however, the reliability was lower.

When correlations were calculated among culture types, they were generally low ranging from .09 to .32, indicating that the culture types were distinct domains and, therefore, suitable as separate variables for analyses. Only the correlation between Clan and Adhocracy was moderate (.6), indicating 36% shared variance. The findings of these analyses indicated that the culture types had sufficient validity and reliability to warrant further analyses.

Research Question 2

Do faculty perceptions of each culture type differ among community colleges within a single system? A multivariate analysis of variance

(MANOVA) tested whether there were significant differences between each of the four culture types among each of the seven community colleges. Two assumptions are necessary in a multivariate analysis. They are: 1) multivariate normality; and 2) equal population covariance matrices. The Box's M test was performed to determine whether these assumptions were met. The test evaluated the homogeneity of the variance-covariance matrices between groups of faculty at the seven campuses and results indicated no threat to the multivariate analysis ($p > .05$).

Table 4 summarizes the univariate F-tests and the multivariate test of significance and for the MANOVA. Results of the MANOVA analysis found that faculty perceptions of the models of culture types differed significantly across campuses ($F = 5.252$, $p = .000$). The univariate F-tests found that each culture type by itself was significantly different across campuses with F values ranging from 2.54 to 7.28, $p \leq .02$. Caution must be exercised in interpreting the F ratios since the separate univariate F-tests do not account for the correlation among the culture types which increases the probability of Type I errors occurring--especially as the number of dependent variables increases.

The multivariate analysis, which considers all the dependent variables (culture types) at once, adjusts for correlations among the dependent variables and the tendency that having more than one dependent variable causes univariate tests to be positively biased. Consequently, a multivariate analysis (the Wilks' Lambda test) was performed. The analysis indicated a significant difference between culture types at the $p = .000$ level, which means that the differences between each of the four

TABLE 4
MANOVA of Culture Types by Campus

Univariate F-Tests

Culture Type	Hypoth. SS	Error SS	Hypoth. MS	Error MS	F	Sig. of F
Clan	74.655	973.798	12.442	3.052	4.075	.001
Adhocracy	118.526	817.706	19.754	2.563	7.706	.000
Hierarchy	28.304	591.527	4.717	1.854	2.544	.020
Market	66.953	488.902	11.158	1.532	7.281	.000

Wilks' Lambda Multivariate Test of Significance

Test	Value	Approx. F	Hypoth. DF	Error DF	Sig. of F
Wilks' Lambda	.685	5.252	24.00	1103.60	.000

culture types among the campuses, after adjusting for any interaction between culture types, were significant. In other words, we can be confident that each of the four culture types--Clan, Adhocracy, Hierarchy, and Market--are significantly unique and the probability of a Type I error occurring is very small (p = .000).

Research Question 3

Do faculty perceptions of culture type differ by individual demographic factors? Individual characteristics of faculty were also analyzed by the MANOVA technique to ascertain whether they affected faculty perceptions of culture type. The demographic data included faculty

characteristics by campus, gender, age, ethnicity, academic rank, tenure status, academic degree, years of experience at their institution, years of teaching experience, and years of work experience in business and industry.

If a variety of demographics were significant, it would tend to negate the strength of the culture argument. Of the individual demographics included in the analyses, only campus made a significant difference (hence, the campuses were further analyzed by culture types). Otherwise, the MANOVA found no significant differences among the individual demographic factors and faculty perceptions of culture type (results not tabled). Therefore, the results indicated that the gender, age, ethnicity, academic rank, tenure status, academic degree, years of experience at their institution, years of teaching experience, and years of work experience in business and industry of faculty had no significant impact on their perceptions of the culture type that characterized their institutions. Only the campus that the faculty members worked at made a difference in their perceptions of culture type. Culture, therefore, does not appear to differ by individual characteristics.

Research Question 4

Which of the culture types account for most of the differences in faculty perceptions of culture between campuses? In Question 2, significant differences were found between campuses in terms of their mean scores and standard deviations on the four culture types. A

significant result in a MANOVA requires further analysis to find out exactly which dependent variable(s) contributed to the overall significant differences. In order to determine which of the four culture types was most responsible for the differences found, a multiple discriminant analysis was performed. The discriminant analysis was selected as the analytic tool for further analyses because it measures the accuracy with which predictor variables (the four culture types) discriminate among groups of nominal criterion variables that are specified in advance (the seven campuses). Discriminant analysis also provides an efficient method for explaining the nature of the differences of faculty perceptions of culture among the campuses.

The multiple discriminant function analysis results in multiple discriminant function prediction equations. These equations take about the same form as multiple regression prediction equations ($D = B_0 + B_1X_1 + B_2X_2 + ... + B_pX_p$). On the left side of each equation is a symbol that stands for the predicted score. On the right side are numerical unstructured canonical discriminant function coefficients for each predictor variable. The linear combinations of the discriminating variables maximize the separation of the groups, thereby maximizing correct classification of group membership by various predictors. Although this test has similarities to linear multiple regression, it provides no causal link between the sets of independent and dependent variables.

Table 5 contains the structure coefficients and the standardized canonical discriminant function coefficients for two of the four discriminant function equations calculated. The two functions tabled were

the only two that were statistically significant as predictors. The first discriminant function accounted for 55% of the between group variability, and the second accounted for 36% of the between group variability. Together they accounted for 91% of the observed within group variability among individuals.[1]

TABLE 5
Results of Discriminant Function Analysis of Culture Type Models as Predictors of Campus Culture

Culture Type	Structure Coefficient		Standardized Coefficient	
	Function 1	Function 2	Function 1	Function 2
Clan	-.020	.641	-.667	.400
Adhocracy	.633	.616	.857	.525
Hierarchy	-.129	-.454	-.348	-.308
Market	.639	-.525	.624	-.569

Results of the discriminant function analyses indicated that faculty perceptions of culture type could, in fact, accurately discriminate the culture type of each community college campus. The structure coefficients show how the culture type predictors correlate with the corresponding discriminant function. Caution should be exercised in interpreting these coefficients since the correlations among predictors have not been controlled. For the purposes of analysis, correlations above .3 may be considered sufficient in interpreting the discriminant function (Tabachnick & Fidell, 1983). The analysis of the structure coefficients indicates that Market (.639) and Adhocracy (.633) discriminate best in Function 1; and Clan (.641) and Adhocracy (.616) discriminate best in Function 2.

The standardized canonical discriminant function coefficients consider the contribution of each of the predictors after controlling for effects of other variables in the function. Thus, they can be thought of as similar to beta weights, and can be compared with one another to determine which of the predictor variables are most effective as predictors within the context of the corresponding discriminant equation. As indicated by the standardized coefficients, Adhocracy (.857), and Market (.624) have high scores as predictors in Function 1, with Adhocracy as the best predictor. In Function 2, Adhocracy (.525) and Clan (.400) were the best predictors. Adhocracy scored high in both functions.

Function 1 accounted for 55% of the between-group variability, and Function 2 accounted for 36% of the between-group variability. As expected, Function 1 was the more accurate predictor model with a higher canonical correlation between the predictor variables and the criterion variables (.436) than Function 2 (.349). Since Adhocracy was high in both functions, it can be concluded that Adhocracy was the most efficient predictor and accounted for most of the differences in faculty perceptions of culture among campuses.

The effectiveness of the discriminant functions can be judged by their accuracy in correctly classifying the campuses by culture type. The results of the classification analysis found that the two functions correctly classified faculty perceptions of culture by campus with 40% accuracy. Therefore, culture types can be considered to discriminate faculty perceptions of culture much better than the 14% accuracy possible by chance alone (assuming equal prior probabilities).

The group centroids were also examined. This analysis depicts the multivariate "space" between the mean vectors for campuses showing how well the discriminate functions separated individuals within each campus. If the discriminant function equations were successful in facilitating accurate predictions of group membership, then the group centroids would be spread out in a graph displaying these centroids.

Table 6 reports mean predicted discriminant scores from each functional equation for each campus. These scores were used to plot the points of the group centroids in a graph. The graph (Figure 4) displays the centroids for each campus showing how effective the culture type discriminant functions were in differentiating individuals within each campus. That is, it demonstrates visually how faculty perceptions of culture type have separated them by campus.

TABLE 6
Group Centroids for Culture Type Discriminating Campuses

Campus	Function 1	Function 2
Honolulu	.267	.060
Kapiolani	.531	-.031
Leeward	-.546	-.173
Windward	-.633	-.360
Hawaii	-.538	-.251
Kauai	-.351	1.089
Maui	.472	-.264

Flexibility

●(6) 1.0

Clan

Adhocracy

.5

DISCRIMINANT FUNCTION 2

Internal

● (1)

External

-1.0 -.5 .5 1.0

●(2)

● (3)
● (5)

● (7)

● (4)

-.5

Hierarchy

Market

-1.0

Stability

DISCRIMINANT FUNCTION 1

FIGURE 4
Plot of Group Centroids of Campuses by Culture Type

Note: 1 = Honolulu, 2 = Kapiolani, 3 = Leeward, 4 = Windward, 5 = Hawaii, 6 = Kauai, 7 = Maui.

The horizontal axis is Discriminant Function 1, represented by high scores on Adhocracy and Market, the culture types with an external focus. The vertical axis is Discriminant Function 2, represented by high scores on Clan and Adhocracy, the culture types characterized by flexibility. Function 1 separates Honolulu, Kapiolani, and Maui as campuses having a culture with an external focus from Leeward, Windward, Hawaii and Kauai as campuses having a culture with an internal focus. Notice that it does not separate Leeward and Hawaii well on this dimension. Function 2 clearly segregates Kauai as having a strong Clan culture but does not discriminate Leeward, Hawaii, and Maui well on this dimension.

Because all campuses are not separated well by Functions 1 and 2, the graph indicates that the culture types are not entirely unique and that characteristics overlap between models. Cameron and Ettington (1988) theoretically designed their models this way based upon Jung's archetypes. Yet, each culture type was also designed to be the opposite of another culture type based upon research consistent with Quinn and Rohrbaugh's (1983) "competing values model" as discussed in Chapter 2.

Given the study's small sample of only seven campuses, Cameron and Ettington's (1988) culture type profiles were still able to discriminate faculty perceptions of culture between and within individual campuses with substantial accuracy. The findings suggest that the culture type models can be used as an effective framework in describing the way faculty perceive the unique cultures of their individual institutions. The substantial ability of the culture types to predict group membership better than chance provides evidence of the model's productiveness and validity.

It has been noted that Function 1 was a more accurate discriminating functional model than Function 2. Therefore, the external/internal focus can be considered to be more effective in separating the campuses than the flexibility/stability focus of the culture types.

In summary, Adhocracy, Market, and Clan culture types provide substantial accuracy in discriminating faculty perceptions of their culture between and within campuses. Of the four culture types, Adhocracy scored highest as the best discriminator in both functions. We can conclude, therefore, that Cameron and Ettington's culture type profiles have considerable construct validity in analyzing the distinct organizational cultures of community college institutions.

Thus far, we have found that the culture type models are appropriate and successful in analyzing faculty perceptions of culture across and among community college campuses. Although the culture types are not orthogonal--that is, they are not completely unique--culture types show considerable agreement within campuses as well as differences among campuses. Because the study proposes to produce a more refined cultural model that could better predict and describe faculty perceptions of the distinct cultures of community colleges, other important cultural dimensions that could potentially explain the differences and similarities in faculty perceptions of their institutional culture were investigated next.

Research Question 5

What other cultural dimensions contribute to explaining the unique differences and similarities in faculty perceptions of their institutional cultures? This question investigates other dimensions of organizational culture that could potentially describe and explain the unique cultures of individual community colleges. Other dimensions that were added to the culture type discriminant function model to distinguish the culture of community colleges were Mission, Objectives, and Philosophy--organizational characteristics considered under Organizational Purpose--and the disciplinary or program affiliation (General Education/Vocational Education Affiliation) of faculty.

Organizational Purpose

Major cultural models describing the content of organizational culture were discussed in Chapter 2. Each of these models commonly recognizes characteristics of organizational purpose as critical dimensions in the investigation of culture. For example, Schein (1991) proposes that the "external adaptation tasks"--the development of consensus on the mission, functions, goals, and tasks of the organization--are principal functions in deciphering the culture of organizations. Tierney (1988) concurs, finding that an "essential concept" in investigating the culture of colleges is the institution's mission. Clearly, the purpose of an organization lies at the heart of the beliefs and values that determine how members find meaning in their work.

The institutional purposes--the mission, objectives, and philosophy--of the community colleges were incorporated into this study's discriminant function model to distinguish the individual community colleges, not only because cultural literature has considered these dimensions critical to the analysis of the organizational culture of these institutions but also because they have been considered major issues in the current studies of community colleges (Ratcliff et al., 1994; Deegan & Tillery, 1991). The mission, objectives, and philosophy of an institution lie at the core of culture giving insight into what an institution is all about.

