Organizational Leadership in Academic Libraries: Identifying Culture Types and Leadership Roles

Monica Garcia Brooks
Marshall University, brooks@marshall.edu

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ORGANIZATIONAL LEADERSHIP IN ACADEMIC LIBRARIES: IDENTIFYING CULTURE TYPES AND LEADERSHIP ROLES

Monica Garcia Brooks,
Marshall University
College of Education and Human Services

Dissertation submitted to the Faculty of the Marshall University Graduate College in partial fulfillment of the requirements for the degree of

Doctor of Education in Educational Leadership

Committee Chair, Dennis M. Anderson, Ed.D.
Andrew Sikula, Sr., Ph.D.
Jerry Jones, Ed.D.
Jennifer Mak, Ph.D.

Huntington, West Virginia, 2007

Keywords: Higher Education, Libraries, Organizational Culture, Leadership

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ABSTRACT

Organizational Leadership in Academic Libraries: Identifying Culture Types and Leadership Roles

The purpose of this study is to identify organizational culture types and leadership roles among research and non-research libraries in higher education institutions in the United States and to reveal trends that can assist in enacting needed organizational change. Organizational culture and leadership are two intertwined concepts that are strongly aligned with the human element of any supervisory experience. According to Crosby, they help “nurture effective and humane organizations” (Crosby, 2004). This research project sought to test the claims brought forth by library researchers such as Kaarts-Brown et al. in which they reported a tie between the library manager’s ability to shift leadership roles to the overall effectiveness of the organization’s culture (2004, p. 38). It also examined possible models to aid libraries in diagnosing and making change that can influence organizational culture in positive ways. Application of Cameron and Quinn’s Competing Values Framework (CVF) by use of the Organizational Culture Assessment Instrument (OCAI) provided a method for identifying culture and leadership roles among 625 academic library respondents. One hundred higher education libraries affiliated with the Association of Research Libraries (ARL) were compared to 123 similar-sized non-research oriented colleges and universities. The library literature stresses that budgetary constraints cause great difficulties among libraries of all types in this country. It also states that library science education does little to prepare its leaders to tackle this wide-spread crisis. This research project attempted to reveal the impact budget may have on culture and if education has any bearing on leadership traits and if one library type displays cultures or leadership roles that are desirable. Significant differences were revealed for several of the variables studied. Revealing culture types or library organizations and the leadership roles of their chief officers can aid in the diagnosis of effective or ineffective organizations. Once types and roles are identified, strategies can be suggested to meet institutional goals in spite of budget problems. With no state-supported economic relief anticipated for higher education in the near future, identifying creative strategies for library directors to employ may aid them in becoming more effective managers. Cameron and Quinn assert that effective managers beget effective leaders, who in turn can invoke positive change within their organizations (2006, p. 81).
DEDICATION

I wish to extend my deepest thanks to my dear family and patient colleagues who aided in my completion of this research project.
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CHAPTER ONE

The average public academic library in the United States faces a problem similar to a retiree’s pension. Resembling a fixed income, the library’s budget cannot compete with annual inflation (Coyle, 2005). This is an issue that has plagued the academic library community for decades but has been especially amplified within the last five years due to declining higher education funding (Lyall & Sell, 2006). September 11, 2001, was a tragic day in our country’s history that shook consumer confidence and lead the economy into a slump that was larger than the original recession projections made by economists in March of that same year (Verma, 2002). Many states reacted swiftly by implementing frugal spending initiatives and making across-the-board cuts. Since 2001, higher education began realizing declines in state funding (Gose, 2002, 2003; Zemskey, 2003; Hartle, 2005; Dervarics, 2006). In 2003, as many as 37 states made permanent cuts in allocations to colleges and universities (Potter, 2003). These cuts have had an impact on college and university libraries that were already seeing a steady drop in the ability to maintain current book and journal holdings. While the US economy is slowly recovering from the 2001 recession, this is not the case with higher education. In a 2002 National Center for Higher Education Management Systems (NCHEMS) report that projects national higher education expenditures through 2012, only five states will have the financial potential to improve higher education funding. Among the remaining 45 states, research shows slow higher education funding growth due to projected increases in entitlement programs such as Medicaid that will impact local government spending (Boyd, 2002). In spite of dismal projections, the Bureau of Labor statistics reports the unemployment rate at 4.7%, the lowest rate since July 2001 (Bureau of Labor Statistics,
2006). Budget surpluses have also been reported by more than half of the states at the end of the 2004-05 fiscal year (Fischer, Hebel, Schmidt, Selingo, & Walters, 2006). So far, however, only 19 state legislatures report that they will reinstate cuts, meet existing funding requests, or consider funding increases for higher education in the coming year (Fischer, et al., 2006).

While the last five years of economic decline in higher education has had a direct negative impact on libraries, the deterioration actually began in the 1990s. In a 2004 study at the University of Oregon, D. Carver reported that academic libraries in the US have steadily cut journal subscriptions over the last thirteen years. With annual journal budget reductions as high as seven percent, book acquisitions have suffered even more as buying has dropped by 25 % in spite of a global monograph publishing increase in 2004 (Carver, 2004). At the 2005 meeting of the Association of American University Presses, publishers reported that “monographs are not selling well” because “library budgets remain tight” (Howard, 2005, p. A12). When library cuts are translated into actual journal titles, for example, a two percent library budget reduction at Colorado State University is akin to 900 titles being permanently removed from the library’s regular journal holdings (Albanese, 2004). Carver’s research shows that a seven percent budget cut necessitates the removal of about 1,000 journal titles among most academic library collections (ACRL, 2005). Of the journals that are removed, most titles will be selected from medical and technology fields since annual costs for these disciplines have grown two to three times above the annual rate of inflation during the last seventeen years (J.R., 2004). Even though the overall US economy was good in the 1990s, libraries still could not compete with forced publisher inflation rates. A periodical price study conducted by the
Library Journal in 2003 found that journal prices from 1999 rose 35% by 2003 across all disciplines (Van Orsdel & Born, 2003). For medical and technology-related titles, a Brandon-Hill study showed prices jumping over 50% from 1996 to 1999. College and university libraries exist to support the curriculum and research needs of their students and faculty. Peer-reviewed journals are critical to faculty research; therefore, academic book and journal publishers have a captive audience. Lack of competition allows them to set their own prices (Carnevale, 2003; Van Orsdel & Born, 2003). Despite outcry from librarians, publishers can and do set prices independent of the consumer price index (Carnevale, 2003; J.R., 2004). When student tuition and fees are often the only means of increasing the library’s budget line, the typical library administrator reluctantly shifts the financial burden to the students as he or she is forced to pay more for the same library resources each year. Eventually, after years of recurring double-digit increases, a static or falling library budget cannot support the status quo, resulting in extreme curtailment of the numbers of library books and journals. The economic outlook for college and university libraries is not expected to improve dramatically in the next 2-5 years due to major cutbacks in student loan programs, research funding, and work study money proposed in 2006 by President Bush (Dervarics, 2006).

The lack of resources does more than hinder the library’s ability to meet its acquisition goals. It also has a negative impact on staff morale and issues central to the maintenance of productive organizational climate (Topper, 2004). Recent studies show that organizational culture is a critical factor that influences library success (Kaarst-Brown et al., 2004; Kaarst-Brown & Robey, 1999). Kaarst-Brown et al. state that “organizational culture can be leveraged as a strategic asset to attract staff, create
favorable assessments by administrators and funders, and cast library institutions in a positive light for independent media and accreditation bodies” (2004, p. 33). In their 2004 study, these researchers identified the Competing Values Framework (CVF) as an appropriate model derived from research “on the major indicators of effective organizations” by which to view library organizational culture and the director’s leadership roles (Cameron & Quinn, 2006, p. 33). Also used by Carroll Varner in 1996 to study libraries, the Organizational Culture Assessment Instrument (OCAI) of the CVF model presents information in a mode that allows for a dialogue focusing on how new tactics can be employed to meet library goals (Kaarst-Brown et al., 2004; Varner, 1996). Similar to other academic units, most academic libraries change incrementally; policies and services tend not to fluctuate dramatically from year to year. Identifying perceived organizational cultural characteristics of successful libraries may provide the tools needed to replicate success in the profession and make change happen (2004).

Statement of the Problem

Library science education does not adequately prepare its academic library leaders to create or foster an effective organization. Likewise, it does not prepare these leaders to diagnose and remedy an organization that has become ineffective in combating its greatest challenge: a chronic lack of funding.

While there are many studies pertaining to library leadership, only a few have utilized an organizational culture model to anticipate and/or recruit individuals who exhibit the abilities to shift among appropriate leadership roles. In a recent Delphi study presented at the Association of College and Research Libraries (ACRL) 11th National Conference, library directors of research institutions did identify several more issues than
their college library counterparts when asked to identify “the responsibilities of academic library directors” which they labeled “Key Results Areas” (Young, et al., 2003, p. 2). Themes emerged but little information on leadership was gained. Likewise, few studies in the literature have used organizational leadership theory and research to correct deficits in existing educational programs. With a substantial body of literature behind the use and application of Quinn and Rohrbaugh’s Competing Values Framework (CVF) and Cameron and Quinn’s Organizational Culture Assessment Instrument (OCAI), this study should provide insightful results regarding academic library directors and may provide recommendations that could potentially influence the discussion regarding library education (Cameron & Quinn, 1999, 2006; Quinn & Rohrbaugh, 1983, 1981; Rohrbaugh, 1983; see also Berrio, 2003; Goodman, et al., 2001; Kwan & Walker, 2004; Martin & Simons, 2002; Preston, 2004). As a library educator responsible for creating and managing development opportunities for practicing librarians and para-professionals, this researcher sees the importance of developing training models based on hard evidence that can generate successful leaders for academic libraries.

Purpose of the Study

The purpose of the study is to investigate the library’s organizational culture type and leadership roles as perceived by library directors of research and non-research institutions of higher education. Association of Research Libraries (ARL) membership will be used to identify the research-level academic libraries. ARL consists of over one hundred libraries at higher education institutions and research organizations that meet established criteria pertaining to monograph and serial volume count, budget, staffing, and annual acquisitions (ARL, 2006). The online searchable database located at the
Carnegie Foundation was used to identify 110 non-ARL academic institutions similar in size to Marshall University. To identify email contacts for this pool, the 2006-2007 edition of the American Library Directory was used to identify non-ARL libraries.

The goal of this study is to compare the organizational culture and leadership roles of ARL library directors to non-ARL library directors. If academic research libraries meet library goals in spite of budget concerns, the institution may exhibit a culture containing a desirable role or set of roles that can be emulated. Identifying the organizational culture is the first step in helping an ineffective library unit become effective (ARL, 2006, p. 117). This exercise may lead to improvements in organizational leadership training and recruitment practices for library directors. Budget is a major factor in this study as it is the main challenge most library directors face at both research and non-research institutions and can be leveraged as a meaningful variable. Library literature has also found relationships among budget problems and the negative impact on staff morale, and the ability (or inability) of the staff to meet the library’s mission (Topper, 2004).

Research Questions

1. In what way, if any, does the organizational culture differ among ARL and non-ARL libraries?

2. In what ways, if any, do leadership roles vary among ARL and non-ARL library directors?

3. In what way, if any, does the organizational culture between ARL and non-ARL libraries impact the budget?
4. In what ways, if any, are the selected demographic characteristics of library directors related to the organizational culture of ARL and non-ARL libraries?

Operational Definitions

For the purpose of this study, the following operational definitions are used.

1. Budget or operating budget – refers to the annual allocation of funds provided to the library by the university to support its personnel, operations, and acquisitions.

2. Competing Values Framework or CVF – is the instrument compiled by Quinn and Rohrbaugh in 1983 and later perfected by Cameron and Quinn 1999, 2006, to assess leadership roles among four leadership models: human relations, open systems, rational goal, and internal process.

3. Culture Types – refer to the four categories identified from extensive research on effective organizations by Cameron and Quinn within the Competing Values Framework: clan, adhocracy, hierarchy, and market (2006, p. 46).

4. Forced publisher inflation – refers to the rates assigned by producers of journals and books in which annual increases rise faster than the national rate of inflation.

5. Organizational Leader Types – are the twelve leadership roles identified by Cameron and Quinn within the Competing Values Framework: facilitator, mentor, team builder, innovator, entrepreneur, visionary, coordinator, monitor, organizer, hard driver, competitor, and producer (2006, p. 46).

6. Library director – is any position of leadership in a college or university library including but not limited to individuals holding the title of assistant or associate director, dean, assistant or associate dean, university librarian, assistant or
associate university librarian, head librarian, and assistant or associate head librarian.

7. Library mission – is the stated purpose of the organization; in this case, libraries that generally state they exist to support the curriculum and research needs of the academic community they serve.

8. Research libraries or ARL library types – are defined by the Association of Research Libraries (ARL). Membership in the ARL association is based partly on a summary measure of five quantitative data elements: number of volumes held, number of volumes added, number of current serials received, total operating expenditures, and number of professional plus support staff. ARL does not measure library services, service quality, or the collection’s quality. There are currently 123 academic libraries in North America belonging to ARL (ARL, 2006) of which 100 are institutions of higher education and will be studied in this project.

9. Non-research library or non-ARL library type – refers to any academic library that may have a research component to its mission but does not belong to ARL or officially meet the ARL criteria for number of volumes held, number of volumes added (gross), number of current serials received, total operating expenditures, and number of professional plus support staff (ARL, 2006).

10. Organizational culture – is defined as “a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and therefore, to
be taught to new members as the correct way to perceive, think, and feel in relation to those problems” (Schein, 1993).

11. Organizational Leadership Theory – is defined as a leadership theory strongly aligned with the human element of any supervisory experience that “nurtures effective and humane organizations” (Crosby, 2004).

12. Organizational Culture Assessment Instrument (OCAI) – is an instrument based on the Competing Values Framework used to identify the organizational culture profile based on the core values, assumptions, interpretations, and approaches that characterize organizations (Cameron & Quinn, 1999, 2006).

13. Serials – refers to journals, magazines, newspapers, monographs produced in serial format (such as a reference book with annual supplements), or any kind of recurring publication that a library may subscribe to on an annual renewal basis.

14. Volumes or Volumes added – refers to the number of items held by a library or purchased in a given year that can be counted in the library’s overall collection holdings.

Significance of the Study

This research project sought to test the claims brought forth by library researchers such as Kaarts-Brown, et al., in which they reported a tie between the library manager’s ability to shift leadership roles to the overall effectiveness of the organization’s culture (2004, p. 38). It also examined possible models to aid libraries in recruiting leaders who can influence organizational culture in positive ways. The project also addressed the debate among library educators about whether the current Master’s in Library Science (MLS) sufficiently prepares a workforce to perform basic managerial duties required of a
professional librarian. Graduate library education does not incorporate contemporary organizational leadership theory and practice embraced by disciplines such as business, public administration, and management. Most programs only require one applied management course in which largely divergent academic and public library management topics are combined. Library schools are also abandoning traditional courses such as management in lieu of technology-based topics that emphasize software, hardware, and networking (Berry, 2004). To address managerial preparation beyond the master’s level, the American Library Association recently created the Allied Professional Association (APA) charged with collaborating with universities to develop ALA accredited post-graduate certificate programs. A post-MLS management certificate that takes approximately three years to complete is currently being marketed (ALA/APA, 2005); however, it is costly, not available completely online, and only provided at a few of the 48 ALA accredited library schools in the US. In addition to these limitations, library systems have yet to require or reward individuals who seek post-MLS certifications. Instead, the academic model is to require or encourage professional librarians to seek additional Master’s degrees or doctorates in related fields such as English, history, or education. Non-degree certificates are not cost-effective or beneficial to academic librarians at this time. Can a library with severe budget issues wait for its leader to seek a managerial certificate or have the ability to recruit an individual with appropriate career experience? Or can it benefit by identifying its leader’s roles and organizational culture to encourage changes that can be implemented immediately? This researcher purports that when given a choice to meet short-term budget goals, a library and its leader will choose the latter.
Theoretical Framework

The theoretical foundation used for this purpose was organizational culture and leadership—two intertwined concepts strongly aligned with the human element of any supervisory experience which “nurture effective and humane organizations” (Crosby, 2004). According to Schein, “culture is a dynamic phenomenon that surrounds us at all times” while also possessing “a set of structures, routines, rules, and norms that guide and constrain behavior” (Schein, 1985, p. 1). Because “culture creation and management are the essence of leadership,” the two concepts are inextricably linked (p.1). The OCAI provides the tool with which to identify library directors’ organizational culture and leadership roles. As Cameron and Quinn purport, this is the first step in making a diagnosis of an organization’s culture (Cameron & Quinn, 1999, 2006; Quinn & Rohrbaugh, 1983, 1981; Rohrbaugh, 1983). Cameron, Quinn, and Rohrbaugh merged functional and semiotic anthropological and sociological approaches to culture when applying the CVF to organizations. Adapting the idea that “organizations are cultures” and “organizations have cultures,” they surmised that culture cannot be discussed without accepting both “functional and semiotic” slants (1999, p. 133; 2006, p. 146-147). This researcher applied the theory that “culture emerges from collective behavior” while also “residing in individual interpretations and cognitions,” to the analysis of the OCAI data collected. Cameron and Quinn further assert that culture may also be a forecaster of “effectiveness” of the organization (2006, p. 147). This concept was tested when library directors reported on their ability to meet library service needs and goals. The CVF allowed for the testing of several variables: library type, budget, and effectiveness. If the CVF illuminates relationships among culture and effectiveness in light of budget
constraints, this study may have an impact on the current library literature that lacks research in this area.