Mission. When a MANOVA was performed on the four items comprising the Mission variable, the results indicated that there were significant differences in the way faculty perceived the mission of their campuses. (See Table 7.) The Mission items "college transfer education," "technical/vocational education," and "community/continuing education" were all significant at the $p < .001$ level in differentiating faculty perceptions of the mission of their institution. Only "remedial education" did not differ across campuses--being "somewhat" important on all campuses.

An examination of the means and standard deviations of the missions of each campus depicts the primary mission of Honolulu as technical/vocational education, and Windward as strongly college transfer education as opposed to technical/vocational education. Kauai was the only campus that rated all of the missions, except remedial education, high indicating that college transfer education, technical/vocational education and community/continuing education were all top priorities.

TABLE 7
MANOVA of Mission by Campus

Campus	College Transfer Ed.	Technical/ Vocational Ed.	Remedial Ed.	Community/ Continuing Ed.
Honolulu				
M	3.35	4.85	3.18	3.71
SD	1.20	.59	1.21	1.03
Kapiolani				
M	4.44	4.48	3.26	3.94
SD	.85	.81	1.25	.99
Leeward				
M	4.31	4.20	3.04	3.84
SD	.86	.85	1.22	.94
Windward				
M	4.80	2.47	3.07	4.07
SD	.41	1.06	1.10	.80
Hawaii				
M	4.35	4.44	3.33	3.15
SD	.84	.99	1.31	1.03
Kauai				
M	4.27	4.63	3.57	4.27
SD	.91	.61	1.07	.74
Maui				
M	3.96	4.24	3.08	3.88
SD	.79	.88	1.08	.97
Wilks' Lambda	.818	.737	.985	.906
F	11.74	18.83	.81	5.48
Significance	.000	.000	.564	.000

The smaller the standard deviations, the stronger the agreement that a particular mission characterized the college. An analysis of these standard deviations indicates that many of the standard deviations were below 1.00. It should especially be noted that the highest scoring missions of each campus had the smallest standard deviations. This evidence suggests that not only do faculty seem to agree about the importance of

each of the missions at their particular campus, but agree even more strongly about their most important missions.

When a discriminant analysis was performed to determine how Mission increased the predictive power of the linear model when added to culture type in discriminating faculty perceptions of culture among campuses, the results indicated that three of six functions calculated were significant at the $p < .001$ level. The structure coefficients and standardized canonical discriminant function coefficients for these three functions are reported in Table 8.[2]

As indicated by the standardized canonical coefficients, Adhocracy and vocational/technical education were the best predictors in Function 1, the most effective model; the Market culture type and community/ continuing education were the best predictors in Function 2; and the Clan culture type and community/continuing education were the best predictors in Function 3. These functions accounted for 88% of the between-group variability among campuses. Function 1 alone, the best of the three predictor models, accounted for 54% of the between-group variability; Function 2 accounted for 20% of the between-group variability; and Function 3 accounted for an additional 13% of the between-group variability. The predictive discriminant functions also proved their effectiveness in correctly classifying 50% of individual perceptions of culture type and mission by campus--10% more than by culture type alone.

TABLE 8
Results of Discriminant Function Analysis of Mission and Culture Type as Predictors of Campus Culture

Dimension	Structure Coefficient			Standardized Coefficient		
	Func. 1	Func. 2	Func. 3	Func. 1	Func. 2	Func. 3
College Transf.	-.463	-.035	-.034	-.555	-.300	-.229
Tech/Vocational	.692	-.368	-.026	.748	-.482	-.125
Remedial	.040	-.098	.131	-.106	-.101	-.030
Community	-.012	.457	.531	-.040	.624	.475
Clan	.011	.089	.596	-.356	-.402	.664
Adhocracy	.293	.422	.312	.579	.415	.141
Hierarchy	-.177	.035	-.370	-.294	-.059	-.114
Market	.126	.606	-.403	.101	.627	-.642

Table 9 specifies the points of the group centroids which mark the separation of campuses by each function. These centroids are graphed in two-dimensional space by using two functions at a time.

TABLE 9
Group Centroids for Culture Type and Mission Discriminating Campuses

Campus	Function 1	Function 2	Function 3
Honolulu	1.066	.091	.021
Kapiolani	.096	.355	-.201
Leeward	-.593	-.206	.093
Windward	-2.602	.798	.255
Hawaii	-.346	-.902	-.395
Kauai	.233	-.277	1.095
Maui	.148	.578	-.277

Since Function 1 is the best predictor model, it is graphed separately with Function 2 and Function 3. That is, the centroids for Function 1 and 2 are plotted in one graph (Figure 5) and Function 1 and 3 are plotted in another graph (Figure 6). These graphs visually depict how the addition of Mission to culture type model works to better discriminate the perceived culture of the campuses than the use of culture type alone. Note how Function 1, which had high scores on technical/vocational education and Adhocracy, markedly separates Windward and Honolulu. Consistent with their mean scores, Windward had a very low score on technical/vocational education (but a high score on college transfer education), while Honolulu had a very high score on technical/vocational education (and a lower score on college transfer education).

It is of interest to note that Figure 6 plotting Functions 1 and 3 closely resembles the initial graph (Figure 4) plotting the individuals by culture type. This is because, in Figure 6, Function 1 is high on Adhocracy and Function 3 is dominated by Clan. Similarly, in Figure 4, showing centroids by culture type, Function 1 had the highest score for Adhocracy and Function 2 had a high score for Clan. The dominance of the Clan culture in Function 3 is revealed by Kauai's high score in Function 3 (Table 9). Overall, the ability to classify faculty perceptions of culture by their campuses suggests the increasing uniqueness of culture as information about Mission is added.

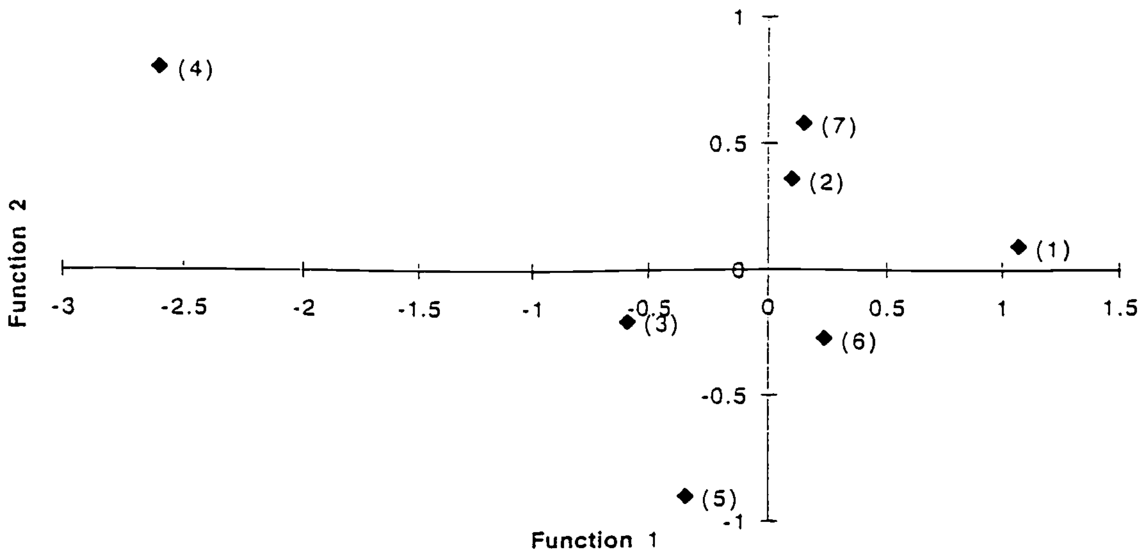


FIGURE 5
Plot of Group Centroids of Campuses by Culture Type and Mission (Functions 1 and 2)

Note: 1 = Honolulu, 2 = Kapiolani, 3 = Leeward, 4 = Windward, 5 = Hawaii, 6 = Kauai, 7 = Maui.

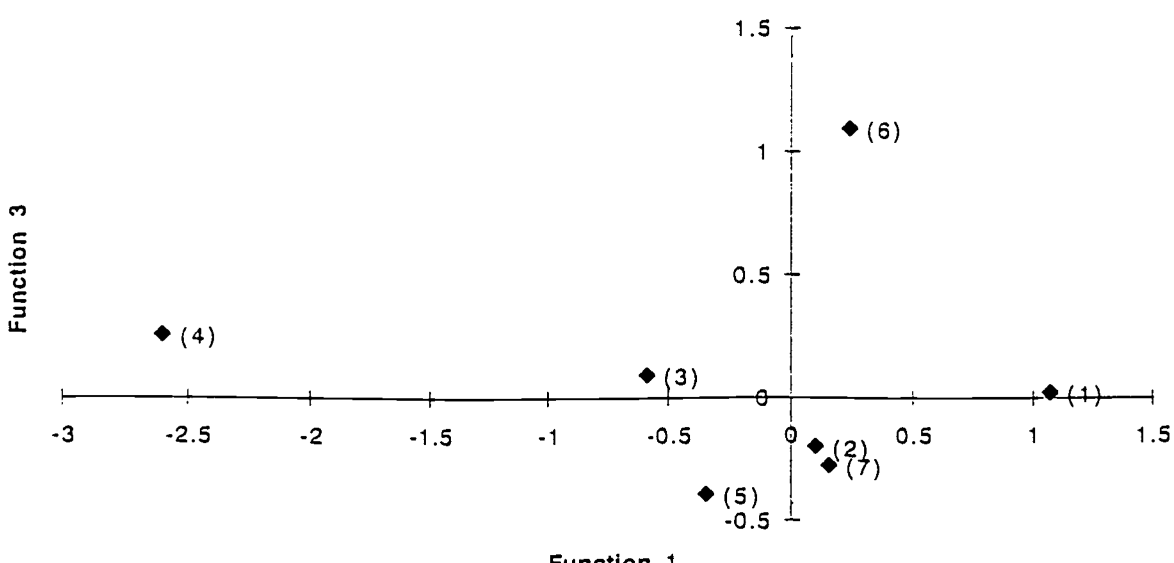


FIGURE 6
Plot of Group Centroids of Campuses by Culture Type and Mission (Functions 1 and 3)

Note: 1 = Honolulu, 2 = Kapiolani, 3 = Leeward, 4 = Windward, 5 = Hawaii, 6 = Kauai, 7 = Maui.

Objectives and Philosophy. The other two dimensions of Organizational Purpose--Objectives and Philosophy--were also considered. An exploratory factor analysis (principal factoring with oblique rotation) was performed on the list of items composing these other two dimensions in an effort to reduce the data and create more reliable measures that might prove to be more productive in the discriminant analyses of campus cultures. The factor analysis suggested the retention of three factors (not tabled). These factors were constructed into the three following scales: Selectivity (for example, being selective in who is served), Innovativeness (such as focusing on innovative programs), and General Education (which includes lifelong learning and developing better citizens). Reliability coefficients (Cronbach's standardized item alpha) for these scales were: Selectivity = .53, Innovativeness = .67, and General Education = .85. Despite the reduction of the Organizational Purpose items into more reliable scales, no additional precision resulted in their discrimination of faculty perceptions of culture among the campuses. Therefore, Mission alone was retained with Culture Type in the discriminant model.

General Education/Vocational Education Affiliation

A final model, which included the GeneralEducation/Vocational Education Affiliation of the faculty with Culture Type and Mission, was subjected to discriminant function analyses after an interaction effect between campus and General Education/Vocational Education Affiliation was found to be significant (Wilks' Lambda = .84, $p = .001$). General Education/Vocational Education Affiliation was of interest since studies

have found that the discipline faculty associated with affects their values and beliefs about their worklife (Bowen & Schuster, 1986; Finkelstein, 1984; Kuh & Whitt, 1988; Seidman, 1985). In fact, Bowen and Schuster and Finkelstein concluded that discipline made more of a difference in faculty perceptions of their work than the type of institution they worked in.

The reported disciplines or programs with which faculty identified were divided into two categories--General Education and Vocational Education. The total respondents were roughly divided in half by General Education (53%) and Vocational Education (45%) affiliation.

The results of the discriminant analyses with the addition of these two categories added only 4% more accuracy to the discriminant function model (not tabled). However, General Education/Vocational Education Affiliation was retained in the final statistical model.[3] The addition of General Education/Vocational Education Affiliation in discriminating the culture of community colleges suggests that the discipline or program with which faculty identify makes a difference in how they view their organizational culture.