Method and Instrument

To diagnose library culture among academic libraries, survey methodology was used to obtain information from academic directors who identified their organizational climates and managerial leadership roles. The Competing Values Framework (CVF) (Cameron & Quinn, 1999, 2006; Quinn & Rohrbaugh, 1983, 1981; Rohrbaugh, 1983), is a model that has been validated and used extensively in several disciplines to determine organizational culture types and managerial leadership roles (Quinn & Rohrbaugh, 1983; Lawrence, et al., 2003). From Quinn, and Rohrbaugh’s original research on organizational effectiveness in 1983, a three-dimensional model emerged that graphically describes the internal balancing of values an effective leader employs to meet organizational goals. The model depicts the leaders’ ability to weigh the well-being of the employees in the organization (or the internal focus and integration) against the external focus and differentiation (or outside forces such as a critical deadline or development of a product) to facilitate the well-being of the organization as a whole. At the same time, leaders are balancing internal and external budget forces; they will jump among the leadership types as they shift between stable and flexible environments (Rohrbaugh, 1983). The literature suggests that the leader’s role will influence or build the organization’s culture (Ott, 1993) and the culture is “a set of basic assumptions that evolve as organizations cope with problems.” If the organization seems successful to its participants and makes them feel “comfortable and successful,” the participants perpetuate the culture by teaching newcomers “how things are done” (Schein, 1986, p.
Cameron and Quinn add to this dialogue by saying that even the most rigid organizations can change if culture change competencies are identified and the leader is willing to enact “personal improvement agendas” to ameliorate “managerial leadership competency” (2006, p. 127).

Kaarst-Brown et al. (2004) are among a cadre of recent researchers and doctoral candidates to apply the CVF to library organizations in an effort to identify the culture. This model was selected due to its ability to categorize and interpret an array of “organizational phenomena” (Cameron & Quinn, 2006, p. 31). Using the data that emerged from the study of thousands of different organizations within several disciplines, a “variety of dimensions” describing organizational culture are denoted in four quadrants (p. 31) providing a “robust explanation of the differing orientations and competing values that characterize human behavior” (Pierce, 2004, p. 98). Cameron and Quinn (2006) designed this model to show several aspects of organizational phenomena such as “…the major approaches to organizational design, stages of life cycle development, organizational quality, theories of effectiveness, leadership roles of human resource managers, and management skills” (p. 31).

As depicted in Figure 1, the quartiles are labeled with “the main organizational forms that have developed in organizational science” and are “the most notable characteristics—clan, adhocracy, market, and hierarchy” listed in clockwise format (p. 36). Regarding the origin of these four “notable characteristics,” Cameron and Quinn asserted, “They also match key management theories about organizational success, approaches to organizational quality, leadership roles, and management skills” (p. 36). On the exterior of the square formed by the four culture quadrants, Cameron and Quinn
depict two sets of opposing core values or “competing values” that emerged from original analysis conducted in 1974 that engendered a comprehensive list of measurable “effective indicators” for organizations. They are labeled flexibility and discretion at the top versus stability and control at the bottom; internal focus and integration on the right versus external focus and differentiation on the left (Cameron & Quinn, 2006, p. 34).

Figure 1. Competing Values Framework: Effectiveness Indicators
In Figure 1, the Competing Values Framework’s Effective Indicators represent “what people value about an organization’s performance” (Cameron & Quinn, 2006, p. 35). These divergent core value sets were gleaned from the identification of thirty-nine indicators that John Campbell, et al., “claimed represented a comprehensive set of all possible measures of organizational effectiveness” in 1974 (p. 34).

In this format reading clockwise from the top left quadrant, organizations exhibiting the clan or adhocracy culture types lean toward an “effectiveness criteria” that encourages flexibility and discretion (Cameron & Quinn, 2006, p. 34). At the same time, organizations demonstrating clan culture characteristics share the “effectiveness criteria” of internal focus and integration with organizations that show hierarchical features. Organizations within the adhocracy culture type share an external focus and emphasis on
differentiation with the market culture, while the market culture shares an emphasis on stability and control with the hierarchy (Cameron & Quinn, 2006, p. 46).

Leadership Effectiveness and Organizational Theory

The CVF also provides a more in-depth analysis of organizational leadership theory by describing more discrete aspects of organizational culture, leadership types, and values (p. 46). Cameron and Quinn revealed in their research that “most organizations develop a dominant culture style” (p. 46). Using the quadrant design established with the competing “effectiveness indicators” discussed above, the following labels are further delineated in Figure 2.

**Figure 2. Competing Values Framework: Leader Types**

*Figure 2* depicts the Competing Values Framework’s descriptions for culture orientation, leader type, value drivers, and main theory of effectiveness.
Again listed in a clockwise format, beginning with the clan culture type, a collaborative orientation is identified that carries three main leader types: the facilitator, mentor, and team builder (Cameron & Quinn, 2006, p. 46). These three leader types are driven by their value of commitment, communication, and development of their employees. The clan culture type fosters a theory of effectiveness in which there is a “strong emphasis on human development and participation” by all. This generally produces effective organizations which is the goal of any system (p. 46). The adhocracy exhibits a creative orientation that leads to innovative, entrepreneurial, and visionary leadership roles. Innovation, transformation, and agility are all values shared by these leader types. The effectiveness theory utilized is the idea that “innovativeness, vision, and new resources produce effectiveness” (p. 46). As with many traditional organizations, the hierarchy culture type relies on a controlling orientation with coordinators, monitors, and organizers leading. The value drivers are efficiency, timeliness, consistency, and uniformity. In this instance, the theory of effectiveness stresses “control and efficiency with capable processes” to produce results (p. 46). And finally, the market culture has a competitive orientation with hard driving, competitive, and productive leaders. Market shares, goal achievement, and profitability are the value drivers with an emphasis on “aggressively competing and customer focus produce effectiveness” (p. 46).

When a CVF assessment instrument analyzes an organization’s individual culture, the framework allows for a graphic representation of culture types, leadership types, and core values. Once data are gathered, the researcher can plot responses within reported quadrants so a graphic representation of the subject’s organizational culture and
leadership style can be seen at a glance. This also allows the researcher to overlay responses and compare and contrast differences among and between culture types and leadership roles quickly. Analyzing areas in which characteristics converge or appear to be disparate allows for an accurate diagnosis of the organization’s overall culture and can lead to suggestions for implementing change. The most desirable leader is one who can exhibit all of the leader types and discrete characteristics at appropriate times depending on which effectiveness measures are applied to the organization: “Effective managers demonstrate ‘behavioral complexity’ – the ability to both conceive and perform multiple and contradictory roles” (Denison, et al., 1995, p. 525). Uneasiness with a current culture type can also spark a period of transformation in the life of an organization. When considering discrepancies between and among core values, Cameron and Quinn (2006) contend that “Mismatches, of course, may create enough discomfort in the system to motivate change” (p. 60).

Summary

Academic libraries need successful leaders who can cultivate an organization that can meet the library’s mission effectively. Since financial resources are not readily available and will likely not materialize in the near future, the library’s director must employ strong leadership skills to meet faculty and student research and curriculum support needs—but how does he or she gain the skill to do so? Library education and training largely ignore current leadership theories and are even moving away from traditional core curriculum in which at least one applied management course is generally required for all library science students (Berry, 2004). Post-MLS managerial certificate programs marketed by the ALA/APA are designed primarily for public library managers.
and do not fit within higher education’s advance degree expectations (ALA, 2005). If the CVF’s OCAI, an organizational leadership instrument adapted from business, can be used to identify the leader’s roles and diagnose the organization’s culture, perhaps desired roles and strategies for culture change can be suggested for these leaders to put into practice for the good of their libraries (Kaarts-Brown, et al., 2004).
CHAPTER TWO

Review of the Literature

The business and management literature applicable to library science suggests that organizational culture is directly related to the leadership style exhibited by the primary manager of the organization or unit. It also indicates that successful leaders are those who generate effective organizations (Cameron & Quinn, 2006, p. 5). According to Cameron and Quinn, the most effective leaders are those who can exhibit contradictory characteristics and/or shift among several styles simultaneously (2006, p. 47). Paradoxical leadership roles must be learned if they are not innate. When an organization becomes ineffective, the culture should be diagnosed so positive change can ensue (Cameron & Quinn, 2006; Grant & Michelson, 2005).

Cameron and Quinn further propose that the manager must “implement a change process to foster cultural transformation and align personal managerial behavior with the culture change” (2006, p. 6). Before library directors can move ahead with their library goals, they must identify their current organizational leadership environment and willfully address perceived weaknesses and/or discrepancies as Cameron and Quinn suggest (2006, p. 57). Library directors must then modify their behaviors to aid in the problem-solving process. Kaarst-Brown et al. suggest there is a link between the “characteristics of organizational cultures and improved effectiveness”—especially among “information organizations” such as libraries. Identifying organizational characteristics can lead to the implementation of leadership strategies that will improve “collaboration, collegiality, and organizational effectiveness” in the information organization (Kaarts-Brown, et al., 2004, p. 33).
Organizational Culture Theory

In a people-profession, managerial skills are as fundamental as leadership skills and one may argue that while they are two distinctly different types, a library cannot fare well if it has one type without the other. These skills even help shape the culture. Edgar Schein provides a comprehensive definition of organizational culture:

a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (Schein, 1985, pp. 373-374).

The culture becomes its own organic entity that cannot be disregarded when leaders consider assessing its current state and/or diagnosing problems. Schein’s theory of culture contains three levels. Level one is the most basic, concentrating on the artifacts and the creations of the culture which include the physical surroundings and the language. The library profession is typical: its practitioners create language and concepts unique to librarians. In relation to Schein, Kaarst-Brown and Robey provide the example in which recent rapid changes force librarians to merge old and new mediums such as housing print materials among electronics. The language created to describe and identify this condition of change is exclusive to librarians (Kaarst-Brown & Robey, 1999, p. 35). The language helps to “construct the physical and social environment” that the members of the culture accept and perpetuate as described in level one (Schein, 1985, p. 15).

Schein’s second level focuses on the organization’s values that can be both “conscious” and “unconscious” (Kaarst-Brown & Robey, 1999, p. 36). The values can be set by the leader and communicated to the group by means of a mission statement or a set of written goals; however, Kaarst-Brown and Robey indicate that in spite of an
articulation and common awareness of organizational values, there can still be “conflicting interpretations” (p. 35). These can be the result of an individual’s own “rationalizations or aspirations” or personal value shifts (Schein, 1985).

Level three consists of the culture’s basic assumptions. At this level the members of the organization become accustomed to the current culture with full acceptance. Schein describes many aspects of level three as being “preconscious” (Schein, 1985), because members make assumptions and cannot articulate their acceptance for the current state of being. Moving past the basic assumptions requires considerable investigation and discussion in which the members of the group may not recognize behavior patterns contributing to their environment. Kaarst-Brown and Robey suggest that this invasive and time-intensive process for diagnosing culture is not feasible when libraries are faced with cultural dynamics that must be addressed (p. 36). With this in mind, they applied Cameron and Quinn’s Competing Values Framework (CVF) to the process of revealing basic assumptions because it is a validated methodology and model that successfully diagnoses culture (p. 37).

Donald Riggs, a key player in the field of library leadership, provides his assessment of leadership as it pertains to libraries—especially academic libraries. Similar to Schein’s definition of organizational culture and leadership, values also factor into Riggs’ overview of leadership styles and trends exhibited among the department heads and directors of libraries. Values, as they pertain to equitable services and access to information, are presented as core elements of the profession’s code of ethics (ALA, 2006). Librarians exercise a commitment to intellectual freedom and privacy when they determine “what is worthwhile” for the library collections (Riggs, 2001, p.13). People
usually revere libraries and often perceive the collection as a personification of the library’s values. They expect the library to reflect their values as most libraries endeavor to fulfill community needs whether that community is defined as a city, town, university, or even company. Riggs urges library leaders to “understand their own values” and “refresh the library’s values” regularly to avoid those that are ingrained and unwavering. Stale or provincial values prevent the library from moving forward in a positive way (Riggs, 2001, p. 13).

Library Leadership Preparation

Theorists who have written extensively in the field of management do not deny that successful relationships with humans are a primary part of the development and cultivation of a successful manager or talented leader. On the science of management and human relations, Peter Drucker said, “It deals with people, their values, their growth and development, social structure, the community and even with spiritual concerns . . . the nature of humankind, good and evil” (Linkletter, 2004, p. 12). Historically, libraries were created to provide people with needed information and subsequently, librarianship has long been classified as a helping profession (Drake, 1993). Leadership skills are fundamental to the success of the library’s mission, yet most library managers achieve those positions as a reward for longevity, entering directorial positions only after serving many years as a librarian (Gorman, 2006). Only recently have any of the higher education institutions offering library science degrees concentrated on leadership skills beyond the routine applied management course typically presented at the Master’s level.

Economic data indicate that the financial situation will not improve dramatically for academe in the next few years (Dervarics, 2006). Anticipating a period of low funding
levels, higher education institutions must recruit and cultivate an organizational leadership climate in which their libraries can thrive and be effective. As Cameron and Quinn assert, “Leaders who are not managers are bound to fail, just as managers who are not leaders are bound to fail (2006, p. 80). The ideal library director possesses managerial and leadership skills to move his or her organization toward a successful and effective organizational culture (Kaarts-Brown, et al., 2004, p. 38). Several opinion leaders in the library science profession, including the president of the American Library Association, charge that library science education is currently in crisis and will not be able to generate leaders who will flourish (Berry, 2004; Gorman, 2004a; 2004b, 2006). Criticized for a general lack of practical training, library programs are not preparing new graduates with the skills needed to perform routine library duties (Berry, 2004; Gorman, 2006). Likewise, management topics are minimal in library schools today if at all required (Gorman, 2004a). It is also difficult to tell what a student has actually studied by the outdated course titles provided in university catalogs (Gorman, 2006). Gorman has argued for some time that continuing education for librarians is rare. Librarians are expected to emerge as leaders or obtain these skills accidentally as they progress in their careers (2006, p. 3). They can also seek costly and time-consuming post-MLS options if they wish to move into administration (Blumenstein, 2005; Oder, 2003). As with other disciplines in which a divide occurs between theory and practice, most library directors are already aware of a gap between library science programs and the “real world” (Giesecke & McNeil, 2005; Vandergrift, 2004; Gorman, 2006). As a result, recent graduates are often not considered for entry-level positions and would rarely, if ever, be considered for administrative posts (Holt & Strock, 2005). In addition to widespread
curriculum conflicts, library science programs are losing school status and merging with communication studies, colleges of education, or information science departments just to survive (L.K., 1999).

With graduate-level library schools closing at a rate of one every other year, and others losing American Library Association (ALA) accreditation status or suffering ALA censure due to removal of the “L word” (library) in their program titles, addressing various issues that impact professional preparation and training are critical to the library education discussion (Berry, 2004, 2005; L.K., 1999; Van House, 1996). Library leadership is not being taught at the Master’s level and some even argue that library science is also not being taught at the Master’s level (Berry, 2004; Gorman, 2004). Nevertheless, the literature strongly suggests that a new educational model is needed to groom tomorrow’s library leaders and the ALA must be intrinsically involved (Gorman, 2006).

Managers versus Leaders

Though Cameron and Quinn would not agree, the academic community has a near consensus that managers and leaders should not be confused with one another. Managers and leaders have defined roles that also influence their skills. It is possible to be both a manager and a leader; however, individuals possessing the traits of both are not believed to be in abundance (Riggs, 2001; Razik & Swanson, 2001; Bolman & Deal, 2003; Bennis & Nanus, 1985). In his influential work on transformational leadership, Burns wrote “Leaders and followers raise one another to higher levels of morality and motivation” (Burns, 1978, p. 20). He fostered the idea that “higher values” were linked to transformational leadership. The leader possesses a moral compass in which his or her
values are embedded in the vision that he or she is conveying to the followers. Followers do so because they choose an ethical and moral path collectively (p. 20). Bass presents the moral and ethical debate in regard to transformational leadership in *The Ethics of Transformational Leadership*, “For Burns, by definition, the transforming leader was morally uplifting. But Bass argued that transformational leaders could wear the black hats of villains or the white hats of heroes depending on their values” (Bass, 1997, p. 1). With Bass’ description in mind, Adolph Hitler could be identified as a transformational leader even though he lacked the morality required to be an *authentic* transformational leader by Burns’ definition. Charisma is an additive that may also be present but not required as followers might be motivated by emotions generated solely by leader charm and not by their morality or true intentions (Bass, 1990).

One might infer that successful leaders possess a gift that is innate and may be among those talents that cannot be taught such as a perfect singing pitch. Providing a succinct distinction between the two, Warren Bennis offers the following: "Managers are people who do things right and leaders are people who do the right thing" (Bennis & Nanus, 1985, p. 21) illustrating that leaders possess an innate ability to react to circumstances in appropriate fashion while implying that managers do not deviate from their prescribed roles. Often, this condition cannot be defined. Anecdotes aside, Bennis does go on to further delineate the roles that managers and leaders exemplify in parallel form:

Managers:  
Administer  
Are copies

Leaders:  
Motivate  
Are original
Focus on systems and structure  Focus on people
Rely on control  Inspire trust
Have short-range view  Have long-range view
Ask how/when  Ask what/why
Initiate  Originate  (Bennis, 1989, p. 33)

John Kotter adds his own parallels: *managers cope with complexity, plan and budget, organize and staff, and control or problem-solve while leaders cope with change, set the direction, align and motivate people* (Kotter, 1990). When applying these assumptions to libraries, Riggs supports the principle that managers and leaders are mutually exclusive and accepts Burns’ definition: “Leadership over human beings is exercised when persons with certain motives and purposes mobilize in competition to conflict with other institutional, political, psychological, and other resources to arouse, engage, and satisfy the motives of followers” (Riggs, 2001, p. 6). Acknowledging that both managers and leaders are vital to any organization, library managers differ in one respect—because the practice of performing a specific job in a library requires that one masters a set of skills unique to the assigned tasks, they are generally slotted into positions that provide “defined bounds of known quantities” (p.6).