The final cultural model, then, incorporated the dimensions of culture type, Mission, and General Education/Vocational Education Affiliation in correctly classifying faculty perceptions of culture by campus with 54% accuracy (versus approximately 14% by chance). Given the purpose of investigating faculty perceptions of culture that discriminate the culture of seven community college campuses, this study ascertained that Cameron and Ettington's culture type models, the Mission of the

institution, and the General Education/Vocational Education Affiliation of faculty were factors that can successfully distinguish the distinct cultures of the various community college campuses.

CHAPTER 5

DISCUSSION, IMPLICATIONS, CONCLUSION

This chapter summarizes the study--its purpose and the findings of the analyses of the research questions posed. It then presents implications for theory, practice and future research which emerge from the findings.

Summary of the Study

Faculty are central to the success of their academic institutions. Their own values and beliefs about their institution--what it does and how it does it--constitute and shape the organizational culture of their institution (Tierney, 1988). It is the understanding of this culture that is crucial in comprehending what happens in the organization and why it happens.

Although community college faculty have been studied as a single homogeneous academic group, their perceptions about their work settings vary. These differential beliefs and values about their institutional environment frame interpretations of their worklife and influence their attitudes and behavior in the workplace, thus yielding unique cultures among similar institutions (Cameron & Ettington, 1988; Finkelstein, 1984; Kuh & Whitt, 1988; Smart, 1992). Understanding what makes the culture of a college distinctive purports an understanding of how faculty perceive their institutions, how they function in their role as members of their organizations, and how they find meaning in their worklives.

There has been a noticeable lack of studies investigating the beliefs and values that community college faculty hold concerning their institutions and their work. This neglect is reflected in the scarcity of literature concerning faculty perceptions of the organizational culture of their institutions. Researchers attribute the shortage of research on organizational culture to the lack of a consensus on what it means, what it is that constitutes organizational culture in institutions of higher education, and how it should be measured (Cameron & Ettington, 1988; Tierney, 1988).

In light of this study's particular interest in community college faculty as a special class of faculty within the higher education arena, the overall intent was to ascertain how these faculty perceive the culture of their institutions and how these perceptions distinguish the uniqueness of diverse institutions within the community college sector. A related aim of this study was to identify important dimensions of culture grounded in higher education organizational literature that discriminate the distinctiveness of the organizational culture of individual community colleges.

Accordingly, the study proposed to: 1) describe faculty perceptions of the culture of their community colleges; 2) investigate whether these perceptions create distinct cultures among campuses of a single community college system; and 3) determine whether these perceptions create a discriminant model of cultural dimensions that define the uniqueness of individual community college cultures. Specifically, the following questions were addressed:

1. Can we identify a profile of culture types within and across community college campuses?
2. Do faculty perceptions of each culture type differ among community colleges within a single system?
3. Do faculty perceptions of culture type differ by individual demographic factors?
4. Which of the culture types account for most of the differences in faculty perceptions of culture between campuses?
5. What other cultural dimensions contribute to explaining the differences and similarities in faculty perceptions of their institutional cultures?

Expressly, the study asked: 1) "How do faculty perceive the culture of their individual institutions?"; 2) "Based on these perceptions, to what extent are the cultures of each campus unique?"; and 3) "If so, what characteristics explain their uniqueness?"

As a result of this investigation, a model incorporating major dimensions of culture to distinguish community college cultures emerged. This model was found to have sufficient accuracy in classifying faculty members by the distinct cultures of seven campuses within a single system. These results suggest that each campus culture is somewhat unique within its specific community and geographical setting.

Discussion of Findings

This section is organized by the dimensions of culture investigated in this study. Major findings emanating from the data analyses of faculty perceptions of the dimensions of culture are discussed in light of the theoretical issues examined--that is, how faculty perceptions of culture agree and vary across seven community college campuses and how they distinctively describe each individual campus.

Culture Type

Cameron and Ettington's (1988) culture type models were tested to determine whether they were appropriate in deciphering a profile of distinct cultures among the seven community college campuses in this study as well as in detecting a pattern of similar perceptions of culture across all campuses. A preliminary analysis of the means and standard deviations of the culture types of each of the seven community college campuses revealed that there was a pattern of agreement in faculty perceptions of culture type across the campuses as well as within each campus. This initial analysis found that faculty perceived the prevalence of a Hierarchy culture across most of the campuses. This finding would not be considered unusual in this particular community college setting. Although the data do not imply any causal effects, one might expect Hierarchy to characterize seven campuses within a single small state system led by a powerful and influential Chancellor who has been at the helm for many more years than any other Chancellor. An additional explanation might be that community college

faculty tend to view their organizations as "political" and "formal-rational"--characteristics of the Hierarchy culture (Peterson & White, 1992).

Windward, the smallest campus, had the highest score and strong agreement (indicated by a small standard deviation) on Hierarchy as the culture type describing its campus. This finding goes counter to literature that suggests that bureaucracy increases as institutional size increases. Other factors, especially, the leadership and management actions on campus, deserve further exploration. A qualitative investigation, including interviewing faculty, might provide insight into their culture type interpretation of this institution.

Maui and Kapiolani's scores were highest on the Market culture type. There is evidence to support the Market type external focus of these campuses. For example, in the 1995 report issued by the state community college system, Maui declared an emphasis on computer networks, televised instruction, and teleconferencing. "This focus on access is especially critical in Maui's tri-isle service area, where distance or the ocean itself could otherwise serve as a barrier to education for the residents [of the other islands]" (Facing the Future, 1995, p. 22). In the same document, Kapiolani pledged more emphasis on international and multicultural enhancement of courses highlighting its continued support for international education including student exchanges with other countries and visiting faculty from other countries.

Kauai was clearly the highest on the Clan culture type. At this institution, the provost emphasizes partnerships within the institution and

with the community: "We see ourselves as a partner to the different constituencies we work with, whether they're businesses or unions or other schools or government agencies. We also consider ourselves to be partners with our students. Our philosophy is that we work with people to find out what their needs are, then match our resources to their needs so they can reach their educational goals" (Facing the Future, 1995, p. 18). There is also strong support for professional improvement on this campus.

Although most campuses were perceived to have a degree of Hierarchy on their campus, they were best characterized by a blend of cultures. For example, Kauai could be typed as Clan/Adhocracy; Windward could be typed Hierarchy/Clan, etc. This blend of culture types is consistent with the findings of Cameron and Ettington's (1988) study of 334 four-year colleges and universities that concluded that most organizations have attributes of more than one culture type.

After substantiating that Cameron and Ettington's culture type were valid in describing the culture types of individual community college campuses, a multivariate analysis of variance (MANOVA) was performed to test whether the differences between each of the four culture types among each of the seven community colleges were significant. Results found that all four culture types were significantly different. Hierarchy showed the least difference across the campuses since it was prevalent among almost all campuses.

Having determined that the culture types were significantly different between campuses, further analyses were performed to determine whether they could withstand the test of discriminant function analyses in uniquely

distinguishing each campus by culture type. The discriminant function analyses also explained which culture types best contributed to the differences found between campuses.

The results of the analyses found that Cameron and Ettington's culture type models correctly classified faculty perceptions of culture by campus with 40% accuracy versus a 14% accuracy rate that could have been attained by chance alone. This analysis indicated that the discriminating variables of Cameron and Ettington's culture type models were very powerful in discriminating the culture of separate community college institutions. Even more remarkable was the fact that the models were able to accurately discriminate seven campuses within a single community college system where one might expect more similarities than differences.

Of the four culture types, the Adhocracy culture type accounted for most of the differences in faculty perceptions of culture and was the most effective predictor of culture type among the campuses. However, because the theoretical model indicates that the culture types may share similar characteristics, one cannot expect the culture types to be completely orthogonal or exclusive of each other. This might explain why the accuracy of the culture type models in correctly classifying campuses was not even greater.

Just as Cameron and Ettington's culture type models were able to show strong associations between culture and institutional effectiveness in higher education institutions, the results of the statistical analyses of these models in this study strongly supported their success in discriminating the

various cultures among community college campuses. The findings also verified the validity of the theoretical framework of the culture type models. For example, institutions with Clan (internal/flexible) cultures were characterized by variables such as a sense of family (the partnerships evidenced by Kauai) and strategic emphases on human resources; and institutions with Adhocracy (external/flexible) cultures were characterized by variables such as external strategies and boundary spanning. As such, we can, with some certainty, conclude that the culture type models are valid and useful dimensions to employ in future studies investigating the cultures of these two-year colleges as a special sector of higher education.

Demographic Factors. Numerous studies have attested that individual attributes make significant differences in faculty perceptions of their worklife (Boyer, 1990; Finkelstein, 1984). To investigate this notion, a multivariate analysis of variance was run against the individual demographics of the faculty respondents in this study and culture type. Surprisingly, of the individual demographics included in the analyses, only campus made a significant difference--hence, this study pursued further analyses of the faculty perceptions of culture by campus and by culture types.

The fact that this study found that the individual factors--gender, age, ethnicity, academic rank, tenure status, academic degree, years of experience at their institution, years of teaching experience, and years of work experience in business and industry--made no significant difference in how faculty perceived the culture types of their institutions was not expected. Since organizational studies have consistently established that

individual backgrounds and experiences have made significant differences in the beliefs and values of individuals, it is remarkable that these individual attributes did not influence faculty perceptions of their institutional culture type. This finding suggests that institutional factors more than individual factors affect how faculty perceive the culture of their institutions.

An explanation for this finding might be that the culture of the institution exerts such a powerful influence on its members that they are effectively socialized by the institutional culture (Peters & Waterman, 1982; Schein, 1992; Tierney & Rhoads, 1993). The notion that faculty are socialized by the culture of community college institutions is related to the strength of the institutional culture (Schein, 1992). Theory suggests that the culture of the community college can be so strong that it attracts faculty who have a favorable orientation to the culture (Peterson & White, 1992). These individuals who hold expectations consistent with that of the organization's culture ("anticipatory socialization") experience socialization processes that affirm their anticipations (Tierney & Rhoads, 1993).

One might expect that the longer a faculty member taught at an institution, the more effectively he/she would be socialized. Yet, this study found that years of experience at the institution made no significant difference in faculty perceptions of their institutional culture. Investigations of the cultural strength theory might elucidate this finding. Peters and Waterman (1982) propose that organizations with strong cultures not only effectively, but also efficiently, socialize their new members. Clearly, the notion of socialization and cultural strength

deserves further attention in future research concerning organizational culture and will be discussed later in this chapter.

Mission

The mission of an organization has been consistently mentioned as an essential element in the examination of an organization's culture (Austin, 1990; Kuh & Whitt, 1988; Peterson & White, 1992; Tierney, 1988). Austin (1990) asserts that institutional mission is a "particularly important element [of culture], affecting recruitment processes, socialization of new faculty, tasks faculty must fulfill, and performance standards" (p. 66). Similarly, Kuh and Whitt (1988) maintain that the culture of an academic institution must project a coherent mission to develop a stronger culture of "shared visions and actions, and, in all likelihood, a distinctive institutional culture" (p. 71). Further, Smart and Hamm (1993b), in their cultural study on organizational effectiveness and the mission orientations of two-year colleges, suggest that future research integrate their "threefold mission typology"--1) transfer and college parallel program, 2) technical and career programs, and 3) adult and continuing programs-- to determine mission distinctiveness and the extent to which there is internal agreement on the espoused mission of the colleges.

Although the mission of community colleges is a critical ingredient in the investigation of culture, the diversity of the missions among the community colleges has been only broadly documented (Ratcliff, Schwarz, & Ebbers, 1994). For example, Cross (1985) identifies four functions of the community colleges: transfer, vocational, remedial, and community

education. Then, Ruscio (1987), in describing the extensive variation in missions existing within the community college sector, illustrates: "In some regions, especially the Northeast, community colleges traditionally educate students along conventional lines, intending to transfer them to other colleges for completion of the baccalaureate. In other locations this transfer function is shared with and frequently surpassed by an occupational one" (p. 336). These broad portrayals of the missions of the varied colleges evidence that research is definitely wanting in profiling the distinct missions of individual community colleges and how these missions affect the roles of institutional participants.

According to Peterson and White (1992), the diverse missions of the community college institutions have resulted in fragmentation and confusion in faculty perceptions concerning the purpose of their institution. They found that, of the three different types of academic institutions they studied--comprehensive universities, liberal arts colleges, and community colleges--there was least agreement in the community college sector with regard to academic purpose. Similarly, McGrath and Spear (1994) found such a diversity in perceptions of mission among community college faculty that they characterized the community college faculty culture as a "weak and disordered intellectual culture."

Considering the importance and potential variation in faculty perceptions of their institutional mission in the investigation of the culture of two-year college institutions, this study sought to explore how faculty interpreted the missions of individual institutions within a single system.