Competing Values Framework

Building on Riggs’ discourse and the research compiled by Kaarst-Brown et al. (2004), the Competing Values Framework from Cameron and Quinn’s model is appropriate for application to organizational cultures in the library profession. Riggs, et al., also acknowledge that organizational leadership has evolved over the last two decades resulting in variations among definitions and descriptions of the archetypal leader. With
many models circulating among the academy, this construct has been difficult to simplify (Noorzad, 2005). A more dynamic model is used in this research to identify the organizational culture shifts that highly influence leadership and managerial roles. From their extensive research using the CVF, Cameron and Quinn’s evidence strongly suggests “it takes both leadership and management to strengthen, maintain, change, or create a culture in any quadrant” (Cameron & Quinn, 2006, p. 80). While leadership is widely believed to be disparate from management, Cameron and Quinn offer another elucidation of leadership theory in which paradoxical values shift regularly as they react to the organization’s ever-changing culture, goals, and needs (p. 35). Organizations are dynamic and thus require dynamic managers. When cultures change, leadership styles must also change.

There has been a noticeable change in the library profession over the last two decades. It changes frequently due to the influx of new technologies and extraordinary innovations in how people use and access information. Time after time, librarians are forced to relearn their jobs and add new skills with no lull anticipated in the future (Siess, 2005). Using a model such as the Competing Values Framework, an honest representation of a library’s current culture can be identified quickly by its own members. If a longitudinal study is undertaken, the transitions or changes can also be tracked as the life of the organization progresses (Cameron & Quinn, 2006, p. 55). Kaarst-Brown et al. accept Schein’s assumptions and further purport that information organizations, such as libraries, display cultural characteristics unique to their purpose. They also allege that external influences can impinge on a culture and use budget constraints—a problem all libraries face—as one of the forces imposing a negative impact on culture (2004, p. 33). In
their study, they use the four culture types within the Competing Values Framework as their lens from which to view four prototypical library types: academic libraries, public libraries, small institutional libraries, and digital libraries. Their original purpose was to provide the reader with a set of assumptions and introduce them to the CVF instrument to examine how “organizational culture can be leveraged as a strategic asset to attract staff, create favorable assessments by administrators and funders, and cast library institutions in a positive light for independent media and accreditation bodies.” They also hoped to gain support for their assumption that this process “can illuminate critical characteristics of an organization’s culture or subculture” for the purpose of “understanding and guiding culture change” (Kaarst-Brown et al., 2004, p. 48).

Organizational Culture Assessment Instrument

Two approaches were used to develop the foundation for the OCAI. From an anthropological approach, Cameron and Quinn recognized that “organizations are cultures”; and from a sociological perspective, they acknowledged that “organizations have cultures” (2006, p. 145). From this standpoint and two major disciplines, they sharpened their theory of organizational culture by utilizing a functional method in which they emphasized that “culture emerges from collective behavior” and a semiotic slant in which they stressed that “culture resides in individual interpretations and cognitions” (p. 146). Further illustrated in Table 1, the key elements for each foundation’s focus help to define the CVF’s disciplinary foundations:
Table 1. Competing Values Framework Disciplinary Foundations

<table>
<thead>
<tr>
<th>Functional Approach</th>
<th>Anthropological Foundation</th>
<th>Sociological Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus:</td>
<td>Collective behavior</td>
<td>Collective behavior</td>
</tr>
<tr>
<td>Investigator:</td>
<td>Diagnostician, stays neutral</td>
<td>Diagnostician, stays neutral</td>
</tr>
<tr>
<td>Observation:</td>
<td>Objective factors</td>
<td>Objective factors</td>
</tr>
<tr>
<td>Variable:</td>
<td>Dependent (understand culture by itself)</td>
<td>Independent (culture predicts other outcomes)</td>
</tr>
<tr>
<td>Assumption:</td>
<td>Organizations are cultures</td>
<td>Organizations have cultures</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semiotic Approach</th>
<th>Individual cognitions</th>
<th>Individual cognitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investigator:</td>
<td>Natives, do not stay neutral</td>
<td>Natives, do not stay neutral</td>
</tr>
<tr>
<td>Observation:</td>
<td>Participant immersion</td>
<td>Participant immersion</td>
</tr>
<tr>
<td>Variable:</td>
<td>Dependent (understand culture by itself)</td>
<td>Independent (culture predicts other outcomes)</td>
</tr>
<tr>
<td>Assumption:</td>
<td>Organizations are cultures</td>
<td>Organizations have cultures</td>
</tr>
</tbody>
</table>

From this knowledge-base, the researchers devised the four culture types that can be used to describe the culture of nearly every kind of organization in existence:

A. The *clan culture* is one in which the employees “readily share of themselves; treat the office as if it were an extension of the family unit; and consider their leaders mentors or even parent figures” (Cameron & Quinn, 2006, p. 222). “Loyalty and tradition” and “cohesion and morale” are extenuated and cultivated with an emphasis on “human resource development.” “Success is defined in terms of sensitivity to customers and concern for people; teamwork, participation, and consensus” are critical to the organization’s health and operation (p. 222).

B. The *adhocracy culture* is “dynamic, entrepreneurial, and creative” (p. 222). The employees are not fearful of taking “risks” or proceeding with new “innovations”
and ideas. “Commitment to experimentation and innovation” are critical to the health of this group while success is defined by gaining “unique products or services.” Employees have the freedom to move forward with new ideas on their own “initiative” (p. 222).

C. The hierarchy culture is “formulated, structured, and efficiency-minded.” The most important aspect to this culture is “maintaining a smooth-running organization.” “Formal rules and policies hold the organization together.” There is a great deal of emphasis on “stability and performance” within the paradigm established. “Success is defined in terms of dependable delivery.” The leaders tend to be “concerned with secure employment and predictability” (p. 222).

D. The market culture is a “results-oriented organization and emphasizing getting the job done.” The leaders and employees of this type of group tend to be harsh, “tough-driving” and “demanding” people who are concerned with “competitive actions and achievement of measurable goals and targets.” Employees put a great deal of “emphasis on winning” and competing with each other within the organization as well as with external competitors outside of the group (p. 222).

Diagnosing Ineffective Organizations

The OCAI also provides a method for identifying effectiveness among the current and preferred culture types. To test for effectiveness, the congruence of cultures is analyzed for both. Once data are obtained and mean scores are derived, the researcher can compare the scores for cultures that fall on opposite or diagonal planes from each other. If mean scores vary by more than ten points, Cameron and Quinn suggest these are indeed incongruent or ineffective organizations (p. 74). For this study, paired sample
t-tests identified significant differences among the mean scores for current and preferred cultures.

Using the means-does not mean review process shaped by Cameron and Quinn, market culture was methodically critiqued. If an organization desires to move away from the market culture, the leader(s) should decentralize internal measures and financial indicators, stop driving for numbers at all costs, begin to focus on key goals, motivate the employees, and adapt to the human needs in addition to external market needs. At the same time, the leader should not ignore the competition, lose the spirit of winning and desire to be number one, miss production goals or targets, neglect the customer or patron, and stop looking at results (p. 89).

To move the library organization toward the desired clan culture, the leader(s) should open communication by surveying the employees to identify their needs, promote teamwork and participation among the members, implement programs that recognize employees for their contributions to enhance morale and encourage teamwork, empower workers, generate a high level of trust, express sincere concern for the group members, and provide opportunities for self-management (p. 88). This new emphasis does not mean that employees should become undisciplined while the manager becomes too permissive. It does not mean that the group should also run amok with social cliques or power clusters, only answer to an internal focus, or dismiss expectations or hard work. Managers should not ignore underachievers or non-performers and cultivate an overall freedom that is void of responsibility (p. 88).
Becoming An Effective Organization

Prior to initiating culture change in an organization, Cameron and Quinn suggest making use of the following steps from page 90 of their 2006 text. The researcher has subsequently adapted these steps for application to an academic library:

1. **Reach consensus on the current culture** – Allow everyone in the library organization to participate in the process of identifying the current culture by using the OCAI instrument to start the process. At all times allow for open communication and the sharing of information (p. 91). Listserves, weblogs, regular meetings, newsletters, retreats, and workshops are all ways in which to share information.

2. **Reach consensus on the desired future culture** – Survey the members of the organization to obtain their desires for the preferred culture type in addition to utilizing the OCAI for this purpose. Use specific examples and verifiable data to support conclusions (p. 92). In an academic setting, some of the library’s goals are predetermined as it carries out its responsibility of supporting the research and curriculum of the university. Nevertheless, innovation and change can be applied to any library service to enhance its quality, delivery, and impact on the academic community.

3. **Determine what the changes will and will not mean** – Cameron and Quinn already provide a worksheet in which participants can identify what moving to and from cultures may mean to their organization (see Figure 3); however, a broad consensual vision of the desired future will influence the elements that the group wishes to preserve or purge from its organization (p. 93). In a recent American
Libraries article, Drew Racine caused a national uproar when he suggested libraries completely abolish basic functions such as interlibrary loan and cataloging in an effort to survive current technology and information trends. For example, adopting an Amazon.com purchase program instead of using the costly national inter-library borrowing service provides what patrons want on demand. It may also be less costly to the library over time. Dropping an arcane and complex cataloging system in lieu of a simplified Google-like author-title format would also be cheaper and eliminate library acquisition backlogs. Instead of approaching discussions with “This is how we have always done this…” he is asking the library community to view every library service with a totally new perspective (Racine, 2006).

4. Identify illustrative stories – Stories and rituals are cultural manifestations of a group that provide the mythology of its own history as it undergoes change. Stories also help to unify the members of an organization as they strive for a unique identity and voice (Martin, Feldman, Hatch, & Sitkin, 1983). Library literature is largely comprised of narratives describing new library services, solutions for disasters, and techniques for improving existing buildings, policies, personnel, and services. The participants in this profession already know how to do this admirably. Inviting the staff to share their stories as they relate to the library and institutional mission will aid in seeking a unified vision for the organization (p. 439).

5. Develop a strategic action plan – Cameron and Quinn suggest an original six-step approach to action planning. They invite organization members to reach
consensus on what should be started, what should be stopped, and what should be continued prior to implementing change. Again, invoking some of Racine’s extreme library survival suggestions may provide new perspectives on mundane tasks. Striking a new approach to an existing service that may have become obsolete, time consuming, or financially draining may aid in bringing about a permanent revolution and transformation of collective attitude within the organization (Racine, 2006). Rituals, building coalitions outside the organization, using measurement, seeking accountability, and being ready are all additive components of a winning action plan (Cameron & Quinn, 2006, pp. 99-100).

6. *Develop and implementation plan* – Finally, the last component to instigating change is creating a plan that allows the group to identify the main elements they wish to pursue (with a maximum of four or five topics). Once the key issues are selected, teams are formed to identify the behavior changes and competencies needed to move toward the collective goals (p. 101). *Open communication, ongoing assessment, an attainable timeline, and identifiable success indicators* are all indispensable values that everyone must welcome as the library organization progresses (p. 102).

Each step also requires the identification of key individuals who possess both management and leadership skills to carry out the duties and encourage participation among the employees. Paradoxical definitions accepted by the leadership studies community state “leaders possess an innate ability to react to circumstances in appropriate fashion while implying that managers do not deviate from their prescribed roles” (Bennis & Nanus, 1985, p. 21) or “managers cope with complexity, plan and
budget, organize and staff, and control or problem-solve while leaders cope with change, set the direction, align and motivate people” (Kotter, 1990). Extensive use of the CVF supports Cameron and Quinn’s assumption that both leadership and management skills are required to “strengthen, maintain, change, or create a culture in any quadrant” (Cameron & Quinn, 2006, p. 80) and merit coupling to achieve the proposed steps. Organizations are dynamic and require dynamic managers; cultures are dynamic and require dynamic leaders (p. 35). The selection of these individuals is indispensable to the success of the entire process. Their ability to exhibit managerial and leadership traits will naturally invoke a commitment and drive among the participants that will influence the outcome in a constructive manner (p. 90).

During the process, the change agent can utilize tools at various points to help spark introspective assessment and discussion in relation to the current and preferred cultures (p. 96). Worksheets such as the one shown in Figure 3 provide equipment to trigger dialogue, introspection, and advancement toward the group’s agreed-upon goals:

<table>
<thead>
<tr>
<th>Clan Culture</th>
<th>Adhocracy Culture</th>
</tr>
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<tbody>
<tr>
<td>_ Increase</td>
<td>_ Increase</td>
</tr>
<tr>
<td>_ Decrease</td>
<td>_ Decrease</td>
</tr>
<tr>
<td>_ Remain Same</td>
<td>_ Remain Same</td>
</tr>
</tbody>
</table>

**Means...**
**Does not mean...**

<table>
<thead>
<tr>
<th>Hierarchy Culture</th>
<th>Market Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>_ Increase</td>
<td>_ Increase</td>
</tr>
<tr>
<td>_ Decrease</td>
<td>_ Decrease</td>
</tr>
<tr>
<td>_ Remain Same</td>
<td>_ Remain Same</td>
</tr>
</tbody>
</table>

**Means...**
**Does not mean...**

**Figure 3. Diagnosis Worksheet**
*Figure 3* describes what culture change means and does not mean and was adapted from Cameron & Quinn’s worksheet presented on page 96 of *Diagnosing and Changing Organizational Culture* (2006).
The leader/manager becomes more critical to the process as the next steps are put into action to inch closer to the chosen culture. For example, if a library identifies the dominant culture as a hierarchy yet reports that the preferred culture is a clan, the leader of this organization must cultivate a more nurturing and family-oriented environment to fulfill employee needs (p. 222). To move a library organization away from a hierarchy, the leader should *eliminate useless rules and procedures, ease fruitless paperwork and reports, cut corporate directives and purge the tendency to micromanage while pushing the decision-making responsibilities down* to the front lines (Cameron & Quinn, 2006, p. 89). Each of these suggestions is radical and may cause disruption within the hierarchical organization. Attention must be directed to the group dynamic as the new emphasis is implemented. These radical changes do not imply that the group should completely *abandon its logical structure, proceed into new projects without any semblance of guidance, eliminate accountability, eradicate any form of measurement or assessment, relax or dispose of production and time schedules, and take advantage of the overall change in leadership behavior* (p. 89). Moreover, in an institution of higher education, the mission and goals of the university must be taken into consideration before executing any change directives. The organization’s leader should then attempt to move toward the more desirable clan culture by emphasizing its best features (p. 88).

**Summary**

Academic libraries are at a critical juncture. Funding levels are decreasing steadily as operating and materials costs continue to rise. Library leaders are forced to consider other models such as privatizing library functions (Lyall & Sell, 2006). In addition to creative budgeting, a library leader must be able to motivate employees to
meet goals in spite of limitations. Kaarst-Brown et al. have explored the relationship between a library’s organizational culture and its effectiveness (Kaarst-Brown, et al., 2004, p. 33). Cameron and Quinn have provided the tools that will enable a library leader to enact positive change in the organization (Cameron & Quinn, 2006). This study attempts to build upon the work that these researchers have published to identify culture types and leadership roles of effective organizations which can serve as role models for change.
CHAPTER THREE

As Kaarst-Brown et al. report in 2004, academic libraries should be ready to redirect energies as they cultivate organizations that can meet service needs and address budget obstacles in light of current and future higher education cuts. Without a dynamic leader who can influence organizational culture by shifting leadership roles appropriate to meet challenges, a library will have difficulty motivating staff to provide appropriate services and will cease to be effective. The purpose of the study is to investigate the library’s organizational culture type and leadership roles as perceived by the library directors of research and non-research institutions of higher education.

Method of Study

Office of Research Integrity IRB #2 approval was obtained prior to distributing surveys. Using a secure email distribution format, the Organizational Culture Assessment Instrument (OCAI) was administered to library directors in both research and non-research academic libraries. The respondent pool selected for this study consisted of 100 research, or Association of Research Libraries (ARL) libraries, and 110 non-research, or non-ARL libraries in the United States. The former group is considered elite among academic libraries and is often represented in the scholarly dialogue of the profession. Of the total 123 member institutions in the ARL organization, 100 are institutions of higher education in the United States and will be used for this study. These ARL libraries reside on the campuses of the top public and private institutions in the country and are often studied and emulated as role models for other libraries (Hurd, 1996). Identified in this study as research libraries or ARL libraries, this distinction is based on a rigorous set of criteria used by the Association (ARL, 2006). Library literature and longitudinal studies
show that ARL libraries have experienced the same budgetary problems other libraries face but are better equipped to meet their goals due to institutional prestige or advancement opportunities that accompany their status (Weiner, 2005). ARL responses to the OCAI were compared to non-ARL responses.

Four-year public institutions identified as *non-research libraries* by the 2006-2007 *American Library Directory* may have a research component but do not meet the ARL requirements. These college and university libraries are similar in size and mission to the libraries at Marshall University and its peers. The institutions also have high undergraduate enrollments even though they provide several graduate and doctoral level programs (Carnegie, 2006). When possible, one to three respondents from each library was solicited: the dean or director, the assistant/associate or head of public/technical services, and a librarian. For some libraries only one email address was obtained.