As a result of the statistical analysis of the four Missions--college transfer education, technical/vocational education, community/continuing education, and remedial education--all except remedial education were found significant in differentiating faculty perceptions of the mission of their institution. Remedial education did not differ across the campuses--being "somewhat" important on all campuses. The results suggest that one cannot describe the mission of institutions by geographic location as Ruscio (1987) did since even the missions of seven campuses within a single system can markedly differ.

Although Mission orientations of individual campuses varied across the system, the statistical analyses showed faculty were in strong agreement on the importance of the priority Missions of their institutions. Therefore, the findings imply that faculty may have diverse perceptions of their institutional mission, but there was little confusion about the primary purpose of their institutions. The results also challenge McGrath and Spear's (1994) contention that community college faculty are a disordered intellectual culture because of their fragmented perceptions about their mission.

The mission profiles of each campus appeared to be empirically accurate. For example, the mission of Honolulu was depicted as strongly technical/vocational, and Windward as convincingly college transfer-oriented versus vocational/technical-oriented. In fact, Honolulu is the campus with the most vocational students including a large number of students in apprenticeship programs, and Windward is the campus with the least vocational programs and the highest percentage of "liberal arts"

students. In the 1995 community college annual report, Honolulu proclaimed that it aspired to be "the technical training center of the Pacific" while Windward professed their support of students going to college (Facing the Future, 1995).

The addition of Mission to the culture type discriminant function models increased the accuracy of correctly classifying the culture of the seven campuses to 50%--substantially better than chance. Therefore, the addition of Mission added 10% more accuracy to the model using culture types alone. The vocational/technical education mission and Adhocracy culture type appeared as the best discriminators of culture.

The two other variables of Organizational Purpose analyzed for this study--Philosophy and Objectives--added no more precision in the discrimination of culture among the campuses. Therefore, they were not retained in the discriminant culture model. One might speculate that these variables were interrelated with Mission and were best explained by Mission.

Thus far, we can conclude that the use of culture types as well as Mission in investigating faculty perceptions of organizational culture can be considered beneficial in distinguishing the unique cultures of each community college campus. Consistent with literature emphasizing the importance of mission as an element of culture, the addition of Mission to the discriminant model improved our understanding of the distinct cultures that exist among community colleges.

General Education/Vocational Education Affiliation

Finkelstein (1984), in his comprehensive study of faculty, reveals that the academic discipline of faculty makes a difference in their orientations to education, their commitment to traditional academic values such as academic freedom, and their emphases in their work role. Similarly, Clark (1983) writes: "The discipline rather than the institution tends to become the dominant force in the working lives of academics" (p. 30).

According to Ruscio (1987), however, community college faculty identified themselves as educators, not as members of a discipline. The discipline was seen as merely a means of helping their students learn. On the other hand, Seidman (1985) contends that the discipline of faculty is not without significance to faculty at the community colleges. He, like Finkelstein, maintains that it is the discipline that determines how faculty perceive their work and their roles within the institution. Reporting on the dichotomy between how vocational faculty versus general education faculty perceive their work roles, Seidman illustrates how general education faculty believe that academic courses--reading, writing, math, science, etc.--are of primary importance for all students and basic to lifelong learning. In contrast, while vocational faculty also subscribe to the importance of basic academic skills, they especially believe in the necessity of acquiring technical occupation-related skills since the main reason students attend college is to prepare themselves for work. Disciplinary or program affiliation, then, was of interest in this study since it influences faculty beliefs and values of their institution and their work.

Disciplinary affiliation was analyzed as two categories: General Education and Vocational Education. When these categories were added to Culture Type and Mission and subjected to discriminant function analyses, they were found significant. However, the addition of the General Education/Vocational Education Affiliation categories added only 4% more accuracy to the model, increasing the total accuracy in classifying faculty perceptions of culture by campus to 54%.

The insubstantial precision contributed by the inclusion of General Education/Vocational Education Affiliation can probably be attributed to the nature of the discriminant function analysis. As more variables are added to the discriminant function model, less precision is contributed since the variance of the added variable may have been explained by the previously existing variables in the model. Nonetheless, the meager contribution of General Education/Vocational Education Affiliation to institutional distinctiveness among the community colleges causes one to question Clark's proposition that discipline has a greater influence than the organizational environment on faculty worklife. Accordingly, one might consider whether discipline affects faculty of community colleges differently than faculty of other types of academic institutions.

Although General Education/Vocational Education Affiliation added only 4% more accuracy, it was retained in the final discriminant model that incorporated the cultural dimensions of Culture Type, the Mission of the institution, and the General Education/Vocational Education Affiliation of faculty. These dimensions can be considered fruitful in describing the distinctiveness of the culture of individual community college campuses.

Implications for Theory

An intent of this study was to determine whether Cameron and Ettington's culture type models could be used appropriately in describing and distinguishing the distinct cultures of individual community colleges. The culture type models proposed a two-by-two matrix of cultures based on an internal or external focus and a flexible or stable focus. The culture types also reflected organizational attributes including the institution's criteria for success, the processes that hold the institution together, the kind of leadership and management style that characterized the institution, and the decision making approach practiced by the institution. When multivariate statistical analyses were applied to the culture types, the results proved that they were not only appropriate in describing the institutional cultures, but were also powerful discriminators of the disparate cultures of seven community college campuses within a single system. These findings indicated that these culture type models are suitable in future investigations of organizational culture among community colleges.

Not only did the culture type models distinguish the distinct cultures of the institutions, but they also addressed the controversy regarding the two approaches to the investigation of culture. The functional and critical approaches were discussed in the literature review of this study, and it was noted that this study employed a functional approach to the investigation of the culture of community colleges.

Taking the functional approach, the statistical analyses found that the separate campuses could be singularly described by the type of culture--

Clan, Adhocracy, Hierarchy, and Market--that faculty interpreted them to have. For example, faculty described the culture type of Kauai as strongly Clan; and Windward, as being more the Hierarchy type. The culture type models, then, provided a meaningful way of viewing the culture of organizations as metaphors. These results suggest that, by using the culture type models, organizational culture can be approached both functionally, as something the organization "has" that predicts culture, and critically, as something the organization "is" that describes the culture as a metaphor.

Since organizational culture is such an elusive construct, the study also sought to refine the theoretical construct of organizational culture by investigating other dimensions deemed critical in deciphering the organizational culture of community colleges. In the final analyses, the most productive dimensions that discriminated faculty perceptions of organizational culture with substantial accuracy included Cameron and Ettington's culture type models, the Mission of the institution, and the General Education/Vocational Education Affiliation of faculty. The results of this study indicated that these organizational characteristics were critical components of culture, and, as such, clarify the construct of organizational culture for future research.

Accordingly, the same dimensions, can hereafter be considered fruitful in examining the culture of other community colleges to compare campus cultures and in developing theory regarding the unique cultures of the various colleges in this important sector of higher education. For example, these cultural dimensions can be applied to empirically investigate culture as a dependent variable in examining the various perceptions of

different constituencies regarding the governance and purpose of individual community colleges. They can also be employed as independent variables in determining how the culture of an institution might impact on faculty worklife variables such as motivation, morale, and satisfaction, or institutional effectiveness variables such as student outcomes, professional development of faculty, curriculum development and teaching strategies, and partnerships with the business community and other educational institutions.

By identifying components of culture that distinguish the diverse cultures of community colleges, this investigation has addressed the confusion surrounding the construct of culture. The study also addressed another concern in the study of organizational culture that centers on the persistent debate over the appropriate method for investigating culture. According to Ouchi and Wilkins (1985): "Some hold that the method of lengthy field observation must be employed, while others assert that the whole point of the contemporary study of organizational culture is to go beyond the method of the anthropologist by applying multivariate statistical analysis to these issues" (p. 478). Using multivariate analyses, this study affirmed that organizational culture can be successfully investigated quantitatively by employing surveys.

Since quantitative research, however, does not always explain the deeper cultural assumptions or provide the rich "thick descriptions" suggested by Geertz (1973), qualitative research--including interviews and ethnographic observations--could also be conducted to uncover the deeper meanings that belie the espoused values (Tierney, 1988). For example:

"Why was the smallest campus perceived as having a Hierarchy type culture?" or "Why did another campus have equally high Mission scores on college transfer education, technical/vocational education, and community/ continuing education?" Moreover, qualitative research could illuminate and validate the construct of organizational culture by asking members: "What makes your campus distinct?" and "How does the institution provide meaning in your worklife?"

The statistical analyses of this study confirmed that community colleges--even within a single system--are diverse and distinct. This evidence suggests that it would be unwise to view these types of institutions commonly--except in broad terms. Exploring how faculty exclusively view their own institutions might yield clearer and more accurate profiles of the unique organizational cultures in which they work.

A caveat that should be noted here is that this study was limited to seven community colleges comprising a single system in a single state; therefore, caution must be taken in generalizing the findings. Replicating this study at other similar institutions would enhance the development of theory regarding the disparate faculty perceptions of culture that make each institution unique.

Another finding of this study revealed that individual attributes had no significant effect on faculty perceptions of culture. This finding supports the contention that the culture of the organization has more influence over faculty perceptions than their own demographic characteristics and experiences. In support of this paradigm, Schein (1992) explains that "culture is a mechanism of social control and can be the basis

of explicitly manipulating members into perceiving, thinking, and feeling in certain ways" that build commitment and loyalty to the organization (p. 13). Ouchi and Price (1978) maintain: "If socialization is total (a pure but probably unrealistic state), then selfish behavior is in the organization's interest, since the employee has been socialized into desiring that which serves the organization" (p. 37). The proposition that organizational culture--especially, cultures associated with strong images and widely-shared beliefs and values--socializes members (Ruscio, 1987) deserves further study and will be discussed in the next section.

Implications for Future Research

Implications for future research emerge from the findings of this study on faculty perceptions of organizational culture. This study revealed that faculty perceptions of their institutional cultures were diverse and distinct. Although there is substantial evidence that faculty themselves are diverse (Finkelstein, 1984) and perceive multiple realities of their institutions (Cooper & Kempner, 1993; Seidman, 1985), little attention has been paid to the way faculty differentially perceive their various community college institutions. Certainly, more research needs to be conducted to profile the distinct and disparate cultures of the community colleges. Both empirical research and qualitative case studies would provide insight into the characteristics of culture that describe their uniqueness and define the culture of these extraordinary academic institutions.

This study also found that, although faculty perceptions of their institutional culture varied across campuses, within each campus faculty perceptions of culture were so strong that even the individual attributes of faculty--such as gender, ethnicity, age, and teaching experience--had no significant effect on how culture is perceived. Hence, the question emerges: "What is it that causes faculty to share similar beliefs and values about their institution?" In essence, the question asks: "What is it that creates institutional culture?" "If individual attributes have no significant effect on faculty perceptions of culture, then, are organizational variables more important in actualizing a shared view of culture?" "If so, which organizational variables cause community college faculty to be united in their beliefs?"

Literature attributes a cohesive culture to strong visionary leadership (Cunningham & Gresso, 1993; Schein, 1992). According to Schein (1992), culture can be created by leaders, and culture can be embedded and strengthened by leaders. Leaders who understand the culture of their organizations and work with all participants to instill a shared vision of what the organization is about, what it does and should do, why it does what it does, and how it should do things, can develop strong cultures. Much has been propounded about the need for cultural leadership, but little has been written to suggest specific actions that provide guidance on how to be a cultural leader. Our limited empirical and qualitative examination of what works and what does not work for those who manage and shape culture requires further investigation and development of theory.

The study's finding that individual attributes had no effect on the perceived culture type also has implications for investigating the strength of culture in molding the attitudes and behavior of faculty. Researchers have maintained that cultural strength is indicative of the influence culture has over the perceptions and actions of institutional constituents (Deal & Kennedy, 1982, Schein, 1992; Wilkins & Ouchi, 1983). Cameron and Ettington (1988), however, found that it was culture type more than cultural strength that made a difference in the effectiveness of higher education institutions. The debate regarding the effect of culture type versus cultural strength on desired attitudes and performance has stimulated current research in higher education and also deserves further investigation.

Socialization theory may also provide insight into the distinct cultural perceptions faculty have about their individual community colleges. The conceptual framework of this study posited that diverse faculty perceptions interact with their institutional environment to uniquely describe the organizational culture of their institutions. The distinct cultures of each campus reciprocally influence the beliefs and values that faculty have regarding their institution and their work. The resulting shared values of the organization's culture shape the thinking and actions of individuals socializing its members to adopt the existing culture in order to perpetuate the culture and legitimize the organization's activities in the eyes of its constituents (Schein, 1985). Tierney and Rhoads (1993) contend that this socialization process reflects the culture of an organization and

indicates how effectively the organization has influenced its members to embrace institutional beliefs and values. They maintain:

> It is the socialization of an individual that makes up the sum total of values and norms that directs a person's daily responses and behavior patterns. The sum of all faculty socialization determines the culture of the organization and, ultimately, how well an organization functions. (p. xiii)

Again, research is lacking with regard to the socialization of faculty in community colleges. However, if an organization wishes to understand how organizational culture is taught to its members, how it perpetuates itself, and how it affects the attitudes and behaviors of its members, an investigation of the socialization of organizational members and the resulting strength of the organizational culture in shaping the thoughts and actions of its members would be of critical concern. In order to illuminate the cultural strength of an organization and the socialization of its members, one might wish to explore how individual values match the organization's predominant values, and how long an institution's culture has endured.

A logical future step in investigating the proposition that the culture of the organization can affect faculty perceptions to a greater degree than their own individual traits would be to investigate the impact of organizational culture on the behavior of faculty. Although it has been proposed that faculty behavior is dependent more on their own individual values than on that of the organization's (Finkelstein, 1984), additional research needs to explore how and why the culture of an organization

influences individual performance and even displaces individual desires and needs for the sake of the organization (Ouchi & Price, 1978). Qualitative research that captures richer descriptions of culture and the deeper interpretations of worklife of organizational constituents would seem appropriate for this task, followed by analyses that measure productivity relative to organizational cultures.

Related to performance is an understanding of faculty worklife and motivation. It has been argued that culture affects attitudes and behavior and gives meaning to the worklife of faculty. The importance faculty place on various aspects of their worklife and motivation, therefore, is a manifestation of organizational culture. Seidman (1988) notes a distressing lack of attention to the issues of how faculty understand and make meaning of their work. He maintains that if we care about the vitality of faculty and the success of the institutions, we must examine what faculty value about their work experience and what motivates them to perform. Hence, further research exploring culture in relation to faculty perceptions of their worklife and motivation can provide a better understanding of the way faculty find meaning in their worklife.

Although a major intent of this study was to identify critical components of culture, by no means can it be said that the dimensions that emerged from this study constitute the only model for discriminating the distinct cultures of the disparate community colleges. Organizational culture is a complex construct that is still in its initial stage of conceptualization with regard to institutions of higher education. Further exploration is essential in producing a more precise model for the

investigation of community college cultures that also enhances the definition of organizational culture for future research.

Clearly, organizational culture--the beliefs and values that members share about their organization and work--is central to understanding organizations and the way members function in their worklife. Yet research has only begun to define culture and its impact on organizational constituents in the community college sector. Certainly, investigations of culture that contribute to theory would improve the understanding and effectiveness of the community colleges and the worklife of those who find meaning through their interpretations of the culture of these institutions.

Implications for Practice

This study found significant differences in faculty perceptions of culture type among the seven community colleges. This finding indicates that although community colleges have been viewed collectively as having similar beliefs and values, faculty perceptions of cultural properties such as institutional emphases and mission, leadership and management style, and decision making processes of each institution vary to describe the culture of each campus distinctly. The differential identities associated with these distinct cultures have implications for leadership and management. For example, Chaffee and Tierney (1988) maintain that as academic institutions face increasing complexity and fragmentation and as "decision making contexts grow more obscure, costs increase, and resources become more difficult to allocate, leaders in higher education need to understand

institutions as cultural entities" (p. 8). When academic leaders are aware of the distinct cultures of their institutions, their decisions may contribute to their organizations' sense of purpose and identity while addressing the needs of their various constituents. These scholars suggest that institutional leaders armed with an understanding of their institution's culture are enabled to:

- Consider real and potential conflicts not in isolation but on the broad canvas of organizational life
- Recognize structural or operational contradictions that suggest tensions in the organization
- Implement and evaluate everyday decisions with a keen awareness of their role in and influence upon organizational culture
- Understand the symbolic dimensions of ostensibly instrumental decisions and actions
- Consider why different groups in the organization hold varying perceptions about institutional performance
- Orchestrate innovation and change in the organization, mindful of how such change will impact on and be constrained by the culture. (p. 9)

In this study, for example, an institutional leader of a campus that scored high on Hierarchy may want to assess his/her management style and decision making processes to determine whether this cultural perception might be considered problematic or desirable in the eyes of the faculty. Likewise, a leader of an institution perceived to have a college-transfer

mission would understand how a decision to provide more funds to a vocational program might not find favor with the faculty.

Astute administrators will realize that decisions and actions taken in one institution may result in different responses by another institution because of their disparate cultures. Adequately informed about the culture of individual institutions, leaders might better assess and anticipate constituent reactions. Moreover, leaders could make decisions that would capitalize upon the positive strengths of the existing culture and, thereby, rally the support of organizational members.

Chaffee and Tierney (1988) further suggest that the positive strengths of each unique cultural identity need to be made clear and coherent. When there is a singular vision of what the organization is all about, "all who are involved with the organization have a star to navigate by in their efforts to contribute to the group" (p. 183). This strong vision also attracts those with similar purpose, encourages them to support the goals of the organization, and perpetuates the institution's cultural identity. Identification with the cultural vision provides meaning to the organization's participants and gives them a sense of accomplishment, worth, and satisfaction that leads to commitment and loyalty.

Cameron and Ettington (1988) linked certain culture types with various scales of effectiveness. For example, Clans were related to faculty and administrator employment satisfaction and organizational health, while Adhocracy was associated with system openness and community interaction. The researchers, however, conclude that there is no ideal culture type for a particular type of institution given the various missions,

environments, and the available resources of each institution. They, like Chaffee and Tierney, propose that the key to effectiveness is in understanding the culture that exists and capitalizing on its strengths as well as focusing on a desired culture that might work for the particular institution. These findings suggest organizations need to conduct a cultural assessment so that leaders can understand the beliefs and values that faculty have about their institutions and their functions. Since administrators and faculty perceive the culture type of their institutions differently (Peterson & White, 1992), it would be instructive to include all members of the organization in the assessment to examine how the perceptions of the various constituents match or polarize.

Considerable debate continues concerning whether or not the culture of an organization can be intentionally manipulated to effect change. Some scholars maintain that culture is a natural development of time and uncontrolled circumstances, while others assert that certain features of culture can, in fact, be altered by deliberate management efforts (Chaffee & Tierney, 1988; Ouchi & Wilkins, 1985; Schein, 1992). Schein's (1985) notable quote: "Culture and leadership...are two sides of the same coin, and neither can really be understood by itself" (p. 2) is echoed by Chaffee and Tierney (1988) who maintain that "leaders influence culture and culture defines leadership" (p. 21). Schein (1992) further emphasizes: "In fact, ...the only thing of real importance that leaders do is to create and manage culture, and...the unique talent of leaders is their ability to work with culture" (p. 5).

Whether culture can be altered or not does not decrease the importance of understanding the culture of institutions. A central theme of this study has been that organizational culture--the beliefs and values people share about their organization and their work--is not receiving the attention it deserves. Yet, the realities that people construct as a result of the environmental stimuli of the culture of their organizations affect their attitudes and actions. The message implied is that organizational leaders need to attend to the collective and multiple realities of their constituents. Through cultural understanding comes the empowerment that enables institutional leaders to capitalize on the positive realities of the existing culture to the actualization of organizational goals.

Conclusion

This study sought to describe the unique cultures of seven community college campuses through the perceptions of its faculty. The multivariate analyses produced a cultural model identifying cultural dimensions that could, with substantial accuracy, describe and discriminate the various and distinct cultures of the individual campuses. As a result, a conceptual theory regarding the content of culture and a theory concerning the cultural distinctiveness of disparate community college campuses emerged.

This empirical conceptualization of organizational culture holds prospect for the understanding of institutions that comprise an important segment of higher education--the community colleges. It provides a

framework for examining how faculty as key members of these organizations find meaning in their worklife and how institutions create their cultural identity. Clarification of the lens of organizational culture creates a refined way of viewing the basic beliefs and values shared by its members that reflect the spirit of every institution. It also serves as a foundation upon which theories of organizational culture can be built upon in the future.

Given the recentness of the investigation of the organizational culture of postsecondary institutions and the confusion surrounding this complex construct, further analysis in clarifying this construct and its usefulness in understanding academic institutions is warranted. Specifically, more work is needed to conceptualize culture by identifying other dimensions that best describe the distinctiveness of the cultures of academic institutions. In addition, the development of theory regarding how these dimensions impact on the attitudes and performance of organizational participants is essential to the welfare of the organization as well as its members.

Diversity characterizes higher education, yet literature repeatedly neglects to heed Finkelstein's (1984) warning not to generalize about faculty or academic institutions. Similarly, little attention is given to Clark's (1980) suggestion that research on community colleges should seriously consider the marked variations among their institutions. As a result, little is known about how faculty--especially community college faculty--vary in their beliefs and values about their institution and work and how they uniquely and differentially perceive the culture of their institutions and find meaning in their worklife. Accordingly, little is

known about the disparateness and distinctiveness of the cultures of the institutions that comprise one of the largest sectors of higher education--the community colleges.

The cultural model produced by this study clarifies the definition of culture and creates opportunities for future investigations of faculty perceptions of culture and the distinctive nature of the institutions they work in. Understanding how faculty describe the cultural uniqueness of their institutions provides the key to understanding colleges as workplaces and as teaching and learning environments (Peterson et al., 1986). Deegan and Tillery (1985) predict that this community college generation will be a period of reflection and transition regarding their mission and identities. An awareness of how faculty perceive the culture of their institutions and how they create distinct institutional identities can empower institutional and system leaders to capitalize on their constituents' cherished values and mutually desirable goals.

APPENDIX A

A Survey of the Culture of Community Colleges

---------------- SECTION ONE: ORGANIZATIONAL PURPOSE ----------------

The items in this section ask about 1) *your perceptions* of the *predominant* values of your institution, and 2) *your own* values.

Please circle your response indicating the importance of each item below. For example, a response of "1" indicates that the factor is of low importance. A response of "5" indicates that the factor is of high importance.

	Low Importance 1	2	*Some Importance* 3	4	*High Importance* 5
Mission					
How important are the following missions to your institution?					
1. College transfer education	1	2	3	4	5
2. Technical/vocational education	1	2	3	4	5
3. Remedial education	1	2	3	4	5
4. Community/continuing education	1	2	3	4	5
How important do you believe the following missions should be?					
5. College transfer education	1	2	3	4	5
6. Technical/vocational education	1	2	3	4	5
7. Remedial education	1	2	3	4	5
8. Community/continuing education	1	2	3	4	5
Objectives					
How important are the following objectives to your institution?					
9. Preparing students with work skills	1	2	3	4	5
10. Instilling lifelong learning	1	2	3	4	5
11. Discovering and creating new knowledge	1	2	3	4	5
12. Teaching basic academic skills	1	2	3	4	5
13. Developing better citizens	1	2	3	4	5
14. Developing personal values	1	2	3	4	5
15. Enhancing critical thinking skills	1	2	3	4	5
How important do you believe the following objectives should be?					
16. Preparing students with work skills	1	2	3	4	5
17. Lifelong learning	1	2	3	4	5
18. Discovering and creating new knowledge	1	2	3	4	5
19. Teaching basic academic skills	1	2	3	4	5
20. Developing better citizens	1	2	3	4	5
21. Developing personal values	1	2	3	4	5
22. Enhancing thinking skills	1	2	3	4	5

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	Low Importance 1	2	Some Importance 3	4	High Importance 5
Philosophy					
How important are the following philosophies to your institution?					
23. Being all things to all people	1	2	3	4	5
24. Providing social mobility for the disadvantaged	1	2	3	4	5
25. Providing open access to a college education	1	2	3	4	5
26. Serving those who are more likely to succeed	1	2	3	4	5
27. Being selective in who is served	1	2	3	4	5
28. Focusing on a unique mission	1	2	3	4	5
29. Developing innovative programs	1	2	3	4	5
How important do you believe the following philosophies should be?					
30. Being all things to all people	1	2	3	4	5
31. Providing social mobility for the disadvantaged	1	2	3	4	5
32. Providing equal access to a college education	1	2	3	4	5
33. Serving those who are more likely to succeed	1	2	3	4	5
34. Being selective in who is served	1	2	3	4	5
35. Focusing on a unique mission	1	2	3	4	5
36. Developing innovative programs	1	2	3	4	5

SECTION TWO: ORGANIZATIONAL GOVERNANCE

The items in this section ask about 1) *your perceptions* of the *predominant* values concerning the governance of your institution and 2) *your own* values concerning the governance of your institution.

Please circle the appropriate response indicating the extent of your agreement with each statement below. For example, a response of "-2" indicates that you strongly disagree with the statement. A response of "+2" indicates that you strongly agree with the statement.