There were 295 ARL addresses and 330 non-ARL addresses; therefore, the total N was 625. A respondent’s email address may include a blending of first and last names, last names with numbers or letters added to the beginning or end, a mixture of the director and library name, or even an address in which the individual’s name is absent and only the library or institution title is used. Given that email addresses are often dependent on a number-letter combination that may reflect innumerable combinations, the pool will be arbitrary and no effort was made to identify the respondent by name.

**Instrument**

The Organizational Culture Assessment Instrument (OCAI) is one of two established tools used to provide data to identify culture types and leadership roles within
the CVF model. The other tool, entitled the Management Skills Assessment Instrument (MSAI), is an 87-question survey in a five-point Likert or 100 point summative scale that is part of an interactive form of managerial review. When studying the culture of a specific organization at length, the MSAI is generally administered after the OCAI to gather significant qualitative information to help enact individual change among an organization’s leadership (Cameron & Quinn, 2006, p. 170). For this study, only the OCAI process was implemented in light of time, scalability, and application to the research questions regarding culture and leadership types. It not only has the ability to identify culture types but also has the depth to show “relationships between cultural strength, culture congruence, and the type” (p. 156). These discrete dimensions help the researcher to determine if cultures are weak, strong, congruent or incongruent (p. 156). Identifying these qualities also aids in determining the leadership roles that lead to organizational effectiveness.

Measurement Format

The OCAI utilizes an ipsative method of measurement in which the respondent self-reports his or her own perceptions of the organization’s current culture by responding to four declarative statements that are tied to the four culture types within six content dimensions of organizational culture. Respondents are asked to use a 100 point summative scale to assign percentages to the statements to determine the extent to which a respondent agrees or disagrees with the declarative statement provided for the current state of the organization. The respondents are also asked to assign percentages to the statements that best describe their preferred organizational culture. The content dimensions are labeled as dominant characteristics, organizational leadership,
management of employees, organizational glue, strategic emphasis, and criteria for success (Cameron & Quinn, 2006, p. 151). When combined and assessed, the content dimensions “reflect fundamental cultural values and implicit assumptions about the way the organization functions” (p. 151). For example, the declarative culture statements are provided for the organization’s dominant characteristics in Table 2. The entire survey instrument is provided in Appendix B.

**Table 2. Dominant Characteristics for the OCAI**

<table>
<thead>
<tr>
<th>Dominant Characteristics</th>
<th>Current</th>
<th>Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.</td>
<td>0</td>
<td>75</td>
</tr>
<tr>
<td>The organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>The organization is very results-oriented. A major concern is with getting the job done. People are very competitive and achievement-oriented.</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td>The organization is a very controlled and structured place. Formal procedures generally govern what people do.</td>
<td>70</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL (Each column must equal 100)</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

When the scores are tabulated and means are derived for each characteristic, the culture types can then be plotted onto the CVF chart. To compare culture types between organizations, different colors or line formats are used. When data are analyzed, the graph will plot culture types that emerge for the individual libraries or groups of similar libraries. Disparity should emerge as shown in the OCAI graph in Figure 4:
Figure 4. CVF Example.

This graph depicts a simulated OCAI response after all six content dimensions are summed and the mean scores are calculated for the four culture types. The double line depicts the organizational culture for an ARL library as reported by a hypothetical respondent. The solid line shows the hypothetical response for a non-ARL library. According to this simulation, the ARL respondent reports working in a traditional hierarchical environment and the non-ARL respondent is working in an adhocracy.

Researchers can also use the CVF to track the typical life of an organization from beginning to end. For example, Cameron and Quinn tracked the lifespan of Apple Computer using the OCAI instrument in which they were able to graphically show the corporation’s evolution on the CVF depicted in Figure 5 (Cameron & Quinn, 2006, p. 55). Image A illustrates Apple’s formative years when Steve Jobs used his dynamic personality and vision to create the company that would revolutionize computer
manufacturing. The subsequent graphs depict culture shifts within the same organization over several years and shifts in corporate mission and success.

**Figure 5. Typical Corporate Lifespan.**
In *Figure 5*, the images show how Cameron and Quinn’s extensive research using the OCAI has enabled them to catalog typical organizational life-spans of companies such as Apple Computer (p. 55).

Using this model aided in identifying current culture types among academic libraries in the United States. By comparing research to non-research libraries, competing values
emerged showing leadership types desirable to institutions hoping to improve their own library culture.

Reliability

Routinely applied to fields outside of its origins in business, the OCAI has a significant level of internal reliability, over 25 years of affirmative study, and empirical validation on its ability to “match or exceed the reliability of the most commonly used instruments in the social and organizational sciences” (Cameron & Quinn, 2006, p. 154). When OCAI survey results were tested using “multitrait-multimethod analysis” with “multidimensional scaling,” results also successfully met “convergent” and “discriminant validity” (p. 157). Cameron and Quinn attest to its reliability as they have administered the OCAI hundreds of times to thousands of respondents. Each time the evidence has been reviewed, the OCAI “measures what it says it measures” (p. 153). To test their claims and determine the reliability coefficients for the culture types reported by respondents for this study, Cronbach’s alpha will be used as the coefficient of reliability or consistency. As Cameron and Quinn and other researchers have done, Cronbach’s alpha was used to establish reliability comparable to the research compiled by Yeung, Brockbank, and Ulrich (1991) and Zammuto and Krakower (1991, p. 154). When data were extracted, Cronbach’s alpha scores were calculated to ensure the reliability of the six declarative statements that were used to calculate each of the four culture types similar to the research conducted by Quinn and Spreitzer, 1991; Yeung, et al., 1991; Zammuto and Krakower, 1991; Berrio, 2003; Pierce, 2004.
Validity

Validity has also been tested by several previous research studies using the OCAI. In 1991, Cameron and Freeman conducted validity testing on the OCAI in a project that studied the organizational culture of colleges and universities. “Validity of the culture instrument was uncovered when the culture type was matched with the domain of effectiveness in which the organizational excelled and by the type of decision-making structure and strategy employed” (Cameron & Quinn, 2006, p. 156). They go on to say that by using multtrait-multimethod statistical testing developed by Campbell and Fiske in 1959, they were able to produce “convergent validity” for “diagonal correlation coefficients” in the OCAI quadrants (p. 157). For “discriminant validity,” Campbell and Fiske’s multi-trait testing was then used with two additional instruments, the coefficient of alienation developed by Guttman in 1968 and later refined by Lingoes in 1973, and the stress coefficient, developed by J. Kruskal in 1978 (Trochim, 2006; Cameron & Quinn, 2006, p. 158). These two instruments were used to validate the following: 1) the “scales in the same culture quadrant” for correlation to each other; 2) the “scales in the same culture” to see if they correlated higher with “each other than with scales in a different culture quadrant;” and 3) the scales “within and between each” of the culture quadrants to see if “the same pattern of interrelationships” emerged (pp. 157-158). This testing provided a tight graphic representation of the “culture position in each quadrant” as shown in Figure 6:
Figure 6. CVF Validity. 

Figure 6 was adapted from Cameron and Quinn’s research validating the OCAI, provides the multidimensional scaling results for the competing values using two types of instruments. These instruments tested whether the culture types reported in the OCAI did physically reside within the quadrants assigned. This test revealed “strong support…for convergent and discriminant validity” (Cameron & Quinn, 2006, p. 158). The two tests used were Kruskal’s Stress Coefficient which equaled .056 and Guttman and Lingoes’s Coefficient of Alienation which equaled .076 (p. 159).

Data Collection

The OCAI was administered by email using a secure distribution method via the Marshall University email system. The OCAI was adapted to a web interface. Encryption and authentication was used to secure responses and prohibit multiple submissions. Statistical Package for Social Sciences (SPSS) was used to perform all statistical tests and generate relevant tables for the review of the results in Chapter Four.

The independent variables that may influence culture and leadership types are research or ARL and non-research or non-ARL libraries, budget, and perceived effectiveness of the organization which were gathered by comparing current to preferred culture results. Responses to the OCAI were used to see if recurring culture and
leadership types emerged among academic library directors who were challenged by library budget cuts. The Association of College and Research Libraries (ACRL) has historically recommended that colleges and universities strive for annual appropriations equivalent to six percent of the overall institution’s operating budget (ACRL, 1995, p. 255). Institutions similar to Marshall University fall below this recommended target. Using Carnegie classifications to identify the institutions similar to Marshall University, they were scrutinized to see if culture type and leadership role patterns emerged. Respondents were asked to report on budget levels since 2001.

Selected demographic information was gathered for gender and experience. Gender, years in current position, and highest degree respondents earned were collected. It was also critical to determine if the library director believed the organization was effective and meeting goals in spite of permanent or temporary cuts to its intellectual resources within the following options reported since 2001: budget increase, stagnant budget, 1% to 3% reductions, 4% to 6% reductions, 7% or higher reduction. Information on the perception of effectiveness was also pertinent to the type of culture the respondent desired. Dependent and independent variables are represented in Table 3:

**Table 3. Dependent and Independent Variables**

<table>
<thead>
<tr>
<th>Dependent Variables - Culture Type:</th>
<th>Independent Variables:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Clan</td>
<td>1  Library Type</td>
</tr>
<tr>
<td>2  Adhocracy</td>
<td>2  Library Budget</td>
</tr>
<tr>
<td>3  Market</td>
<td>3  Selected Demographic Data</td>
</tr>
<tr>
<td>4  Hierarchy</td>
<td></td>
</tr>
</tbody>
</table>

Data from these variables and the OCAI outcomes reinforced concepts Kaarst-Brown et al. (2004) emphasize in their research in which they state, “Identification of
those characteristics of organizational cultures that are uniquely relevant to the growth and success of libraries can provide current and future library leaders with guidance, models, and intellectual resources to enhance personal and organizational success” (p. 33).

**Data Analysis**

To assess the reliability of the instrument, this researcher applied Cronbach’s Alpha to the OCAI’s 48 declarative statements that comprise the six content dimensions. During analysis, the responses to the six dimensions were coded to obtain the culture values for each of the four quadrants on the OCAI. Each quadrant’s Alpha score was obtained to ensure its coefficient of reliability. The goal was to determine how well each of the sets of six declarative statements within each content dimension measured the corresponding culture construct (SPSS, 2007).

A statistical test was assigned to obtain the values for each research question presented in this study. To test the first research question, descriptive statistics were compiled to provide mean scores for each of the current and preferred culture types. Independent t-testing was then applied to these mean scores to compare the means in the event one or more culture type presented statistically significant differences when ARL responses were compared to non-ARL.

Because the second research question uses the same culture mean scores for its analysis, descriptive statistics were again used to determine the values for the leadership traits for both ARL and non-ARL types. Independent t-testing was then applied to these mean scores to determine if significant differences between the two groups would be present.
The third research question required a statistical test that would reveal significant differences when considering the impact of the library budget on the culture for both ARL and non-ARL libraries. The general linear model (GLM) univariate analysis provided access to the two-by-three factorial ANOVA test. Factorial ANOVA was used to determine if library type and budget impact culture in any way. Factorial ANOVA allows the researcher to isolate a dependent variable and analyze the interaction effects of two or more independent variables. For this question, the dependent variable was culture. The independent variables were library type (ARL or non-ARL) and three budget levels (increased, remained, or decreased). The test was applied to the eight current and preferred dependent culture variables (current and preferred clan, adhocracy, market, and hierarchy).

For the fourth research question, a statistical test more sophisticated than a descriptive crosstab representation of the demographic data was needed. Analysis of the demographic characteristics was possible when viewing these ARL and non-ARL data in tabular format.

Effectiveness is a potential indicator of library success that may provide this researcher with insights regarding desirable organizational culture types or leadership traits. The paired samples t-test was used to compare the means for each pair of congruent culture quadrants. This test allowed for significant differences to emerge when incongruent cultures were identified. An incongruent culture alerts the researcher to a potential for ineffective organizations and is an essential to this study’s assumptions regarding organizational effectiveness among academic libraries.
As described, each of the statistical analyses discussed provides the means for answering the following research questions which are also represented in null hypothesis format in Appendix E:

1. In what way, if any, does the organizational culture differ among ARL and non-ARL libraries?

2. In what ways, if any, do leadership roles vary among ARL and non-ARL library directors?

3. In what way, if any, does the organizational culture between ARL and non-ARL libraries impact the budget?

4. In what ways, if any, are the selected demographic characteristics of library directors related to the organizational culture of ARL and non-ARL libraries?

Limitations of the Study

1. Meeting the testing criteria discussed in this chapter created the potential for a low survey return thus making significant comparisons of ARL to non-ARL library culture types difficult to achieve.

2. Survey methodology was dependent upon respondent willingness to complete the questionnaire in a timely fashion.

3. The electronic delivery of the survey posed some technical difficulties such as the submission of incomplete surveys and the return of erroneous emails that were bounced from the local or remote servers.

4. The OCAI survey utilized an ipsative method of measurement and was therefore limited by the honesty and accuracy of respondents polled.
5. The 2006 ARL directory was used to identify the institutions belonging to the research consortium. Membership can change mid-year as libraries opt out of the program and/or fail to pay the $20,000 annual dues. The total number of ARL respondents could have dropped during the study.

6. The online searchable database located at the Carnegie Foundation was used to identify non-ARL academic institutions similar in size to Marshall University along with the 2006 edition of the American Library Directory. The directory is updated annually. However, staffing changes in the upper level of the administration for some libraries occurred prior to publication and required revision to the initial pool of ARL and non-ARL libraries.
CHAPTER FOUR

The purpose of this chapter was to provide an assessment of the data collected to answer the research questions discussed in Chapter One. By using survey methodology to illuminate organizational culture and leadership roles among respondents representing the two library types, this research sought to uncover ways, if any, in which organizational culture differed among ARL and non-ARL libraries; if leadership roles varied among ARL and non-ARL library directors; if budget impacted culture in any way; and, if selected demographic characteristics of library directors related to the organizational culture of both library types.

Instrument and Quantitative Data Collection

Anticipating the methodology for this study, the researcher obtained approval to use the Organizational Culture Assessment Instrument (OCAI) questionnaire from the primary author, Dr. Kim S. Cameron, in the spring of 2006. The OCAI consists of 12 declarative statements arranged in six sections that solicit responses for the following content dimensions: dominant characteristics, organizational leadership, management of employees, organizational glue, strategic emphasis, and criteria for success (Cameron & Quinn, 2006, p. 151). Each of the six areas consist of four questions in which respondents are to describe their impression of the current and desired organizational culture for a total of 24 responses (pp. 26-28). As discussed in Chapter Three, the reliability of the six characteristics was tested.

The Cronbach’s Alpha score for all 48 questions on the OCAI was .82. The highest score was .91 for the preferred clan culture and the lowest was .81 for both
current market and preferred hierarchy cultures. The remaining cultures scored between .85 and .88. The Cronbach’s alpha scores for each quadrant are listed in Table 4.

Table 4. OCAI Reliability Statistics – Cronbach’s alpha

<table>
<thead>
<tr>
<th>Culture</th>
<th>Alpha</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>.82</td>
<td>48</td>
</tr>
<tr>
<td>Current Clan</td>
<td>.88</td>
<td>6</td>
</tr>
<tr>
<td>Current Adhocracy</td>
<td>.85</td>
<td>6</td>
</tr>
<tr>
<td>Current Market</td>
<td>.81</td>
<td>6</td>
</tr>
<tr>
<td>Current Hierarchy</td>
<td>.85</td>
<td>6</td>
</tr>
<tr>
<td>Preferred Clan</td>
<td>.91</td>
<td>6</td>
</tr>
<tr>
<td>Preferred Adhocracy</td>
<td>.85</td>
<td>6</td>
</tr>
<tr>
<td>Preferred Market</td>
<td>.87</td>
<td>6</td>
</tr>
<tr>
<td>Preferred Hierarchy</td>
<td>.81</td>
<td>6</td>
</tr>
</tbody>
</table>

N of Cases = 334

As stated by Cameron & Quinn (2006) regarding the confidence levels identified by Yeung, Brockbank, and Ulrich (1991) and Zammuto and Krakower (1991) that were .71 and higher (p. 154), the alpha levels in this study create a level of confidence that “matches or exceeds the reliability of the most commonly used instruments in the social and organizational sciences” (p. 155).

Respondents were asked to consider the statements for each characteristic and to assign a numerical value to the ones that best described their organizations. Each column containing four responses totaled one hundred. Selected demographic information was also supplied in four additional questions arranged in web-based format (Appendix B).

IRB #2 approval was obtained in October 2006 from Marshall University’s Office of Research Integrity to distribute the OCAI questionnaire to three respondents at each of the 100 ARL libraries and 123 non-ARL libraries. An automated version of the OCAI
survey was generated and housed on a Marshall University web server using standard HTML and Java scripting techniques. The university webmaster assisted in customizing the Java code to provide automatic numerical calculations for the questionnaire’s columns and pop-up warnings if missing data were detected at the point of submission. By using the proprietary online service, Survey Monkey, a comprehensive email list was developed easily to dispatch the consent letter and web-based survey to 625 respondents electronically.

The quantitative data collection for this study began during the first week of November, 2006, and consisted of two mass mailings to the complete email database created from ALA library directory information within Survey Monkey. Responses were completely confidential to the researcher which added security to the respondent, but did pose a minor problem when errors were returned to the email database for bad email addresses. A list removal option was also provided as per Survey Monkey’s distribution policy. Upon receipt of the mass mailing, 32 respondents exercised this option, requesting that they be removed from the survey process and not receive additional reminders. They were subsequently removed from the database (Survey Monkey, 2006). Additionally, as anticipated in Chapter Three, several emails were erroneous and required revision to the database. One hundred thirteen emails returned errors and another 24 indicated a managerial personnel change by auto-response or a response from office personnel. To maintain $N = 625$, replacement emails were obtained for each erroneous address. Overall, 169 alternate emails were added from the ALA directory or individual library directories online. This resolved the personnel changes, the undeliverable emails, and those who selected the “opt out” service within the email system.
In an effort to obtain a maximum level of response, a third and final mailing occurred during the first week of December. Allowing for a reasonable response time following the third mailing, the researcher identified 422 surveys. Of these, 334 were viable surveys that could be applied to the data analysis. This represents a return rate of 53%.