	Strongly Disagree -2	-1	Neutral 0	+1	Strongly Agree +2
Institutional Emphases					
My institution defines success on the basis of:					
37. Its concern for its faculty and staff.	-2	-1	0	+1	+2
38. Its innovativeness and ability to take risks.	-2	-1	0	+1	+2
39. Its efficiency and stability.	-2	-1	0	+1	+2
40. Its competitiveness among institutions.	-2	-1	0	+1	+2

41. Which one of the above institutional emphases do you value most?
Number _____

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	Strongly Disagree -2	-1	Neutral 0	+1	Strongly Agree +2
Institutional "Glue"					
The "glue" that holds my institution together is:					
42. Cohesion, teamwork among faculty and administrators	-2	-1	0	+1	+2
43. A focus on innovation and development.	-2	-1	0	+1	+2
44. Formal procedures, rules, and policies.	-2	-1	0	+1	+2
45. Performance and goal accomplishment.	-2	-1	0	+1	+2
46. There is no "glue."	-2	-1	0	+1	+2
47. Which one of the above do you value most? Number _____					
Institutional Leadership					
The leadership style valued at my institution is best characterized as:					
48. A mentor, a harmonizer, a parent-figure.	-2	-1	0	+1	+2
49. An entrepreneur, a delegator, a risk taker.	-2	-1	0	+1	+2
50. An authoritarian, an organizer, an efficiency expert.	-2	-1	0	+1	+2
51. A hard-driver, an achiever, a competitor.	-2	-1	0	+1	+2
52. Which one of the above leadership styles do you value most? Number _____					
Management Style					
The management style in my institution is best characterized by:					
53. Teamwork, consensus, and participation.	-2	-1	0	+1	+2
54. Individual initiative and freedom.	-2	-1	0	+1	+2
55. Secure employment, conformity, predictability.	-2	-1	0	+1	+2
56. Competitiveness, performance, and achievement.	-2	-1	0	+1	+2
57. Which one of the above management styles do you value most? Number _____					
Decision making					
Academic decision making at my institution can be best described as:					
58. Collegial, with widespread participation.	-2	-1	0	+1	+2
59. Formal, dependent upon the hierarchical structure.	-2	-1	0	+1	+2
60. Autonomous, giving academic units freedom.	-2	-1	0	+1	+2
61. Anarchic or haphazard.	-2	-1	0	+1	+2
62. Political, depending upon who has power.	-2	-1	0	+1	+2
63. How do you think decisions should be made? (Choose one) Number _____					
Change Orientation					
My institution faces educational change by:					
64. leading.	-2	-1	0	+1	+2
65. adapting.	-2	-1	0	+1	+2
66. responding.	-2	-1	0	+1	+2
67. resisting.	-2	-1	0	+1	+2
68. Which one of the above change orientations do you value most? Number _____					

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	Strongly Disagree -2	-1	*Neutral* 0	+1	*Strongly Agree* +2
Reward/Evaluation System					
My institution rewards:					
69. Teaching	-2	-1	0	+1	+2
70. Research	-2	-1	0	+1	+2
71. Service to the community	-2	-1	0	+1	+2
72. Service to the college	-2	-1	0	+1	+2
73. Professional development	-2	-1	0	+1	+2

74. I believe the #1 priority in rewarding faculty should be
Number ______ (Choose one)

Faculty Governance					
Faculty input at the department level is important in:					
75. Program decisions	-2	-1	0	+1	+2
76. Budget decisions	-2	-1	0	+1	+2
77. Personnel decisions	-2	-1	0	+1	+2
Faculty input at the college level is important in:					
78. Program decisions	-2	-1	0	+1	+2
79. Budget decisions	-2	-1	0	+1	+2
80. Personnel decisions	-2	-1	0	+1	+2

SECTION THREE: FACULTY WORKLIFE AND MOTIVATION

The items in this section ask about *your* values concerning your worklife and motivation.

Please circle your response indicating the importance of each item below. For example, a response of "1" indicates that the factor is of low importance. A response of "5" indicates that the factor is of high importance.

	Low Importance 1	2	*Some Importance* 3	4	*High Importance* 5
Faculty Worklife					
How important are the following in making your worklife meaningful?					
81. The mission of my institution	1	2	3	4	5
82. Teaching students	1	2	3	4	5
83. Research and publication	1	2	3	4	5
84. Exchanging knowledge with colleagues	1	2	3	4	5
85. Service to the community	1	2	3	4	5
86. Committee responsibilities	1	2	3	4	5
87. Advising and counseling students	1	2	3	4	5
88. Quality of my teaching	1	2	3	4	5
89. Quality of my students	1	2	3	4	5
90. The quality of the faculty at my institution	1	2	3	4	5
91. Student enthusiasm	1	2	3	4	5
92. Student accomplishments	1	2	3	4	5

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	Low Importance 1	2	Some Importance 3	4	High Importance 5
93. Consulting opportunities	1	2	3	4	5
94. Service to the community college system	1	2	3	4	5
95. Sharing in the decisions of the college	1	2	3	4	5
96. My own professional development	1	2	3	4	5
97. Monetary rewards	1	2	3	4	5
98. Recognition for my contributions	1	2	3	4	5
99. Autonomy	1	2	3	4	5
100. Academic freedom	1	2	3	4	5
101. My "fit" with the philosophy of the college	1	2	3	4	5
How important are the following in making your worklife meaningful?					
102. The reputation of my program in the community	1	2	3	4	5
103. The image of the college in the community	1	2	3	4	5
104. Administrative support	1	2	3	4	5
105. Relations with colleagues in the department	1	2	3	4	5
106. Relations with colleagues within the college	1	2	3	4	5
107. Relations with colleagues in other colleges	1	2	3	4	5
108. Institutional support for students	1	2	3	4	5
109. The high standards I set for my students	1	2	3	4	5

110. Which one of the Faculty Worklife items above has the most positive impact on the meaning of your worklife in the institution? Number _______

111. Which one has the least positive impact on the meaning of your worklife in the institution? Number ______

Motivation

How important are the following in motivating you to work harder and better ?

112. My students	1	2	3	4	5
113. The administration	1	2	3	4	5
114 Collegiality with other faculty	1	2	3	4	5
115. My belief in the mission of my institution	1	2	3	4	5
116. Rewards	1	2	3	4	5
117. Opportunity for promotion	1	2	3	4	5
118. Evaluations	1	2	3	4	5
119. Achievement	1	2	3	4	5
120. My personal standards	1	2	3	4	5

121. What motivates me the most is: Number ______ (Choose one)

COMMENTS:

SECTION FOUR: RESPONDENT INFORMATION

Please fill in the following information *about yourself* to help us describe the group of faculty who have responded to this survey.

All responses will remain strictly confidential. No individual names will be associated with individual responses.

1. Name of community college: ______________________________

2. Academic role: ____ Instructional ____ Other (specify) ______________

3. Academic rank:

   ____ Instructor ____ Assistant professor ____ Associate professor

   ____ Professor ____ Other (specify) ______________________

4. ____ Full-time ____ Part-time

5. ____ Tenured ____ Non-tenured

6. Number of years at this institution: _______ years

7. Name of program, discipline, or departmental unit with which you identify:

   ____

8. Highest degree earned:

   ____ High school diploma ____ Bachelor's ____ Master's ____ Doctorate

   ____ Other (specify) ______________________

9. Gender: ____ Male ____ Female

10. Age: ____22-35 ____36-45 ____46-55 ____56-65 ____65+

11. Ethnicity: (Specify one group with which you most closely identify)

    ____

12. Teaching experience (in years):

    Community college _____ Postsecondary educational institution_____

    Four-year college _____ High school_____

13. Work experience in business/industry: _____ years

APPENDIX B

Survey Letters

University of Hawaii at Manoa

College of Education
Department of Educational Administration
1776 University Avenue • Honolulu, Hawaii 96822

January 1996

Dear Colleague:

Relatively little research has been conducted on community colleges, even less on faculty. As a result, we know very little about the culture of the community colleges and the implications of the culture for faculty work lives. The intent of this survey is to explore faculty perceptions of the beliefs and values of the community colleges.

Helene Sokugawa is conducting this research to fulfill her requirements for a doctorate in Educational Administration at the UH College of Education. Her field of study is higher education, and her research interests lie in the area of faculty development.

You are assured of complete confidentiality. The coding on the survey is to help us follow-up on those who do not respond. No individual names will ever be associated with individual responses. The demographic information requested will not be used to identify individuals, but rather to determine how the results differ by such factors as sex, race, age, campus, or discipline.

Thank you in advance for your time and candor. Please make every effort to complete and return the questionnaire within one week of receiving it. Your voice is important in contributing to the understanding of the community colleges and the meaning faculty find in their worklife.

Sincerely,

Linda K. Johnsrud
Associate Professor

ERIC

University of Hawaii at Manoa

College of Education
Department of Educational Administration
1776 University Avenue • Honolulu, Hawaii 96822

February 1996

REMINDER!

PLEASE return the survey sent to you recently which explores your perceptions about the organizational culture of the community colleges.

Because I am conducting this research to fulfill my requirements for a doctorate, I can personally assure you that your responses will be kept confidential. Your response will be a valuable contribution to the understanding of the beliefs and values of the community college faculty.

I hope you will complete the questionnaire and add your voice to the understanding of how faculty perceive their work in the community colleges. If you have any questions regarding the survey, please leave a message for me at (home phone) or page me at (pager number).

Thank you for your time and input.

Sincerely,

Helene Sokugawa

Helene Sokugawa

University of Hawaii at Manoa

College of Education
Department of Educational Administration
1776 University Avenue • Honolulu, Hawaii 96822

February 27, 1996

FINAL CALL!

My sincere thanks to you who have completed the survey exploring your perceptions of the organizational culture of your institution. When I sent out a reminder to return the survey recently, I received many phone calls from faculty wanting to be sure I received their responses. They wanted to be heard and counted in the study. I certainly appreciate the overwhelming response I have been receiving from you.

In case you have misplaced your survey, I am sending you another one. Please return it by March 10, 1996 in order to have your voice included in this study. You will be helping to generate new knowledge with regard to the way community college faculty experience their worklife at their institutions.

Thank you very much for your precious time in responding to the enclosed survey. I know you will be very interested in the results--especially if you have participated.

Sincerely,

Helene Sokugawa

Helene Sokugawa

ERIC

APPENDIX C

Means and Standard Deviations on Individual Items

Variable	N	M	SD
Mission			
How important are the following to your institution?			
1. College transfer education	359	4.17	1.01
2. Technical/vocational education	359	4.43	.92
3. Remedial education	358	3.23	1.23
4. Community/continuing education	359	3.82	1.01
How important do you believe the missions should be?			
5. College transfer education	361	4.49	.76
6. Technical/vocational education	360	4.64	.69
7. Remedial education	360	3.34	1.33
8. Community/continuing education	360	4.14	.90
Objectives			
How important are the following to the institution?			
9. Preparing students with work skills	357	4.33	.89
10. Instilling lifelong learning	358	4.02	1.02
11. Discovering and creating new knowledge	358	3.41	1.29
12. Teaching basic academic skills	356	3.89	1.03
13. Developing better citizens	357	3.42	1.13
14. Developing personal values	355	3.35	1.19
15. Enhancing critical thinking skills	356	3.91	1.03
How important do you think the following should be?			
16. Preparing students with work skills	361	4.58	.70
17. Lifelong learning	361	4.69	.55
18. Discovering and creating new knowledge	361	4.07	1.08
19. Teaching basic academic skills	361	4.33	.88
20. Developing better citizens	361	4.28	.87
21. Developing personal values	361	4.24	.94
22. Enhancing thinking skills	361	4.75	.48
Philosophy			
23. Being all things to all people	353	3.20	1.19
24. Providing social mobility for disadvantaged	351	3.46	1.01
25. Providing open access to a college education	354	4.23	.94
26. Serving those who are more likely to succeed	350	2.95	1.07
27. Being selective in who is served	349	2.39	1.10
28. Focusing on a unique mission	348	3.22	1.16
29. Developing innovative programs	353	3.58	1.15

Variable	N	M	SD
How important should the following be?			
30. Being all things to all people	357	2.50	1.23
31. Providing social mobility for disadvantaged	356	3.66	1.02
32. Providing equal access to a college education	358	4.32	.91
33. Serving those who are more likely to succeed	354	3.08	1.12
34. Being selective in who is served	355	2.75	1.21
35. Focusing on a unique mission	354	3.71	1.14
36. Developing innovative programs	359	4.31	.80
Institutional Emphases			
My institution defines success on the basis of:			
37. Its concern for its faculty and staff	358	2.76	1.24
38. Its innovativeness and ability to take risks	356	3.15	1.23
39. Its efficiency and stability	357	3.67	1.10
40. Its competitiveness among institutions	356	3.29	1.17
Institutional "Glue"			
The "glue" that holds my institution together is:			
42. Cohesion and teamwork among fac. & admin.	357	3.15	1.31
43. A focus on innovation and development	354	3.16	1.13
44. Formal procedures, rules, and policies	355	3.34	1.10
45. Performance and goal accomplishment	354	3.51	1.05
46. There is no "glue."	342	2.68	1.37
Institutional Leadership			
The institution's leadership style is characterized by:			
48. A mentor, a harmonizer, a parent-figure.	350	3.13	1.33
49. An entrepreneur, a delegator, a risk taker	349	2.91	1.22
50. An authoritarian, organizer, efficiency expert	350	3.19	1.30
51. A hard-driver, an achiever, a competitor	347	2.93	1.25
Management Style			
The institution's management style is characterized by:			
53. Teamwork, consensus, and participation	355	3.20	1.37
54. Individual initiative and freedom	355	3.11	1.27
55. Secure employment, conformity, predictability	355	3.19	1.23
56. Competitiveness performance, achievement	353	3.04	1.10
Decision making			
Decision making at my institution can be described as:			
58. Collegial, with widespread participation	354	3.01	1.28
59. Formal, dependent upon hierarchical structure	351	3.61	1.11
60. Autonomous, giving academic units freedom	347	2.98	1.16
61. Anarchic and haphazard	348	2.46	1.27
62. Political, depending upon who has power	351	3.42	1.30

Variable	N	M	SD
Change Orientation			
My institution faces educational change by:			
64. leading	352	3.18	1.30
65. adapting	354	3.87	.92
66. responding	354	3.94	.90
67. resisting	350	2.47	1.21
Reward/Evaluation System			
My institution rewards:			
69. Teaching	359	3.66	1.26
70. Research	356	2.21	1.10
71. Service to the community	356	3.49	1.09
72. Service to the college	357	3.90	1.00
73. Professional development	357	3.24	1.18
Faculty Governance			
Faculty input at the department level is important in:			
75. Program decisions	358	4.26	1.11
76. Budget decisions	357	3.66	1.38
77. Personnel decisions	358	3.91	1.20
Faculty input at the college level is important in:			
78. Program decisions	355	3.75	1.35
79. Budget decisions	356	3.32	1.44
80. Personnel decisions	354	3.46	1.35
Faculty Worklife			
How important are the following in making your worklife meaningful?			
81. The mission of my institution	357	3.76	1.09
82. Teaching students	356	4.86	.43
83. Research and publication	358	2.30	1.22
84. Exchanging knowledge with colleagues	359	3.99	.87
85. Service to the community	359	3.57	.91
86. Committee responsibilities	358	2.91	1.06
87. Advising and counseling students	358	4.06	.89
88. Quality of my teaching	359	4.90	.36
89. Quality of my students	357	4.12	.93
90. The quality of the faculty at my institution	359	4.39	.79
91. Student enthusiasm	359	4.35	.76
92. Student accomplishments	358	4.28	.88
93. Consulting opportunities	357	2.62	1.31
94. Service to the community college system	359	3.16	1.05
95. Sharing in the decisions of the college	359	3.87	1.00
96. My own professional development	359	4.42	.71

Variable	N	M	SD
97. Monetary rewards	358	3.55	1.14
98. Recognition for my contributions	355	3.86	1.11
99. Autonomy	357	4.06	.95
100. Academic freedom	358	4.48	.72
101. My "fit" with the philosophy of the college	357	3.90	1.01
102. The reputation of my program	357	4.26	.89
103. The image of the college in the community	356	4.24	.85
104. Administrative support	356	4.26	.91
105. Relations with colleagues in the department	356	4.49	91
106. Relations with colleagues within the college	357	4.03	.84
107. Relations with colleagues in other colleges	356	3.49	.99
108. Institutional support for students	358	4.22	.83
109. The high standards I set for my students	357	4.53	.66
Motivation			
How important are the following in motivating you?			
112. My students	356	4.73	.56
113. The administration	354	3.12	1.14
114. Collegiality with other faculty	355	3.77	.87
115. My belief in the mission of my institution	355	3.78	1.04
116. Rewards	353	3.27	1.12
117. Opportunity for promotion	353	3.33	1.21
118. Evaluations	355	3.23	1.17
119. Achievement	351	4.12	.93
120. My personal standards	355	4.84	.44

Frequencies And Percentages of Individual Items

Variable	Frequency	Percent
41. Institutional emphases valued most		
37. Its concern for its faculty and staff	114	31.3
38. Its innovativeness and ability to take risks	112	30.8
39. Its efficiency and stability	62	17.0
40. Its competitiveness among institutions	12	3.3
Missing cases	64	17.6

Variable	Frequency	Percent
42. Cohesion and teamwork among faculty & admin.	223	61.3
43. A focus on innovation and development	69	19.0
44. Formal procedures, rules, and policies	0	0
45. Performance and goal accomplishment	42	11.5
46. There is no "glue."	6	1.6
Missing cases	24	6.6
52. Institutional leadership valued most		
48. A mentor, a harmonizer, a parent figure	162	44.5
49. An entrepreneur, a delegator, a risk taker	117	32.1
50. An authoritarian, organizer, efficiency expert	9	2.5
51. A hard-driver, an achiever, a competitor	22	6.0
Missing cases	54	14.8
57. Management style valued most		
53. Teamwork, consensus, and participation	215	59.1
54. Individual initiative and freedom	82	22.5
55. Secure employment, conformity, predictability	7	1.9
56. Competitiveness performance, achievement	21	5.8
Missing cases	39	10.7
63. How decisions should be made		
58. Collegial, with widespread participation	247	67.9
59. Formal, dependent upon hierarchical structure	11	3.0
60. Autonomous, giving academic units freedom	72	19.8
61. Anarchic or haphazard	0	0
62. Political, depending upon who has power	1	.3
Missing cases	33	9.0
68. Change orientation valued most		
64. leading	207	56.9
65. adapting	71	19.5
66. responding	42	11.5
67. resisting	0	0
Missing cases	44	12.1
74. #1 priority in rewarding faculty should be		
69. Teaching	277	76.1
70. Research	1	.3
71. Service to the community	10	2.7
72. Service to the college	21	5.8
73. Professional development	27	7.4
Missing cases	28	7.7

Variable	Frequency	Percent
110. Most positive impact on meaning of worklife		
81. The mission of my institution	2	.5
82. Teaching students	63	17.3
83. Research and publication	0	0
84. Exchanging knowledge with colleagues	3	.8
85. Service to the community	0	0
86. Committee responsibilities	0	0
87. Advising and counseling students	1	.3
88. Quality of my teaching	37	10.2
89. Quality of my students	1	.3
90. The quality of the faculty at my institution	1	.3
91. Student enthusiasm	2	.5
92. Student accomplishments	13	3.6
93. Consulting opportunities	0	0
94. Service to the community college system	0	0
95. Sharing in the decisions of the college	1	.3
96. My own professional development	5	1.4
97. Monetary rewards	3	.8
98. Recognition for my contributions	3	.8
99. Autonomy	3	.8
100. Academic freedom	2	.5
101. My "fit" with the philosophy of the college	1	.3
102. The reputation of my program	49	13.5
103. The image of the college in the community	7	1.9
104. Administrative support	20	5.5
105. Relations with colleagues in the department	39	10.7
106. Relations with colleagues within the college	9	2.5
107. Relations with colleagues in other colleges	1	.3
108. Institutional support for students	18	4.9
109. The high standards I set for my students	54	14.8
Missing cases	26	7.1
111. Least positive impact on meaning of worklife		
81. The mission of my institution	4	1.1
82. Teaching students	1	.3
83. Research and publication	45	12.4
84. Exchanging knowledge with colleagues	0	0
85. Service to the community	2	.5
86. Committee responsibilities	13	3.6
87. Advising and counseling students	1	.3
88. Quality of my teaching	0	0
89. Quality of my students	1	.3
90. The quality of the faculty at my institution	0	0
91. Student enthusiasm	0	0

Variable	Frequency	Percent
92. Student accomplishments	0	0
93. Consulting opportunities	44	12.1
94. Service to the community college system	4	1.1
95. Sharing in the decisions of the college	0	0
96. My own professional development	0	0
97. Monetary rewards	8	2.2
98. Recognition for my contributions	7	1.9
99. Autonomy	3	.8
100. Academic freedom	0	0
101. My "fit" with the philosophy of the college	2	.5
102. The reputation of my program	9	2.5
103. The image of the college in the community	12	3.3
104. Administrative support	28	7.7
105. Relations with colleagues in the department	3	.8
106. Relations with colleagues within the college	8	2.2
107. Relations with colleagues in other colleges	107	29.4
108. Institutional support for students	10	2.7
109. The high standards I set for my students	5	1.4
Missing cases	47	12.9
121. What motivates me most		
112. My students	131	36.0
113. The administration	0	0
114. Collegiality with other faculty	7	1.9
115. My belief in the mission of my institution	11	3.0
116. Rewards	7	1.9
117. opportunity for promotion	5	1.4
118. Evaluations	14	3.8
119. Achievement	0	0
120. My personal standards	169	46.4
Missing cases	20	5.5

ENDNOTES

1. The following discriminant function equations resulted for Functions 1 and 2 which included the culture types as predictors:

$$D_1 = -.439 + .568\text{ Market} + .483\text{ Adhocracy} - .424\text{ Clan} - .226\text{ Hierarchy}$$

$$D_2 = .273 + .357\text{ Adhocracy} + .256\text{ Clan} - .443\text{ Market} - .272\text{ Hierarchy}$$

The unstructured coefficients were not tabled.

2. The following discriminant function equations resulted for Functions 1, 2, and 3 which included culture types and the four missions as predictors:

$$D_1 = -.956 + .923\text{ Mis}_2 + .361\text{ Adhocracy} + .082\text{ Market} - .603\text{ Mis}_1 - .215\text{ Hierarchy} - .204\text{ Clan} - .088\text{ Mis}_3 - .042\text{ Mis}_4$$

$$D_2 = -1.008 + .646\text{ Mis}_4 + .506\text{ Market} + .259\text{ Adhocracy} - .596\text{ Mis}_2 - .326\text{ Mis}_1 - .230\text{ Clan} - .083\text{ Mis}_3 - .043\text{ Hierarchy}$$

$$D_3 = .084 + .493\text{ Mis}_4 + .380\text{ Clan} + .088\text{ Adhocracy} - .518\text{ Market} - .249\text{ Mis}_1 - .155\text{ Mis}_2 - .083\text{ Hierarchy} - .025\text{ Mis}_3$$

Mis_1 is the college transfer mission; Mis_2 is the technical/vocational education mission; Mis_3 is the remedial education mission; and Mis_4 is the community/continuing education mission. The unstructured coefficients were not tabled.

3. The following discriminant function equations resulted for Functions 1, 2, and 3 which included culture types, the four missions, and disciplinary affiliations as predictors in the final model:

$$D_1 = -2.279 + 1.059\ Mis_2 + .570\ Dept + .285\ Adhocracy + .073\ Market - .488\ Mis_1 - .204\ Hierarchy - .179\ Mis_4 - .153\ Clan - .106\ Mis_3$$

$$D_2 = -2.651 + .882\ Dept + .600\ Mis_1 + .445\ Mis_2 + .143\ Mis_3 + .122\ Clan + .087\ Hierarchy - .773\ Mis_4 - .322\ Market - .290\ Adhocracy$$

$$D_3 = -.943 + .759\ Dept + .620\ Market + .237\ Mis_1 + .069\ Mis_3 + .056\ Adhocracy + .039\ Hierarchy - .429\ Clan - .230\ Mis_4 - .204\ Mis_2$$

"Dept" is the General Education/Vocational Education affiliation of the respondent since the respondent's department, discipline, or program was categorized as either General Education or Vocational Education. The unstructured coefficients were not tabled.

REFERENCES

Allaire Y. & Firsirotu, M. E. (1984). Theories of organizational culture. Organization Studies, 5(3), 193-226.

Argyris, C. (1976). Increasing leadership effectiveness. New York: Wiley-Interscience.

Austin, A. E. (1990). Faculty cultures, faculty values. In Tierney, W. G. (Ed.), Assessing academic climates and cultures, (pp. 61-74). San Francisco: Jossey-Bass.

Austin, A. E. & Gamson, Z. F. (1983). Academic workplace: New demands, heightened tensions. (ASHE-ERIC Higher Education Research Report No. 10). Washington, DC: Association for the Study of Higher Education.

Bennis, W. G. (1973). The leaning ivory tower. San Francisco: Jossey-Bass.

Bennis, W. & Nanus, B. (1985). Leaders: The strategies for taking charge. New York: Harper and Row.

Berg, P. O., & Kreiner, C. (1990). Corporate architecture: Turning physical settings into symbolic resouces. In Gagliardi, P. (Ed.), Symbols and artifacts. New York: de Gruyter.

Blackburn, R. T. & Lawrence, J. H. (1995). Faculty at work: Motivation, expectation, satisfaction. Baltimore: Johns Hopkins University Press.