Table 5. Survey Return Rate

<table>
<thead>
<tr>
<th>Total</th>
<th>Returned</th>
<th>%</th>
<th>Included in Analysis</th>
<th>%</th>
<th>Excluded in Analysis</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>625</td>
<td>422</td>
<td>68%</td>
<td></td>
<td></td>
<td>334</td>
<td>53%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>88</td>
<td>14%</td>
</tr>
</tbody>
</table>

Table 5 data show the results of the survey returns in which one to three emails per institution were distributed. Erroneous emails were replaced with viable addresses to retain the N of 625.

A total of 88 surveys were completely unusable due to missing data critical to the OCAI culture calculations or ARL status in spite of the Java coding that disallowed continuation and provided calculation error messages and warnings of missing data within the form. Twenty surveys were lacking demographic information such as gender or budget levels. Because the ARL status is present and the organizational culture data can still be calculated, these 20 surveys were not removed from examination.

Of the 334 usable surveys that are included in the data analysis, 165 are from ARL libraries (49%) and 169 are from non-ARL libraries (51%). The rate of return for each library type represents more than 50% of surveys sent to both groups providing a robust data set for the analysis of the OCAI culture types and leadership roles.

In Table 6, the demographic characteristics are presented to provide an overview of the information collected from the respondents. There were 334 total usable surveys returned to the researcher; however, 21 of these lacked gender information (N = 313). Of
these, 60% of the respondents were female (n = 189) and 40% were male (n = 124) which is consistent with the literature that indicates the library field is still predominantly female (Statistical Abstracts, 2007). According to the responses, the gender breakdown was also similar when looking at library type individually. For the ARL responses, 59% were female and 41% were male (n = 157). For the non-ARL responses, 62% were female and 38% were male (n = 156). This is consistent with the literature that states women possess more than 50% of the managerial positions in American academic libraries—a figure that has increased in the last several decades and is still climbing (Deyrup, 2004).

When considering educational levels, the respondents could select more than one option if they possessed multiple degrees, resulting in a total of 817 responses for this characteristic. Seventy-five percent of the ARL respondents reported having a Bachelor’s degree and Master of Library Science (n = 404). This was very similar to the non-ARL response of 73% (n = 413). A portion of the respondents possessed additional non-MLS Master’s degrees (14% for both library types), Education Specialists or postmaster certificates (ARL = 1%; non-ARL = 2%), Doctor’s degrees (9% for both), postdoctoral degrees (1% for both), and other degrees such as a law degree (one to two respondents or .05% for ARL and .02% for non-ARL). There were no major differences in levels of educational attainment or possession of additional advanced degrees when comparing ARL to non-ARL library type.

The years for which each librarian held his or her current position were also gathered. For this demographic characteristic, only 314 responses were used because 20 surveys were not complete. Again, the breakdown was similar for both ARL and non-
ARL library type with no startling patterns emerging from a qualitative analysis of the demographic characteristics. The responses for each are almost identical. Thirty-five percent of ARL respondents reported holding their current positions for 0-5 years (n = 158) compared to 37% for non-ARL (n = 156). Twenty-two percent of ARL subjects (n = 34) held their positions for 6-10 years compared to 24% for non-ARL (n = 38). For the 11-15 year range, ARL reported 14% (n = 22), non-ARL reported 12% (n = 18); for 16-20 years, ARL reported 16% (n = 25) compared to 13% for non-ARL (n = 20); and both reported 14% (n = 22) have been in their positions for 21 or more years. Table 6 shows the numerical values for each demographic characteristic collected for this study:

Table 6. Demographic Characteristics

<table>
<thead>
<tr>
<th></th>
<th>ARL</th>
<th>Non-ARL</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>64</td>
<td>60</td>
<td>124</td>
</tr>
<tr>
<td>Female</td>
<td>93</td>
<td>96</td>
<td>189</td>
</tr>
<tr>
<td>Total</td>
<td>157</td>
<td>156</td>
<td>313</td>
</tr>
</tbody>
</table>

**Education (check all that apply):**

<table>
<thead>
<tr>
<th>Education</th>
<th>ARL</th>
<th>Non-ARL</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's Degree</td>
<td>157</td>
<td>156</td>
<td>313</td>
</tr>
<tr>
<td>Master of Library Science</td>
<td>144</td>
<td>145</td>
<td>289</td>
</tr>
<tr>
<td>Master's Degree (non-MLS)</td>
<td>57</td>
<td>59</td>
<td>116</td>
</tr>
<tr>
<td>Ed. Specialist or Postmaster Certificate</td>
<td>4</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Doctor's Degree</td>
<td>37</td>
<td>36</td>
<td>73</td>
</tr>
<tr>
<td>Postdoctoral Degree</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Other (please list) J.D.</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>404</td>
<td>413</td>
<td>817</td>
</tr>
</tbody>
</table>

**Years in Current Position:**

<table>
<thead>
<tr>
<th>Years in Position</th>
<th>ARL</th>
<th>Non-ARL</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 years</td>
<td>55</td>
<td>58</td>
<td>113</td>
</tr>
<tr>
<td>6-10 years</td>
<td>34</td>
<td>38</td>
<td>72</td>
</tr>
<tr>
<td>11-15 years</td>
<td>22</td>
<td>18</td>
<td>40</td>
</tr>
<tr>
<td>16-20 years</td>
<td>25</td>
<td>20</td>
<td>45</td>
</tr>
<tr>
<td>21+ years</td>
<td>22</td>
<td>22</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>158</td>
<td>156</td>
<td>314</td>
</tr>
</tbody>
</table>
Table 6 data show responses for both ARL and non-ARL. The distribution of responses by library type is almost even.

In Table 7, the ARL and non-ARL responses for each budget level are provided. Again, 20 of the 334 surveys could not be used due to missing data for this portion of the survey (N = 314). Respondents were asked to select the budget characteristic that best described their library’s budget condition since the year 2001. There were differences when comparing the ARL to the non-ARL responses. Sixty-four percent of the ARL institutions reported budget increases since 2001 (n = 158) while only 27% of the non-ARL institutions reported increases (n = 156). When considering budget cuts, ARL libraries indicated 24% of their budgets were cut from 1% to 7% (or higher) while over half (51%) of the non-ARL libraries saw 1% to 7% or more cuts since 2001 (ARL, n = 38; non-ARL, n = 80). The library literature reports a relationship between library budget and staff morale and may also be a meaningful indicator of library effectiveness (Topper, 2004).

Table 7. Budget Characteristics

<table>
<thead>
<tr>
<th>Describe the condition of your library budget since 2001:</th>
<th>ARL</th>
<th>Non-ARL</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased</td>
<td>101</td>
<td>42</td>
<td>143</td>
</tr>
<tr>
<td>Remained the Same</td>
<td>19</td>
<td>34</td>
<td>53</td>
</tr>
<tr>
<td>1% - 3% Reduction</td>
<td>15</td>
<td>33</td>
<td>48</td>
</tr>
<tr>
<td>4% to 6% Reduction</td>
<td>15</td>
<td>24</td>
<td>39</td>
</tr>
<tr>
<td>7% or Higher Reduction</td>
<td>8</td>
<td>23</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>158</td>
<td>156</td>
<td>314</td>
</tr>
</tbody>
</table>

Table 7 data show that over half of the ARL libraries surveyed experienced budget increases since 2001 while less than a third of non-ARL libraries did. Less than a fourth of the ARL libraries saw budget cuts while over half of the non-ARL library budgets were cut.
Restatement of the Research Questions

As described in Chapter Three, the following research questions were tested (See Appendix E for null hypothesis):

1. In what way, if any, does the organizational culture differ among ARL and non-ARL libraries?

2. In what ways, if any, do leadership roles vary among ARL and non-ARL library directors?

3. In what way, if any, does the organizational culture between ARL and non-ARL libraries impact the budget?

4. In what ways, if any, are the selected demographic characteristics of library directors related to the organizational culture of ARL and non-ARL libraries?

Results of the Study

First Research Question: Organizational Culture, ARL versus. Non-ARL

In what way, if any, does the organizational culture differ among ARL and non-ARL libraries? Because of their institutional prestige and success in meeting goals, this researcher made the assumption that ARL library culture will be different from non-ARL library culture. Since the literature states that organizational culture is a critical factor influencing library success, identifying a desired culture so it may be emulated could ultimately aid a library in becoming more effective (Kaarst-Brown et al., 2004; Kaarst-Brown & Robey, 1999).

Quantitative Analysis.

Data were entered into the computer using the SPSS program. The first research question was tested to determine if there were any differences in organizational culture
between ARL and non-ARL libraries. Descriptive statistical testing was used to identify
the mean scores and standard deviations for current and preferred culture types among
both types of library responses in preparation for comparisons. The mean scores for each
culture type (as shown in Table 8) were tested for significance.

The significance level was set at .05 and is denoted by an asterisk in the data
tables. The independent t-test provided a quantitative analysis of the mean differences
between ARL and non-ARL clan, adhocracy, market, and hierarchy cultural
characteristics. These mean scores were applied to the Competing Values Framework
(CVF) grid to provide a visual representation of culture for appraisal purposes (Cameron

Table 8. Mean Scores, Standard Deviations, and Independent T-Test Results

<table>
<thead>
<tr>
<th></th>
<th>ARL</th>
<th>Non-ARL</th>
<th>MD</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>MD</td>
</tr>
<tr>
<td>Current Clan</td>
<td>24.49</td>
<td>16.94</td>
<td>26.52</td>
<td>17.09</td>
<td>-2.03</td>
</tr>
<tr>
<td>Current Adhocracy</td>
<td>18.44</td>
<td>11.90</td>
<td>16.21</td>
<td>12.19</td>
<td>2.22</td>
</tr>
<tr>
<td>Current Market</td>
<td>20.99</td>
<td>15.29</td>
<td>17.38</td>
<td>12.70</td>
<td>3.61</td>
</tr>
<tr>
<td>Current Hierarchy</td>
<td>32.17</td>
<td>17.43</td>
<td>33.80</td>
<td>20.65</td>
<td>-1.63</td>
</tr>
<tr>
<td>Preferred Clan</td>
<td>35.44</td>
<td>17.71</td>
<td>38.49</td>
<td>20.26</td>
<td>-3.05</td>
</tr>
<tr>
<td>Preferred Adhocracy</td>
<td>27.55</td>
<td>13.21</td>
<td>24.13</td>
<td>11.12</td>
<td>3.42</td>
</tr>
<tr>
<td>Preferred Market</td>
<td>16.50</td>
<td>11.78</td>
<td>14.82</td>
<td>09.61</td>
<td>1.68</td>
</tr>
<tr>
<td>Preferred Hierarchy</td>
<td>17.69</td>
<td>10.72</td>
<td>16.68</td>
<td>10.75</td>
<td>1.01</td>
</tr>
</tbody>
</table>

ARL n = 165, Non-ARL n = 169
*p<.05

Table 8 data show the mean scores for each culture type. For ARL and non-ARL, the
highest mean scores resided in the current hierarchy and the preferred clan culture
quadrants. The lowest values were reported in the current adhocracy and preferred market
cultures for both.
The highest mean score reported by the ARL libraries was 32.17 and the lowest was 18.44. This demonstrates that most research library organizations in the respondent pool were perceived to be traditional hierarchies. Respondents did rank the hierarchy characteristic above market. This was anticipated when compared to Cameron and Quinn’s research outcomes as most university settings are rarely geared toward a market culture’s values. Instead, Cameron and Quinn’s extensive research using the OCAI indicates they are typically “characterized by longevity and staying power” (2006, p. 34).

**Qualitative Analysis.**

Revisiting the first research question from a qualitative perspective, descriptive statistics provide the mean scores to plot ARL and non-ARL current and preferred culture types in Figures 7 and 8 to see if differences were visible.

![Figure 7. ARL Mean Scores.](image)

*Figure 7 shows the ARL mean scores with a solid line while non-ARL mean scores are shown with a dotted line and italics. When comparing the two groups, similarities emerge. Both report hierarchies being the dominant culture with very little difference between the mean scores for the other three cultures.*
Figure 8. ARL Preferred Culture.
In Figure 8, ARL mean scores are shown by a solid line while non-ARL mean scores are shown with a dotted line and italics. Again, both groups report very similar preferred culture types with clan being the most preferred as anticipated.

Upon review of the data and CVF graphs, it is evident that differences between the ARL and non-ARL library cultures were not major. The two library types appeared to be very similar to one another. Only the values for current market and preferred adhocracy revealed statistically significant results. Nevertheless, these small differences did provide some observations that have been confirmed by previous studies conducted by Cameron and Quinn. Utilizing their model, these visible differences in conjunction with the statistically significant data discussed in the quantitative analysis can aid in the diagnosis and steps for implementing leadership behaviors and initiating organizational change that will be further delineated in the study conclusions for Chapter Five (p. 88).
For preferred ARL cultures, the researcher did anticipate that the majority of the 165 respondents would desire a clan culture type when given a choice. Cameron & Quinn’s research provides a series of typical or average culture plots for various industry or institutional types (2006, p. 75-77). Similar to their culture plots for higher education, the data have indicated the clan quadrant represents a collaborative environment in which the leadership roles of facilitator, mentor, and team builder are exemplified by the primary leader of the organization (2006, p. 46).

**Second Research Question: Leadership Roles, ARL versus Non-ARL**

In what ways, if any, do leadership roles vary among ARL and non-ARL library directors? The behavior of the leader is essential to the organizational culture of the institution (Cameron & Quinn, 2006, p. 127). If these data show that ARL libraries are meeting goals in spite of budget constraints, are they exhibiting desirable leadership roles that non-ARL library leaders can imitate? If a model can be identified, enlisting organizational change may allow an ineffective library leader to acquire the tools he or she needs to become effective (p. 127; ARL, 2006).

In addition to organizational culture quadrants, the Competing Values Framework (CVF) also provides a representation of the current and preferred leader types for each section as illustrated in Figure 9. If a current culture type is an adhocracy, for example, the group’s orientation is creative due to the innovative, entrepreneurial, and visionary leader type associated with this culture. Figure 9 also shows the orientation and internal or external forces that shift values and influence leadership.
Figure 9. CVF Leader Types.
Figure 9 uses the same organizational culture quadrants and the leader types are adapted from Cameron and Quinn’s Competing Values Framework (2006, p. 46).

Quantitative Analysis.

The second research question attempted to use the OCAI results to identify if there were any differences in leadership roles between ARL and non-ARL library directors. Because the quadrants are the same, the same statistical values were retrieved and descriptive testing was replicated to compare ARL and non-ARL.

In Table 9, the ARL data showed a high mean score in the hierarchy quadrant (32.17) with a leader possessing traits consistent with a coordinator, monitor, and organizer. When assessing the data for non-ARL library leaders, the current leader type with the highest mean score was also within the hierarchy (33.80). As shown in Table 8 for culture types, the preferred leader types resided within the clan quadrant for both ARL and non-ARL library types. The highest mean score for ARL responses was 35.44 and the highest mean score for non-ARL was 38.49 revealing that library leaders in both
types of libraries preferred the characteristics (facilitator, mentor, and team builder) associated with a clan leader.

**Table 9. Mean Scores and Independent T-Test Results for Leadership Types**

<table>
<thead>
<tr>
<th></th>
<th>ARL</th>
<th>Non-ARL</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clan Leader</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitator, Mentor, Team Builder</td>
<td>24.49 16.94</td>
<td>26.52 17.09</td>
<td>0.275</td>
</tr>
<tr>
<td>Adhocracy Leader</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovator, Entrepreneur, Visionary</td>
<td>18.44 11.90</td>
<td>16.21 12.19</td>
<td>0.093</td>
</tr>
<tr>
<td>Market Leader</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hard Driver, Competitor, Producer</td>
<td>20.99 15.29</td>
<td>17.38 12.70</td>
<td>0.020*</td>
</tr>
<tr>
<td>Hierarchy Leader</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coordinator, Monitor, Organizer</td>
<td>32.17 17.43</td>
<td>33.8 20.65</td>
<td>0.437</td>
</tr>
<tr>
<td><strong>Preferred</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clan Leader</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitator, Mentor, Team Builder</td>
<td>35.44 17.71</td>
<td>38.49 20.26</td>
<td>0.144</td>
</tr>
<tr>
<td>Adhocracy Leader</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovator, Entrepreneur, Visionary</td>
<td>27.55 13.21</td>
<td>24.13 11.12</td>
<td>0.011*</td>
</tr>
<tr>
<td>Market Leader</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hard Driver, Competitor, Producer</td>
<td>16.50 11.78</td>
<td>14.82 9.61</td>
<td>0.153</td>
</tr>
<tr>
<td>Hierarchy Leader</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coordinator, Monitor, Organizer</td>
<td>17.69 10.72</td>
<td>16.68 10.75</td>
<td>0.390</td>
</tr>
</tbody>
</table>

ARL n = 165, Non-ARL n = 169; *p<.05, 2-tailed

Statistical testing also showed significant differences in values for two quadrants as shown in Table 9. The value for the current market leadership role for both ARL and non-ARL library types indicated there were significant differences in these data. This style exhibits the traits of a hard driving, competitive, and productive leader. The value for the adhocracy leadership role also indicated that there were significant differences for
both library types. This leader is generally innovative, entrepreneurial, and visionary. The other values did not show significant differences.