Blackburn, R. T., Lawrence, J. H., Ross, S., Okoloko, V. P., Bieber, J. P., Meiland, R., & Street, T. (1986). Faculty as a key resource: A review of the research literature. (Technical Report No. 86-D-001). Ann Arbor: Board of Regents of the University of Michigan.

Bolman, L. G. & Deal, T. E. (1989). Modern approaches to understanding and managing organizations. San Francisco: Jossey-Bass.

Bowen, H. R. & Schuster, J. (1986). American professors: A national resource imperiled. New York: Oxford University Press.

Boyer, E. L. (1990). Scholarship reconsidered: Priorities of the professoriate. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

Cameron, K. S. & Ettington, D. R. (1988). The conceptual framework of organizational culture. In J. C. Smart (Ed.), Higher education: Handbook of theory and research (Vol. 6, pp. 356-396). New York: Agathon Press.

Chaffee, E. E. & Tierney, W. G. (1988). Collegiate culture and leadership strategies. New York: American Council on Education, Macmillan Publishing Company.

Clark, B. R. (1970). The distinctive college: Antioch, Reed and Swarthmore. Chicago: Aldine.

Clark, B. R. (1980). The "cooling out function" revisitedIn G. B Vaughan (Ed.), Questioning the community college role: New directions for community colleges (Vol. 32, pp. 15-31). San Francisco: Jossey Bass.

Clark, B. R. (1983). The higher education system: Academic organization in cross-national perspective. Berkeley: University of California Press.

Clark, B. R. (1987). The academic life: Small worlds, different worlds. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

Cohen, A. M. (1989, Fall). What's next for the community colleges? An ERIC review. Community College Review, 17(2), 53-59.

Cohen, A. M. & Brawer, F. B. (1977). The two-year college today. New York: Praeger.

Cohen, A. M. & Brawer, F. B. (1989). The American community college (2nd ed.). San Francisco: Jossey-Bass.

Cohen, A., Palmer, J., & Zwemer, D. K. (1986). Key resources on community colleges. San Francisco: Jossey-Bass.

Cooper, J. & Kempner, K. (1993, Summer). Lord of the Flies Community College: A case study of organizational disintegration. The Review of Higher Education, 16(4), 419-437.

Cross, P. K. (1985). Determining missions and priorities for the fifth generation. In W. L. Deegan and D. Tillery (Eds.), Renewing the American community college (pp. 34-52). San Francisco: Jossey-Bass.

Cunningham, W. G. & Gresso, D. W. (1993). Cultural leadership: The culture of excellence in education. Boston: Allyn and Bacon.

Deal T. E. & Kennedy, A. A. (1982). Corporate cultures: The rites and rituals of corporate life. Reading, MA: Addison-Wesley.

Deegan, W. L. & Tillery, D. (Eds.). (1991). Renewing the American community college. San Francisco: Jossey-Bass.

Deiner, T. (1985). Community college faculty job satisfaction. Community/Junior College Quarterly, 9, 347-357.

Facing the future--on the edge of a new millenium. (1995). Honolulu, HI: University of Hawaii, Office of the Chancellor for Community Colleges.

Finkelstein, M. J. (1984). The American academic profession: A synthesis of social scientific inquiry since World War II. Columbus, OH: Ohio State University Press.

Frost, P. J., Moore, L. F., Louis, M. R., Lundberg, C. C., & Martin, J. (Eds.). (1991). Reframing organizational culture. Newbury Park: Sage Publications.

Gardner, D. P. (1983). A nation at risk: The imperative for educational reform. National Commission on Excellence in Education. Washington, DC: Government Printing Office.

Geertz, C. (1973). The interpretation of cultures. New York: Basic Books.

Goodenough, W. (1971). Culture, language, and society (Modular Publication, No. 7). Reading, MA: Addison-Wesley.

Hamm, R. E. (1992). Organizational effectiveness, culture and decision processes in two-year colleges. Unpublished doctoral dissertation, University of Illinois, Chicago.

Hill, E. A. (1986). Job satisfaction facets as predictors of commitment to or withdrawal from the work organization among selected community college faculty in New York state. Community/Junior College Quarterly, 10, 1-11.

Huff, A. (1983). A rhetorical examination of strategic change. In L. R. Pondy, P. M. Frost, G. Morgan, & T. C. Dandridge (Eds.), Organizational symbolism (Vol. 1, pp. 167-183). Greenwich, CT: JAI.

Jung, C. G. (1923). Psychological types. London: Routledge and Kegan Paul.

Keim, M. C. (1989, Winter). Two-year college faculty: A research update. Community College Review, 17 (3) 34-43.

Kempner, K. (1990, Winter). Faculty culture in the community college: Facilitating or hindering learning. The Review of Higher Education, 13, 215-235.

Kuh, G. D. & Whitt, E. J. (1988). The invisible tapestry: Culture in American colleges and universities (ASHE-ERIC Higher Education Report No. 1). Washington, D. C.: Association for the Study of Higher Education.

London, H. B. (1978). The culture of a community college. New York: Praeger.

Marcoulides, G. A. & Heck, R. H. (1993). Organizational culture and performance: Proposing and testing a model. Organization Science, 4, 209-225.

Manke, J. (1995, July 7). State shorfall may require additional restrictions. Ku Lama, p. 1.

Mason, R. O. & Mitroff, I. I. (1973). A program for research in management. Management Science, 19(5), 475-487.

McGrath, D. & Spear, M. B. (1991). The academic crisis of the community college. Albany: State University of New York Press.

Meister, J. S. (1982). A sociologist looks at two schools: The Amherst and Hampshire experiences. Change, 14, 26-34.

Milosheff, E. (1990). Factors contributing to job satisfaction at the community college. Community College Review, 18, 12-22.

Mintzberg, H. (1979). The structuring of organizations. Englewood Cliffs, NJ: Prentice-Hall.

Mitroff, I. I. (1983). Stakeholders of the organizational mind. San Francisco: Jossey-Bass.

Mitroff, I. I., & Kilmann, R. H. (1976). On organizational stories: An approach to the design and analysis of organization through myths and stories. In R. H. Kilmann, L. R. Pondy, and D. F. Slevin (Eds.), The management of organizational design, (Vol. 2, pp. 189-207). New York: Elsevier North-Holland.

Morgan, G. (1986). Images of organizations. Beverly Hills, CA: Sage.

National Center for Education Statistics. (1992, November). Statistical analysis: Students at less-than-4-year institutions, (NCES 92-206). Washington DC: U.S. Government Printing Office.

National Center for Education Statistics. (1994). Digest of educational statistics. Washington DC: U.S. Government Printing Office.

Neumann, W. & Riesman, D. (1980). The community college elite. In G. B. Vaughan (Ed.), Questioning the community college role: New directions for community colleges, (Vol. 32, pp. 53-71). San Francisco: Jossey-Bass.

Ouchi, W. G. (1983). Theory Z: An elaboration of methodology and findings. Journal of Contemporary Business, 11, 27-41.

Ouchi, W. G. & Johnson, J. (1978). Types of organizational control and their relationship to emotional well-being. Administrative Science Quarterly, 23, 293-317.

Ouchi, W. G. & Price, R. L. (1978). Hierarchies, clans, and Theory Z: A new perspective on organization development. Organizational Dynamics, 7(2), 25-44.

Ouchi, W. G. & Wilkins, A. L. (1985). Organizational culture. Annual Review of Sociology, 11, 457-83.

Parnell, D. (1990). Dateline 2000: The new higher education agenda. Washington, DC: Community College Press.

Peters, T. J. & Waterman, R. H. (1982). In search of excellence. New York: Harper and Row.

Peterson, M. W. & Spencer, M. G. (1990). Assessing academic culture and climate. In W. G. Tierney (Ed.), Assessing organizational climate and culture, (pp. 3-18). San Francisco: Jossey-Bass.

Peterson, M. W. & White, T. H. (1992). Faculty and administrator perceptions of their environments: Different views or different models of organization? Research in Higher Education, 33, 177-204.

Peterson, M. W., Cameron, K. S., Mets, L. A., Jones, P., & Ettington, D. (1986). The organizational context for teaching and learning. Ann Arbor: University of Michigan.

Pfeffer, J. (1981). Management as symbolic action: The creation and maintenance of organizational paradigms. Research in Organizational Behavior, 3, 1-52.

Quinn, R. E., & Cameron, K. S. (1983). Organizational life cycles and shifting criteria of effectiveness: Some prliminary evidence. Management Science, 29, 33-51.

Quinn, R. E. & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. Management Science, 29, 363-377.

Ratcliff, J. L., Schwarz, S., & Ebbers, L. H., (Eds.). (1994). Community Colleges. Needham Heights, MA: Simon and Schuster.

Ruscio, K. P. (1987). Many sectors, many professions. In B. R. Clark (Ed.), The academic profession: National, disciplinary, and institutional settings. Berkeley: University of California Press.

Sackmann, S. A. (1991). Cultural knowledge in organizations: Exploring the collective mind. Newbury Park: Sage Publications.

Schein, E. H. (1985). Organizational culture and leadership. San Francisco: Jossey-Bass.

Schein, E. H. (1990). Organizational culture. American Psychologist, 45, 109-119.

Schein, E. H. (1991). What is culture? In P. J. Frost, L. F. Moore, M. R. Louis, C. C. Lundberg, & J. Martin (Eds.), Reframing organizational culture (pp. 243-253). Newbury Park: Sage.

Schein, E. H. (1992). Organizational culture and leadership (2nd ed.). San Francisco: Jossey-Bass.

Seidman, E. (1985). In the words of the faculty: Perspectives on improving teaching and educational quality in community colleges. San Francisco: Jossey-Bass.

Smart, J. C. & Hamm, R. E. (1993a). Organizational culture and effectiveness in two-year colleges. Research in Higher Education, 34, 95-106.

Smart, J. C. & Hamm, R. E. (1993b). Organizational effectiveness and mission orientations of two-year colleges. Research in Higher Education, 34, 489-502.

Smart, J. C. & Lerner, A. W. (1993, April). Organizational culture and effectiveness in higher education: A test of the "culture type" and "strong culture" hypotheses. Paper presented at the American Educational Research Association, Atlanta, GA.

Smircich, L. (1983). Concepts of culture and organizational analysis. Administrative Science Quarterly, 28, 339-358.

Spencer, M. G., White, T. H. Peterson, M. W. & Cameron K. S. (1989, November). Paper presented at the Annual Meeting of the Association for the Study of Higher Education, Atlanta, GA.

Study Group on the Conditions of Excellence in American Higher Education. (1984). Involvement in learning: Realizing the potential of American higher education. Final report to the National Institute of Education, U.S. Department of Education. Washington, DC: U.S. Government Printing Office.

Tierney, W. G. (1988, January/February). Organizational culture in higher education: Defining the essentials. Journal of Higher Education, 59, 2-21.

Tierney, W. G. (1989). Curricular landscapes, democratic vistas: Transformative leadership in higher education. New York: Praeger.

Tierney, W. G. (Ed.). (1990). Assessing academic climates and cultures. San Francisco: Jossey-Bass.

Tierney, W. G. (1991). Ideology and identity in postsecondary institutions. In W. G. Tierney (Ed.), Culture and ideology in higher education, (pp. 35-57). New York: Praeger.

Tierney, W. G. & Rhoads, R. A. (1993). Enhancing promotion, tenure and beyond: Faculty socialization as a cultural process (ASHE-ERIC Higher Education Report No. 93-6). Washington, DC: George Washington University, School of Education and Human Development.

Toffler, A. (1980). The third wave. New York: Morrow.

Townsend, B. K., Newell, L. J., & Wiese, M. D. (1992). Creating distnctiveness: Lessons from uncommon colleges and universities. (ASHE-ERIC Higher Education Report No. 6). Washington, DC: The George Washington University, School of Education and Human Development.

Visions: Toward the 21st centrury. (1990). Honolulu, HI: University of Hawaii, Office of the Chancellor for Community Colleges.

Weis, L. (1985). Between two worlds: Black students in an urban community college. Boston: Routledge and Kegan Paul.

Wilkins, A. L. & Ouchi, W. G. (1983). Efficient cultures: Exploring the relationship between culture and organizational performance. Administrative Science Quarterly, 28, 468-481.

Willie R. & Stocklein, J. E. (1982). A three-decade comparison of college faculty characteristics, satisfactions, activities, and attitudes. Research in Higher Education, 16, 81-93.

Yamaguchi, A. & Kresnak, W. (1995, July 11). The Honolulu Advertiser, pp. 1, A2.

Zammuto, R. F. & Krakower, J. Y. (1991). Quantitative and qualitative studies of organizational culture. Research in Organizational Change and Development, 5, 83-114.

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