For both library types current mean scores were low for the adhocracy and market leader types. It is unusual for a higher education organization to exhibit the market or adhocracy leadership traits as these are generally roles found in corporate environments (Cameron & Quinn, 2006). For the preferred leader types, the least favorable among both ARL and non-ARL was the market leader type which is consistent with Cameron and Quinn’s findings for higher education. The hierarchy role values were also low. The leadership roles and their mean scores are delineated in Table 9.

Qualitative Analysis.

Similar to the process for the first research question, these data are plotted onto the CVF to provide the researcher with a visible representation of the values for each quadrant. When viewed, only diminutive differences between the types can be discerned even though these data produced significant differences for two leadership roles. There were minimal differences between the current leader types for ARL library leaders when compared to non-ARL even though the statistical analysis did yield a significant value for the current market leader.

When comparing the ARL and non-ARL library types on the CVF, the similarities were noteworthy. As with the numerical values, the library types were similar in leadership style in spite of this researcher’s assumption that ARL institutions would display leadership roles that were different from non-ARL library leaders. Figures 10 and 11 depict the comparison between ARL and non-ARL leadership roles on the CVF graph.
Figure 10. ARL Leader Types.
ARL mean scores are shown by a solid line; non-ARL mean scores are shown with a dotted line and italics.
Figure 11. ARL Preferred Leader Types.
It appears that the least preferred leader is one who resides within the hierarchy.

Third Research Question: Budget Impact, ARL versus Non-ARL

In what way, if any, does the organizational culture between ARL and non-ARL libraries impact the budget? This researcher surmised from the literature that budget is a major factor that impedes mission outcomes for most libraries. To test for a possible relationship to organizational culture, the budget characteristics were closely scrutinized in this study.

Quantitative Analysis.

To determine if budget impacts culture in any way, a two-by-three Factorial ANOVA test was used to analyze the impact of budget levels on culture. Factorial ANOVA aids in revealing interaction effects of multiple factors or independent variables on one dependent variable. The test was applied to all of the current and preferred dependent culture variables. To prepare the test, the data acquired for the independent variables of budget condition were converted from five values to three as shown in Table 10. The budget conditions for cuts of 0% to 7% or higher were combined into one value.

Table 10. Recoding of Budget Values for 2-by-3 Factorial ANOVA

<table>
<thead>
<tr>
<th>Budget Condition since 2001</th>
<th>Original Value</th>
<th>New Label</th>
<th>New Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased</td>
<td>1</td>
<td>Increased</td>
<td>1</td>
</tr>
<tr>
<td>Remained the Same</td>
<td>2</td>
<td>Remained the Same</td>
<td>2</td>
</tr>
<tr>
<td>1% - 3% Reduction</td>
<td>3</td>
<td>Reduction</td>
<td>3</td>
</tr>
<tr>
<td>4% to 6% Reduction</td>
<td>4</td>
<td>Reduction</td>
<td>3</td>
</tr>
<tr>
<td>7% or Higher Reduction</td>
<td>5</td>
<td>Reduction</td>
<td>3</td>
</tr>
</tbody>
</table>
Factorial ANOVA results for all eight culture types were reviewed. Of these, only two, preferred clan and preferred market, presented significant differences. LSD post-hoc tests were then performed to identify the differences.

Table 11 shows the sum of squares, degrees of freedom, mean square, F test, and significance levels for the preferred clan culture. For the dependent preferred clan culture variable, there was an association between this culture and budget. From the post-hoc analysis, these data provided the preferred clan culture values for budget levels. The values for budgets that “remained the same” and were reduced 0% to 7% or higher since 2001 were 38.2 and 43.4 respectively. The preferred clan culture variable for budget increase was 34.8. These data in Table 11 show an overall budget condition that remained the same or experienced cuts. An association was identified between the lack of monetary resources and the desire for a clan culture.

**Table 11. Two by Three Analysis of Variance for Preferred Clan Culture**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>dF</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library Type</td>
<td>244.89</td>
<td>1</td>
<td>244.89</td>
<td>0.76</td>
<td>.384</td>
</tr>
<tr>
<td>Budget Level</td>
<td>3663.59</td>
<td>2</td>
<td>1831.80</td>
<td>5.69</td>
<td>.004 *</td>
</tr>
<tr>
<td><strong>2-Way Interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library Type * Budget Level</td>
<td>721.90</td>
<td>2</td>
<td>360.95</td>
<td>1.12</td>
<td>.327</td>
</tr>
<tr>
<td>Error</td>
<td>308</td>
<td></td>
<td>321.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05, 2-tailed

Upon review of the data for the dependent preferred market culture variable, there was an association between this culture type and budget. Again a post-hoc analysis was performed. The preferred market culture value for budget increase since 2001 was 18.3. The values for “remained the same” and 0% to 7% or higher cuts were 14.9 and 14.4
respectively. In this situation, the responses indicated an overall budget condition that increased since 2001. These data in Table 12 showed a relationship between the presence of monetary resources and the desire for a market culture.

**Table 12. Two by Three Analysis of Variance for Preferred Market Culture**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>dF</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library Type</td>
<td>3.04</td>
<td>1</td>
<td>3.04</td>
<td>0.03</td>
<td>0.869</td>
</tr>
<tr>
<td>Budget Level</td>
<td>984.89</td>
<td>2</td>
<td>492.44</td>
<td>4.42</td>
<td>0.013*</td>
</tr>
<tr>
<td><strong>2-Way Interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library Type * Budget Level</td>
<td>224.05</td>
<td>2</td>
<td>112.03</td>
<td>1</td>
<td>0.367</td>
</tr>
<tr>
<td>Error</td>
<td>308</td>
<td></td>
<td>111.49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05, 2-tailed

Because both library types showed significant differences for the factorial ANOVA analysis, it is not possible to attribute preferred clan or market characteristics to solely ARL or non-ARL.

**Qualitative Analysis.**

When library resources are low, do these data support the assumption that respondents desire a cohesive workforce that can be more successful in meeting faculty and student research and curriculum support needs in spite of limitations? The library literature provides an array of inspirational narratives with successful strategies for responding to cuts so libraries can maintain existing services and materials; however, empirical data supporting these strategies are not present (Lawal, 2005; Moyer, 2005; Feagin, 2004; Rogers, 2004, 2003; & Miller, 2003). In a clan culture, the desire for a cohesive and participatory environment is important to the employee. When money is not the primary motivator, a culture that is committed to enriching an employee’s work life becomes more desirable (Cameron & Quinn, 2006; Chalofsky, 2003). The clan culture
theory of effectiveness emphasizes “human development and participation” while encouraging employee empowerment and open communication (p. 49). Likewise, the leader may exhibit mentoring and team building roles that aid in cultivating this internally motivated setting. According to Cameron and Quinn, a successful clan environment with high levels of employee morale can usually overcome external challenges to produce effectiveness (2006, p. 46).

In regard to the preference for a market culture, a similar question can be asked: When library resources are high, do these data support the assumption that respondents desire a more competitive environment that can respond to customer needs because resources are not limited? These data do imply that when money is present, there is a greater emphasis on the desire for a market culture. When an organization has the tools to routinely generate services or resources that the faculty and students want, its effectiveness is defined by its ability to respond fruitfully to external motivation (2006, p. 48). In a market environment, the leader fosters this culture as he or she encourages his or her employees to “outpace the competition” and maintain aggressive levels of productivity (p. 46-48).

Fourth Research Question: Demographic Characteristics, ARL versus Non-ARL

In what ways, if any, are the selected demographic characteristics of library directors related to the organizational culture of ARL and non-ARL libraries? For this question, the statistical analysis was not necessary because both groups were so similar. Referring back to the introduction of the demographic characteristics collected from these respondents in Table 6, responses for gender are consistent with the literature. For example, these responses indicated that 60% of the entire pool was female and 40% was
male (N = 313). ARL librarians reported 59% female and 41% male (n = 157). Non-ARL librarians reported 62% female and 38% male (n = 156). These gender values are consistent with the literature and current national data regarding individuals currently employed in the library science field (ALA, 2007; Statistical Abstracts, 2007).

There were also no major differences between ARL and non-ARL library types when considering education. Over 75% of the pool possessed a Bachelor’s degree and Master of Library Science (n = 404). Demographic differences were minute. The same percent of ARL and non-ARL respondents reported possessing additional Master’s degrees (14%; n = 116); Doctor’s degrees (9%; n = 73); and postdoctoral degrees (1%; n = 9). For the years these respondents have held their current positions, similar patterns emerge once again. For example, 35% of ARL respondents held their current positions for 0-5 years (n = 158) compared to 37% for non-ARL (n = 156).

Organizational Effectiveness: ARL versus Non-ARL

Cameron and Quinn say that the act of an organization identifying their current culture and the culture they prefer is a positive step toward culture change and improving effectiveness (p. 74). To test for effectiveness, the incongruence of cultures must be analyzed for both library types. When a perceived current culture is on the diagonal from a perceived preferred culture, it is identified as incongruent. According to Cameron and Quinn, incongruence is present if mean scores simply differ by more than ten points; however, the paired t-test was used to test for significance. Because incongruence may contribute to an organization’s lack of effectiveness, it is helpful to provide this analysis so change can ensue (p. 74).

Quantitative Analysis
The current and preferred mean scores for each of the cultures by library type was obtained for the first and second research questions. These data were used to identify current and preferred congruent pairs (congruent pairs are identified as the current culture quadrant that is directly diagonal to the preferred culture quadrant). When congruent pairs were identified, tabulated, and compared using the paired samples t-test, Table 13 shows that six out of the eight paired mean scores demonstrated significance. These results affirm a state of incongruence between these cultures. As per Cameron and Quinn, the researcher can assume these libraries are reporting disparate culture types that may be contributing to the inability to meet goals and be effective (2006, p. 48).

Table 13. Paired T-Tests for Incongruent Quadrants

<table>
<thead>
<tr>
<th>Pair</th>
<th>Description</th>
<th>M</th>
<th>SD</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 1</td>
<td>Current Clan - Preferred Market</td>
<td>7.99</td>
<td>20.25</td>
<td>5.07</td>
<td>.000 *</td>
</tr>
<tr>
<td>Pair 2</td>
<td>Current Adhocracy - Preferred Hierarchy</td>
<td>0.75</td>
<td>14.63</td>
<td>0.65</td>
<td>.514</td>
</tr>
<tr>
<td>Pair 3</td>
<td>Current Market - Preferred Clan</td>
<td>-14.45</td>
<td>22.31</td>
<td>-8.32</td>
<td>.000 *</td>
</tr>
<tr>
<td>Pair 4</td>
<td>Current Hierarchy - Preferred Adhocracy</td>
<td>4.62</td>
<td>21.81</td>
<td>2.72</td>
<td>.007 *</td>
</tr>
<tr>
<td>Non-ARL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 1</td>
<td>Current Clan - Preferred Market</td>
<td>11.71</td>
<td>19.59</td>
<td>7.77</td>
<td>.000 *</td>
</tr>
<tr>
<td>Pair 2</td>
<td>Current Adhocracy - Preferred Hierarchy</td>
<td>-0.47</td>
<td>15.89</td>
<td>-0.38</td>
<td>.703</td>
</tr>
<tr>
<td>Pair 3</td>
<td>Current Market - Preferred Clan</td>
<td>-21.11</td>
<td>23.01</td>
<td>-11.93</td>
<td>.000 *</td>
</tr>
<tr>
<td>Pair 4</td>
<td>Current Hierarchy - Preferred Adhocracy</td>
<td>9.67</td>
<td>24.24</td>
<td>5.18</td>
<td>.000 *</td>
</tr>
</tbody>
</table>

ARL n = 164; Non-ARL n = 168
(Table T = 0.05) *p<.05, 2-tailed

From these results depicted in Table 13, ARL and non-ARL libraries are similarly ineffective.

Qualitative Analysis.
In Figure 12, the mean scores for the current and preferred values for ARL responses are plotted on the CVF to view disparate culture types with the naked eye. ARL subjects reported that they were currently situated in hierarchical cultures. The dominant preferred culture was clan. When depicted on the CVF, a researcher can view the disparate cultures quickly.

**Figure 12. ARL Current versus Preferred Culture.**
Using the CVF model, mean scores for the current and preferred cultures for the ARL libraries are shown in *Figure 12* in overlay fashion. The current culture is represented by a solid line while the preferred culture is depicted by a dashed double line and italicized means.

Among the non-ARL respondents, the dominant current culture was also the hierarchy and again, when mean scores were plotted on the CVF chart, these data also showed a non-ARL preference for the clan culture when given the opportunity to report
on a desired organizational environment for each of the six characteristics queried on the OCAI.

Figure 13. Non-ARL Current versus Preferred Culture.
In Figure 13, the CVF model shows mean scores for the current and preferred culture types for the non-ARL libraries. The current culture is again represented by a solid line and preferred culture is shown with a dotted line and italicized means.

In a clan environment, the employees are empowered, teams are fostered, and there is a great deal of open and honest communication (p. 50). Human nature dictates that this is the most desirable organizational culture among a multitude of organization types or employee levels and personalities. Similar to Cameron and Quinn’s analysis of thousands of organizations that represent diverse institutions, adhocracy scores are rated the lowest among current and preferred culture types in this study (p. 79).
Study Results and Relationship to the Literature

As discussed in the review of the literature, library opinion leaders agree that librarians exhibit leadership and cultural behaviors that are influenced by personal and professional values that are central to the profession (Riggs, 2001). According to the management literature applicable to library science, organizational culture tends to be related to the leadership style exhibited by the primary manager and the organization’s mission or purpose (Kaarst-Brown & Robey, 1999). Because a library houses intellectual resources and provides services that illustrate the staff’s understanding of the library’s role at the institution, Riggs urges library leaders to stay abreast of current trends and update their values accordingly. Failure to do so may render the library obsolete and irrelevant (Riggs, 2001, p. 13). Cameron and Quinn suggest the most effective leaders are those who can shift values quickly among the cultures and leadership roles to meet immediate external organizational needs (p. 47). Kaarst-Brown et al. utilized the OCAI to identify library culture to see how organizational culture can be susceptible to the negative impact of external forces such as budget cuts (2004, p. 33).

In this study, values were deemed essential to an organization’s diagnosis. The OCAI was an ideal instrument with which to identify culture types and leadership roles among ARL and non-ARL libraries. The data from this research reveal results that are in line with prior studies. The majority of managers in both ARL and non-ARL libraries appear to be coordinators, monitors, and organizers residing in hierarchical cultures. These results were expected. Management and library researchers found that higher education organizations tend to be hierarchies (Cameron & Quinn, 2006, p. 80; Edwards, 1997). Edwards also suggests that today’s academic libraries do not fare well in the
typical slow-moving academic hierarchy. To meet user needs, they attempt to address rapid changes in information technology but are hindered by the campus culture. Directors feel “constrained” by the university’s hierarchical structure even though the staff tend to favor the status quo of a hierarchy. An organization steeped in tradition provides them with a sense of security in “knowing their place” (1997).

When applying the OCAI to library organizations, Kaarst-Brown and Robey determined that the traditional hierarchy needs to be replaced by a clan or adhocracy culture so it may possess the ability to meet ever-changing technology trends in the profession (Kaarst-Brown & Robey, 1999). This point is emphasized in their assessment of why a clan would be best in addressing the current climate in libraries:

The clan-based framework would encourage smaller teams to form around certain tasks. Instead of having technical services separated from public services, this clan framework would encourage groups of individuals to be assigned to teams based around types of information sources or services. Then, if there is a change in a particular technology, the team can adjust much more quickly than if changes have to work their way through hierarchical management levels (p. 45).

These data from the research conducted for this study suggest a similar outcome. The majority of ARL and non-ARL libraries report a culture that resides within the hierarchy quadrant, yet the culture they report preferring resides within the clan quadrant. According to the competing values research on higher education, clan culture is a more appropriate environment in which to cross-train and manage teams in departments requiring rapid changes (Cameron & Quinn, 2006, p. 20; Kaarst-Brown & Robey, 1999, p. 45; Edwards, 1997). Kaarst-Brown and Robey further deduce that clan culture is essential for academic libraries to meet the challenges of technology innovations without delay or conflict among the employees (p. 45). They also stress that directors must have
the leadership skills to move their organizations toward a successful and effective organizational culture (p. 38).

Summary

Initial data review does not affirm the assumptions the research discussed in Chapters One through Three. However, there are data that demonstrate an impact of budget on preferred culture and the existence of significant incongruent culture types that imply a state of ineffectiveness. These results support a thorough analysis of each culture quadrant’s relationship to the independent variables studied that may aid in providing organizational culture change tools for academic libraries.
CHAPTER FIVE

Summary of Purpose

The purpose of the study was to investigate the library’s organizational culture type and leadership roles as perceived by library directors of research and non-research institutions of higher education. The study further attempted to identify leadership roles and reveal a desired culture that other libraries might emulate. Additional demographic data were collected to identify any other independent variable that might influence culture. The following research questions lead the researcher’s process:

1. In what way, if any, does the organizational culture differ among ARL and non-ARL libraries?

2. In what ways, if any, do leadership roles vary among ARL and non-ARL library directors?

3. In what way, if any, does the organizational culture between ARL and non-ARL libraries impact the budget?

4. In what ways, if any, are the selected demographic characteristics of library directors related to the organizational culture of ARL and non-ARL libraries?

Summary of the Procedures

To initiate the study, 100 research and 110 non-research libraries were identified using American Library Association and Carnegie Foundation classification tools available to the researcher. A comprehensive database of libraries located in the United States and belonging to the Association of Research Libraries was generated. The non-research database consisted of American libraries similar in scope, size, and budget level to Marshall University as identified by the Carnegie Foundation’s 2006 classification.
descriptions. An appropriate instrument to assess organizational culture was identified from the business literature pertaining to organizational culture. Permission was obtained to use the Organizational Culture Assessment Instrument (OCAI) from Dr. Kim S. Cameron who is currently a Professor of Management and Organizations at the Stephen M. Ross School of Business of the University of Michigan. With the help of the Information Technology web development staff at Marshall University, the OCAI was adapted to an electronic format for ease of distribution and data retrieval.

Three emails were selected from each institution in order to secure a response from the director, dean, assistant/associate director/dean, or chief library department head. The for-profit service, Survey Monkey, was adopted to distribute the email database and track bad emails or mailing errors (Survey Monkey, 2006). The researcher anticipated email errors for the upper-level administrators and was poised to identify replacements using ALA and web-based directories. With the appropriate exemption for a human subjects study obtained from the Marshall University Office of Research Integrity, the approved letter and automated OCAI survey (see Appendix B) were distributed during the first week of November. Java scripting was designed to prevent missing data from being submitted. Unfortunately, a determined respondent could submit an empty survey if he or she dismissed the Java warning. The second mailing was sent during the third week of November. The third and final mailing was sent during the second week of December. Meeting the proposed level of return (>50%) was an initial concern as email surveys are often ignored or categorized as spam by hyper-sensitive email filters. Ultimately, the number of usable surveys equaled 53% of the N of 625 and
was a strong data set with which to run the various statistical tests assigned to retrieve significant results.

Using a summative scale, the respondents were invited to think about their workplace culture and assign a numerical value that described their current organizational culture. They were told to “spend” one hundred dollars in any way they wished by assigning value to a dozen declarative statements they reviewed. They were then asked to assign a value for the same twelve statements to reflect the culture in a preferred workplace. These statements are designed to identify the culture type as values and are averaged for six content areas: *dominant characteristics, organizational leadership, management of employees, organizational glue, strategic emphasis,* and, *criteria for success* (Cameron & Quinn, 2006). The content areas or characteristics ultimately generate the dependent variables of the following culture types: clan, adhocracy, market, and hierarchy. For this study, current and preferred culture types were obtained for each to attain a total of eight dependent variables. Four demographic questions were added at the end of the OCAI to identify the independent variables of library type, gender, education levels, years in the current position, and budget. Effectiveness was also an independent variable identified by observing the differences between the current and preferred means for both library types.

By the third week of December, the survey was closed. During November and December, a total of 169 emails (27%) returned errors. As expected, personnel changes and server errors necessitated email replacements to maintain the N of 625. Ultimately, 422 surveys were returned (N = 625, 68%). Of these, 88 (14%) were deemed unusable due to missing critical data such as OCAI values and ARL status. The researcher
expected that the OCAI survey format might be problematic for respondents who cannot add values quickly or accurately mentally. Java scripting was created to calculate values for the respondents as they typed them. It was also designed to prevent empty surveys. This function could be bypassed by respondents who chose to close the warning and submit the survey before completion. As a result, 88 surveys were not included in the data analysis because they lacked too much critical information needed to calculate culture or library type. For 20 surveys, demographic data that do not impact culture calculations were not present. The total number of usable surveys was 334 (53%). The split among library type was acceptable with 165 ARL libraries (49%) and 169 non-ARL (51%). To ensure reliable results, Cronbach’s alpha was calculated for each of the six content areas. With Cameron and Quinn’s reliability studies as a guide in which the lowest level reported was .71, in this study, none scored lower than .81 which demonstrates a high level of confidence. This fact provided this researcher with the assurance that responses to the OCAI in this study are indeed reliable and consistent to the reliability reported for prior studies using this instrument (Cameron & Quinn, 2006, p. 155).

Because the pool was derived primarily from a print directory, the researcher expected that personnel changes or changes in ARL status could occur prior to its publication. There were no additions or deletions to the ARL pool during the fall of 2006; however, a startling 169 email errors were returned to the Survey Monkey tracking system. This is a sizable number representing 27% of the overall pool selected for study. Alternate emails were selected but not all were from the top administrator of the organization. Lower level managers had to be selected due to lack of available staff at
smaller institutions. This could have had an impact on the outcomes. Respondents did return an adequate number of surveys but not in a timely fashion. The 53% level of return was achieved only after second and third reminders were sent during November and December. Each time the survey was sent, several respondents exercised the “opt out” function provided by Survey Monkey which required removal from the database and retrieval of an alternate contact at their respective institutions. The responses were completely confidential and not known to the researcher to preserve anonymity.

Summary of the Findings

The statistical testing performed on the data did yield some significant differences when examining each of the four research questions posed by the researcher. In response to the first research question, the two library types returned significant differences as shown in Table 8 for the current market and preferred adhocracy cultures. When mean scores for ARL libraries are compared to non-ARL, no significant differences emerge between the two types. Mean scores for both library types reported comparable mean scores residing within the hierarchy quadrant.

The leadership roles were similar when considering the second research question for this study. Both library types reported having current leaders who exhibit the traits common to individuals leading hierarchies. Results were depicted in Table 9 showing a significant score for current market-driven and preferred innovative leadership roles. These data also show low values within the current adhocracy and preferred market quadrants. These results are consistent with findings Cameron and Quinn obtained from long-term research on the life-span of a typical organization (2006, p. 79).
To test the third research question and determine if budget is a factor that influences the culture of library organizations, two-by-three factorial ANOVA was used to uncover interaction effects. Each dependent variable for the culture type (current and preferred) was analyzed to see if budget level and library type returned significant differences. Two of the eight tests provided significant results. These data show that when there is a lack of library funding these respondents seem drawn to a clan culture while an abundance of funding seems to draw respondents to a market culture. In order to make positive change and become more effective, a leader would need to apply these results to the culture diagnosis process described in Chapter Two.

The fourth research question did not require sophisticated statistical testing. Yielding almost identical demographic results, ARL and non-ARL libraries did not appear to attract a specific age group, gender, or level of education. None of the demographic information collected from the respondents appeared to have an impact on organizational culture type or leadership roles.

Ancillary Findings

There were a few observations of a non-statistical nature that warrant mention at this time. The demographic information was exceptionally homogenous among the two library types. In spite of a slow return rate among ARL respondents during the start of the survey request process, more than half of those individuals who were queried responded during the third mailing. The breakdown of demographic information for education levels and years in the current position was also very similar. These results did provide for valid and reliable application of the statistical tests used in this study. Additionally, obtaining a response rate of 53% allowed for a strong sample of ARL and non-ARL respondents.
Gender

More than half of the respondents were female for both library types. It also does not appear that one gender is dominant within the ARL setting. When considering library type, ARLs reported 59% female and 41% male while non-ARLs reported 62% female and 38% male. Because librarianship is still a female-dominated field, the researcher expected there to be more females than males in the overall pool. According to the 2005 data tables for labor force demographics, 85% of the librarians employed in the United States are women (Statistical Abstracts, 2007) yet an ALA survey conducted in 1999 reported that 43% of all academic library directors were men (ALA, 2007). These data from this study also revealed that more men appear to be in managerial positions when compared to overall labor force figures. Among the prestigious group of research institutions, a 2002 article in the leading ACRL publication, College and Research Libraries, indicates 52% of the ARL libraries are currently directed by women. As recently as 1972, women held fewer than 5% of the directorships at these libraries (Deyrup, 2004). Deyrup celebrates the narrowing of the gender gap and asks whether these current data support the assumption that this issue has been resolved in the library field. The results appear promising until Deyrup further investigates salary and reports that male directors still tend to earn more than females by an average of 14% (p. 243). In spite of professional salary issues, the gender distribution for this study is consistent with national statistical reports for both ARL and non-ARL libraries.
Years in Current Position

There were no differences among the years in current position when compared to the other independent demographic variables. The researcher hoped to see a correlation between effectiveness and years in a managerial position in the hopes that longevity begets more effective leadership traits. These data do not provide figures to support this assumption. While the majority of respondents reported that they had been in their current positions within the 0-10 year range, the distribution was fairly even among library type and did not appear to have any significance in relation to the research questions.

Educational Attainment and Preparation

Because of the focus and prestige associated with the research-oriented library, this researcher understood that ARL institutions would be more likely to draw directors with degrees beyond the Master’s in Library Science. The responses in this study showed that almost the same number of individuals (male and female) employed in ARL and non-ARL institutions possessed second Master’s degrees, postmaster certifications or degrees and/or Doctorates. Again, the demographic breakdown of the respondents was homogenous.

According to the data for this study, the research found that non-ARL libraries are just as likely to attract or cultivate people with second Master’s degrees or doctorates. Fourteen percent of the ARL and non-ARL directors reported a second MA, and 9% of both reported a doctorate. There was also no way to relate the educational demographic data to a librarian’s leadership preparation. ARL directors and librarians are just as likely to possess advanced degrees as non-ARL librarians and directors. The assumption was
made that current library science programs neglect many central issues such as leadership training essential to every type of library organization. While the curricula may stress a series of accepted professional values, the actual practice may not be in line with espoused theory. When there is a discrepancy between the espoused values and theories-in-use, the organization’s ability to accomplish goals will be damaged (Pierce, 2004). If there is a similar correlation to library education and training, it is not evident in this study.

This researcher also cited literature in which experts stress that today’s library education may not be providing courses or addendums to the curricula appropriate to meet current leadership trends in the profession and may even be approaching a critical juncture in which educators must act (Berry, 2004; Gorman, 2004a; 2004b, 2006). The data for this study cannot refute or support the disquieting suppositions made by Berry and Gorman as no major educational attainment differences by library type were revealed. If these curricula issues are being discussed at the national level, support for these sweeping indictments remain purely anecdotal and require empirical exploration by the American Library Association division responsible for accrediting library education programs. This study cannot link professional library education, preparation, or training to effective and desirable leadership roles or culture types. Any relationship to library education deficiencies cannot be substantiated by the results discussed here.

**Competing Values**

The theoretical foundation pivotal to this study relies on the value of the human element within an organization’s culture as it relates to leadership (Crosby, 2004). Building on Schein’s assumption that organizational culture and leadership are dynamic
and connected at the most fundamental behavior levels, it is logically possible for a leader to undertake culture change once the types are identified (Schein, 1985). This study shows that ARL and non-ARL institutions are remarkably similar when compared to each other. Both groups reside primarily within the hierarchy culture and desire to reside within the clan culture quadrant. Schein says that “culture is a dynamic phenomenon that surrounds us at all times” while also possessing “a set of structures, routines, rules, and norms that guide and constrain behavior” (p. 1). Significant differences among the two were not identified but the OCAI results did provide diagnostic information allowing for positive organizational change.

Conclusions and Implications

Conclusions

While the instrument selected for this study was statistically reliable and measured precisely what it said it would measure, these data compiled for this study did not reveal significant differences among ARL and non-ARL library directors. In review, the tests conducted for the four research questions and the ancillary question regarding organizational effectiveness demonstrated the following:

- no significant differences in organizational culture between ARL and non-ARL library directors.
- no significant differences in leadership roles between ARL and non-ARL library directors.
- significant evidence that budget had an impact on the preferred clan and market cultures for ARL and non-ARL libraries.
• no significant evidence that demographic information collected in this study had an impact on the organizational culture of ARL and non-ARL libraries.
• significant evidence that both ARL and non-ARL libraries exhibited culture characteristics consistent with ineffective organizations.

Ancillary findings also indicated no statistical means for linking educational attainment to library effectiveness or formal library education and leadership preparation. As discussed, the literature on this topic is mainly subjective and requires empirical study by the appropriate organizations.

**Implications**

This study was conducted at the national level and did reveal small differences between the current and preferred culture types for both the ARL and non-ARL groups. While differences between library types were not significant, the differences between the current and preferred variables allow for an interpretation of organizational effectiveness.

The incongruent culture analysis revealed the presence of dysfunctional organizational climates among both library types (Cameron & Quinn, 2006, p. 74). This analysis can aid a director who conducts the OCAI at his or her library in implementing Cameron and Quinn’s six steps to enacting organizational change (2006, pp. 90-102). With the identification of incongruous cultures for ARL and non-ARL libraries, the research identifies discrepancies between current and preferred congruent cultures for both groups. These data support the application of the change process steps to achieve a healthy organizational goal. As per the diagnosis of an organization, a leader can move toward a more desirable culture type to improve the library’s effectiveness (p. 101).
Kaarst-Brown et al. studied the symbiotic relationship between a library’s organizational culture and its effectiveness (Kaarts-Brown, et al., 2004, p. 33). Moving away from traditional hierarchies may allow libraries to stay abreast of information technology trends and their application to faculty and student research and curriculum support. Edwards even suggests that “technology is the most potent change agent” among academic libraries (1997). Meeting library user needs in this environment requires that a skilled director must shift his or her leadership roles to address internal and external forces that influence the competing values within all four cultures—the clan, adhocracy, market, and hierarchy (p. 35).

Recommendations for Further Study

A review of the findings in this study, the current literature in organizational culture, and the literature in library science aid in the following recommendations for further study:

1. Selection of one ARL institution and one non-ARL institution of similar size for an in-depth analysis that would provide a comparison of organizational culture and leadership roles.

   a. The lack of significant differences between ARL and non-ARL library cultures and leadership roles suggests an opportunity for further study in which deeper qualitative data may reveal interesting and meaningful trends.

   b. If a pair of institutions are scrutinized, definitive demographic data could be obtained including longitudinal budget information that may link budget to culture and overall effectiveness. If found, the link would
support Kaarst-Brown et al. and their assumption that “organizational culture can be leveraged as a strategic asset to attract staff, create favorable assessments by administrators and funders, and cast library institutions in a positive light” (2004, p. 33).

c. The supplementary competing values instrument developed by Cameron and Quinn, entitled the Management Skills Assessment Instrument (MSAI), could be conducted to identify the relationship management skills may have to the culture process. Its qualitative components accompany the OCAI’s quantitative results and provide more cause and effect data for a thorough organizational analysis.

2. ARL budget trends could be studied to identify how, why, and if ARL directors possess leadership traits unique to their research mission.

   a. This study’s data provided a significant link between budget and preferred culture type. This study revealed that higher budget levels may spark the desire for a market culture. This hard driving, competitive, product-driven leader who is influenced by external (market-driven) forces may be the key element in a library director’s ability to mitigate budget constraints. More study is needed in this area to support these ancillary findings.

   b. The ARL respondents reported budget increases since 2001 that more than doubled those reported by the non-ARL institutions yet both ARL and non-ARL respondents preferred the market culture when budget levels were ample. This is a finding that requires further study to determine if
non-ARL libraries are just as competitive and externally motivated as their research counterparts.

3. This project emphasized the current and desired culture types primarily among library directors; however, the opportunity to study the perceptions of the librarians and support staff in the organization may also provide results that are worthy of additional investigation.
   a. The perceptions of the leader may dramatically differ from those shared by the subordinates.
   b. A thorough assessment of one organization’s culture would provide a researcher with a hearty set of variables with which to work and is another option for further study.

4. This study also spent a great deal of effort in identifying cultures but it did not touch on why people feel the way they do.
   a. What influences the culture perception? The MSAI requires that each respondent reveal personal characteristics that contribute to a healthy organization.
   b. This supplement to the OCAI provides a more detailed assessment of an organization’s climate with the tools to make positive change, and is an opportunity for a future national study.

5. Further study is warranted to determine if there are links between professional library preparation and training programs and incongruent or ineffective library cultures.
a. In previous studies in which the OCAI and MSAI were used, the research was conducted over the course of two or more years (Pierce, 2004). The MSAI is designed to aid entire business organizations in the change process and is a lengthy assessment requiring qualitative interviewing skills to conduct properly.

b. It is possible the addition of MSAI data would allow this researcher to make concrete connections to the assumptions discussed in Chapter One; however, time and scalability were major factors in choosing to omit this secondary analysis. Researchers such as James Pierce implemented both the OCAI and MSAI in 2004 to study the impact that professional development programs have on the culture of officers in the United States Army (Pierce, 2004).

c. Pierce identified a link between professional training and culture for Army Officers in his dissertation research project in 2004. By using the OCAI and MSAI in tandem, data were compiled which provided the support for his findings (Pierce, 2004).

d. Detailed qualitative interviewing and longitudinal study are required to formulate an unassailable link so that positive changes in curriculum or professional practice can follow.

Summary

This study’s title, *Organizational Leadership in Academic Libraries: Identifying Culture Types and Leadership Roles*, is accurate as culture types and leadership roles were successfully identified for the selected pool of academic libraries. Unfortunately,
significant differences between research and non-research libraries espoused by the researcher cannot be confirmed by these data obtained from this national inquiry. These data show that the selected ARL and non-ARL library directors and librarians are situated in current hierarchical cultures that are remarkably similar while yearning for the same thing: a clan culture. Both demonstrate incongruence between the preferred clan and market cultures that insinuate the presence of an ineffective organizational climate. When budget is leveraged as an independent variable, both ARL and non-ARL library respondents yearned for market cultures when budgets were high and clan cultures when budgets were low.

Can the lack of differences between ARL and non-ARL culture types and leadership roles identified in this study be leveraged as a tactical advantage? Kaarst-Brown, et al., advocate that an organization’s culture is an asset that can be used to meet a variety of library goals (2004, p. 33). An incorrect assumption was made by the researcher in this study that gave deference to the effectiveness of ARL libraries simply due to their perceived institutional prestige and higher budget levels. These data showed the presence of incongruence and ineffectiveness within ARL institutions in spite of the initial high regard for their status among the academic library profession.

Non-research institutions can also deduce a few affirming assumptions from the analysis of this study’s data. Because non-ARL culture and leadership roles are not significantly different from those of ARL libraries, non-ARL libraries already possess the tools: (1) to cultivate effective leaders and organizations, (2) to meet library goals, (3) to attract quality personnel, and, (4) to compete at the same prestigious levels enjoyed by their research counterparts. As Kaarst-Brown et al. stress, organizational culture may be a
“strategic asset” that can be used during the recruitment process, the fundraising process, and the accreditation process to realize organizational success and achieve library goals (1999, 2004). With the literature currently discussing severe budget cuts among publicly-funded institutions, the library leader’s role is more important than ever before. Directors must emulate the values and leadership roles that influence culture to creatively and effectively address funding and inflation issues (Carver, 2004; Topper, 2004; Coyle, 2005; Lyall & Sell, 2006).

This study may also add to the discussion regarding a crisis in library education in which no links were found to support the claims in the literature that preparation and training are in a “crisis mode” (Berry, 2004; Gorman, 2004a; 2004b, 2006). With anecdotal information being accepted as fact, this study implies that empirical research to support or refute editorial comments among library leaders is needed—especially when those individuals are leaders within the organization that is responsible for the ongoing accreditation of the 48 library schools in the United States. In spite of minor significant results, these data reveal some interesting observations in regard to academic library culture and leadership roles which this researcher hopes will have a minor impact on the literature of the profession.
REFERENCES

Retrieved January 10, 2006, from
http://www.libraryjournal.com/article/CA379265.html?display=searchResults&stt
=001&text=uc%2Delsevier+deal+stops+inflation

Retrieved December 16, 2005, from
http://www.ala.org/ala/acrl/acrlstandards/standardslibraries.htm

classified list of libraries in the United States and Canada, with personnel and


college & Research Library News, 56(4), 245-257.

http://www.ala.org/ala/acrl/acrlissues/scholarlycomm/scholarlycommunicationtoo
llkit/librarians/librarianeconomics.htm

http://www.arl.org/arl/arlfacts.html


Hebel, S. (2006). Outlook for higher education in the state legislatures: Alabama, California, Georgia, Idaho, Indiana, Iowa, Kansas, Minnesota, Mississippi, New


APPENDIX A

Email Cover Letter to Participants
November 1, 2006

Dear Library Dean or Director,

You are invited to participate in a study entitled “Organizational leadership in academic libraries: Identifying culture types and leadership roles.” I am conducting this research as part of my dissertation for the Ed.D. degree in Educational Leadership at Marshall University.

The purpose of this study is to investigate academic library organizational culture types and managerial leadership roles for research and non-research institutions within higher education. Participating in this study will aid in the completion of my project while building on the literature in the fields of library science and leadership studies.

If you choose to assist, your participation will consist of the completion of a 24 item web survey which takes approximately 10 minutes to complete. As a participant, your responses will be confidential, and there are no risks involved in taking this survey.

You can access the web-based survey at:
http://www.marshall.edu/ a new address will be provided here/

If you have any questions regarding this survey, please do not hesitate to contact me at 304/696-6613 or brooks@marshall.edu. This study received an “exempt” status from the Marshall University IRB. If you have any questions regarding your rights as a participant in a research study, you may contact Dr. Stephen Cooper, Marshall University IRB #2 Chair, at 304/696-7320.

I greatly appreciate your participation in this study, and thank you for your time, consideration, and effort.

Sincerely,

Dennis M. Anderson, Ed.D., Principal Investigator
andersond@marshall.edu

Monica G. Brooks, Ed.D. Candidate/Co-Investigator
brooks@marshall.edu
APPENDIX B

Web-Based Version of the Organizational Culture Assessment Instrument (OCAI) and Author-Generated Demographic Information
Informed Consent

Project Title: Organizational leadership in academic libraries: Identifying culture types and leadership roles

Principal Investigator: Dr. Dennis M. Anderson, Distinguished Professor, Marshall University Graduate College, 100 Angus E. Peyton Drive, South Charleston, WV 25303, 304-746-8989, andersond@marshall.edu.

Co-Investigator: Monica Brooks, One John Marshall Drive, Huntington, WV 25755, 304-696-6613, brooks@marshall.edu.

Your participation in this study is voluntary and confidential. You may discontinue the survey and exit at any time. Information will not be disclosed without your permission. Only the Principal and Co-investigator will see the data.

Thank you for your valuable time and cooperation.

Data are returned to the researcher without your personal information. When you click NEXT >> the survey will begin.

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list. [RemoveLink]

NEXT>>
Organizational Culture Assessment Instrument (OCAI)

Instructions:

1) For the yellow column, think about your workplace and assign a numerical value that best describes the current culture of your organization. Imagine you have 100 dollars to "spend" for each column. Distribute the dollars where you deem appropriate.

2) Just type over the 0 in the box and/or leave it there if you decide 0 is an appropriate value for a characteristic.

3) For the pink column, also provide a numerical value for each question that best describes how you would prefer the culture to be. Again, distribute your $100 to demonstrate how you wish your workplace was.

4) You do not have to assign a value for every category. You can leave some of the boxes with a 0 value as long as the column adds up to 100.

<table>
<thead>
<tr>
<th>Dominant Characteristics</th>
<th>Current</th>
<th>Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The organization is a very personal place, it is like an extended family. People seem to share a lot of themselves</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>2. The organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>3. The organization is very results-oriented. A major concern is with getting the job done. People are very competitive and achievement-oriented.</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td>4. The organization is a very controlled and structured place. Formal procedures generally govern what people do.</td>
<td>45</td>
<td>0</td>
</tr>
</tbody>
</table>

TOTAL (Each column must equal 100) | 100     | 100       |

Is your library a member of the Association of Research Libraries (ARL)? ☐ Yes ☐ No
### Dominant Characteristics

1. The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.
2. The organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.
3. The organization is very results-oriented. A major concern is with getting the job done. People are very competitive and achievement-oriented.
4. The organization is a very controlled and structured place. Formal procedures generally govern what people do.

<table>
<thead>
<tr>
<th>Now</th>
<th>Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Organizational Leadership

5. The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing.
6. The leadership in the organization is generally considered to exemplify entrepreneurship, innovation, or risk taking.
7. The leadership in the organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.
8. The leadership in the organization is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.

<table>
<thead>
<tr>
<th>Now</th>
<th>Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Management of Employees

9. The management style of the organization is characterized by teamwork, consensus, and participation.
10. The management style of the organization is characterized by individual risk taking, innovation, freedom, and uniqueness.
11. The management style of the organization is characterized by hard-driving competitiveness, high-demand, and achievement.
12. The management style of the organization is characterized by security of employment, conformity, predictability, and stability in relationships.

<table>
<thead>
<tr>
<th>Now</th>
<th>Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Organization Glue

13. The glue that holds the organization together is loyalty and mutual trust. Commitment to this organization runs high.
14. The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being on the cutting edge.
15. The glue that holds the organization together is the emphasis on achievement and goal accomplishment.
16. The glue that holds the organization together is formal rules and policies. Maintaining a smooth-running organization is important.

<table>
<thead>
<tr>
<th>Now</th>
<th>Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
### Strategic Emphases

<table>
<thead>
<tr>
<th>17. The organization emphasizes human development. High trust, openness, and participation persist.</th>
<th>Now</th>
<th>Preferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.</td>
<td>Now</td>
<td>Preferred</td>
</tr>
<tr>
<td>19. The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.</td>
<td>Now</td>
<td>Preferred</td>
</tr>
<tr>
<td>20. The organization emphasizes permanence and stability. Efficiency, control, and smooth operations are important.</td>
<td>Now</td>
<td>Preferred</td>
</tr>
</tbody>
</table>

TOTAL (Each column must equal 100) | 0 | 0 |

### Criteria of Success

| 21. The organization defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people. | Now | Preferred |
| 22. The organization defines success on the basis of having the most unique or newest products. It is a product leader and innovator. | Now | Preferred |
| 23. The organization defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key. | Now | Preferred |
| 24. The organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical. | Now | Preferred |

TOTAL (Each column must equal 100) | 0 | 0 |

### Demographic Information

| 25. Gender: | Female | Male |

<table>
<thead>
<tr>
<th>26. Education (check all that apply):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's Degree</td>
</tr>
<tr>
<td>Master of Library Science</td>
</tr>
<tr>
<td>Master's Degree (non-MLS)</td>
</tr>
<tr>
<td>Educational Specialist or Postmaster Certificate</td>
</tr>
<tr>
<td>Doctor's Degree</td>
</tr>
<tr>
<td>Postdoctoral Degree</td>
</tr>
<tr>
<td>Other (please list)</td>
</tr>
</tbody>
</table>

| 27. Years in current position: | 0-5 | 6-10 | 11-15 | 16-20 | 21 & up |

<table>
<thead>
<tr>
<th>28. Check the item that best describes the condition of your library budget since 2001:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased</td>
</tr>
<tr>
<td>Remained the same</td>
</tr>
<tr>
<td>1% to 3% reduction</td>
</tr>
<tr>
<td>4% to 6% reduction</td>
</tr>
</tbody>
</table>
☐ 7% or higher reduction

☑ DID YOU MISS ANY CATEGORIES?
☑ DO ALL YOUR COLUMNS ADD UP TO 100 EACH?
☑ IF SO, YOU ARE READY TO SUBMIT!

Submit OCAI
APPENDIX C

Permission to Use the OCAI from Dr. Kim S. Cameron
Dear Monica:

Thank you very much for your note and inquiry. You may certainly have permission to use the OCAI survey instrument in your dissertation research. Best wishes in your project!

Kim

-----Original Message-----
From: Brooks, Monica [mailto:brooks@marshall.edu]
Sent: Wednesday, May 31, 2006 3:05 PM
To: kim_cameron@umich.edu
Cc: Brooks, Monica
Subject: Use of the OCAI for dissertation study

Hello, Dr. Cameron,

Please accept this email as a formal request for permission to utilize the Organizational Culture Assessment Instrument (OCAI) to support a dissertation research project at Marshall University.

I am currently a doctoral student in Leadership Studies with a minor in Industrial Employee Relations at Marshall in Huntington, West Virginia. I am in the process of writing the first three chapters of my dissertation in preparation for my prospectus meeting this summer and have become very interested in using the OCAI.

My dissertation will be focusing on the organizational culture of academic libraries in research and non-research institutions. The 2006 edition of your book, _Diagnosing and Changing Organizational Culture_, has been enlightening and incredibly helpful. The respondent pool is tentatively a random sample of Association of Research Libraries (ARL) compared to medium-sized non-research academic libraries similar to Marshall as identified by the new Carnegie classifications. I should have 250 in my pool pending committee and MLU Institutional Research Board approval. The concept is still preliminary, but I am hoping to utilize the OCAI instrument to identify current culture trends among both groups in the hopes some interesting types, discrepancies, or congruencies will emerge.

With your permission as copyright holder, may I please administer the OCAI to these respondents? Additionally, if you approve, my intention is to administer it via email using our secure web interface at Marshall. If that format is not acceptable, I will work with a traditional print format of course. Upon completion, I will also be happy to send you a copy of my findings.

I sincerely enjoyed your book and feel the theories and examples you and Dr. Quinn provided can be applied to the field of librarianship. Thank-you for your time and consideration.

Sincerely,

Monica

APPENDIX D

Approval Letter from the Marshall University Office of Research Integrity, Institutional Research Board #2
Dear Library Dean or Director,

You are invited to participate in a study entitled “Organizational leadership in academic libraries: Identifying culture types and leadership roles.” I am conducting this research as part of my dissertation for the Ed.D. degree in Educational Leadership at Marshall University.

The purpose of this study is to investigate academic library organizational culture types and managerial leadership roles for research and non-research institutions within higher education. Participating in this study will aid in the completion of my project while building on the literature in the fields of library science and leadership studies.

If you choose to assist, your participation will consist of the completion of a 24 item web survey which takes approximately 10 minutes to complete. A total of 625 administrators employed in 210 academic libraries in the United States will be invited to participate. As a participant, your responses will be confidential and there are no risks involved in taking this survey. Participation is completely voluntary and you may exit or discontinue the survey at any time without penalty.

You can access the web-based survey at: http://www.marshall.edu/ill/OCAI/

If you have any questions regarding this survey, please do not hesitate to contact me at 304/696-6613 or brooks@marshall.edu. This study received an “exempt” status from the Marshall University IRB. If you have any questions regarding your rights as a participant in a research study, you may contact Dr. Stephen Cooper, Marshall University IRB #2 Chair, at 304/696-7320.

I greatly appreciate your participation in this study, and thank you for your time, consideration, and effort.

Sincerely,

Demos M. Anerson, Ed.D., Principal Investigator
andersom@marshall.edu

Monica G. Brooks, Ed.D. Candidate/Co-Investigator
brooks@marshall.edu
Office of Research Integrity
Institutional Review Board

Wednesday, October 18, 2006

Dennis M. Anderson, Ed.D
Leadership Studies
100 Angus E. Peyton Dr.
Marshall University Graduate School
South Charleston, WV, 25303

RE: IRB Study # EX07-00:14  At: Marshall IRB 2

Protocol Title:
Organizational Leadership in Academic Libraries: Identifying Culture Types and Leadership Roles

Expiration Date: 10/17/2007
Our Internal #: 2875
Type of Change: (Other) Exempted
Expedited ?: 
Date of Change: 10/18/2006
Date Received: 10/18/2006
On Meeting Date: 

Description: In accordance with 45 CFR 46.101(b)(2), the above study and informed consent were granted Exempted approval today by the Marshall University IRB#2 Chair for the period of 12 months. The approval will expire 10/17/07. A continuing review request for this study must be submitted no later than 30 days prior to the expiration date. This study is for student Monica Brooks.

The purpose of the study is to investigate and compare the library's organizational culture type and managerial leadership roles among research and non-research academic libraries.

Respectfully yours,

Stephen D. Cooper, Ph.D.
Marshall University IRB#2 Chairperson
APPENDIX E

Null Representation of the Research Questions for Statistical Testing Purposes
Null Hypotheses

1. There are no significant differences between ARL and non-ARL libraries in organizational culture.

2. There are no significant differences between ARL and non-ARL libraries in leadership roles.

3. There are no significant differences between ARL and non-ARL libraries for budget impact on organizational culture.

4. There are no significant differences between current and preferred organizational culture for ARL libraries.

5. There are no significant differences between current and preferred organizational culture for non-ARL libraries.
APPENDIX F

Curriculum Vitae
Monica García Brooks

Huntington, West Virginia 25704
Office Phone: 304-696-6613
E-mail: Brooks@marshall.edu
Personal webpage: http://users.marshall.edu/~brooks/

EDUCATION


WEST VIRGINIA UNIVERSITY, Morgantown, West Virginia. Bachelor of Arts (B.A.) in English, granted May 1988. Emphasis in English Literature, Spanish, and Communications; member of University Marching Band, Varsity Pep Band, and Symphonic Band, ΚΚΨ service fraternity, and Women's Rugby Football Club.

EXPERIENCE


Rank
Professor/Librarian IV, spring 2006 to present; non-tenure, 12-month librarian-track appointment with administrative faculty status.

Administration
Associate Dean of Libraries, September 1996 to present. Report to the Dean of Libraries; assists dean in preparation of internal and external reports and planning documents for various purposes such as IPEDS, the American Library Association, and program accreditation reviews; handle personnel processing and management for the classified staff and faculty including recruitment, evaluations, hiring, and firing; assume library administrative duties when the dean is absent; coordinate the planning and integration of library information resources which will include an upcoming migration to a new library system; direct the Public Service and Information Delivery Services departments which include direct supervision of nine professional librarians; provide faculty/staff training initiatives within the library unit; provide faculty/staff/student training outside the library unit; oversee/maintain several university web sites; coordinate electronic subscriptions; assist in the management of vendor accounts and maintenance agreements via PALINET and other brokers; assist in the planning and purchasing of equipment; aid in the over-all technology and equipment planning for the university libraries including the Marshall University Graduate College Library, development and training needs. Coordinate the Drinko Library art exhibit program by soliciting exhibits, coordinating events, and hanging/disassembling shows. Participate in several campus committees, councils, organizations and projects including the Associate Deans Council, Faculty Women's Association, Enrollment Management.
admissions and recruitment efforts, and the Center for the Study of Ethnicity and Gender in Appalachia. Assisted in establishing the Women’s Studies Minor, the Public Library Technology Certificate Program, and the School Library Media Certification. Former titles include: Associate Dean for Technology, Services and Planning and Head of Administrative Services and Technology.

**Interim Dean of Libraries**, January 15, 1999 to August 1, 2000. In addition to duties in technology services and planning, assumed duties of library dean during search for the newly defined position; managed the libraries’ daily operations; assumed all standing committee responsibilities; prepared and carried-out the 1999-2000 budget; directed two significant projects: 1) acquisition of JSTOR, the comprehensive digital journal storage collection and 2) acquisition of ILLIAD, the web-based automated interlibrary loan/document delivery system; administered ongoing personnel duties and responsibilities.

**Librarianship**

**Public Services Librarian/Legal Reference**, June 1995 to September 1996. Performed public service for faculty, students and staff; maintained legal collections; served as liaison to Paralegal and Criminal Justice students; conducted library orientation tours and implemented library webpages. Assisted in the initial planning for the John Deaver Drinko Library—a project that became significantly more involved upon moving into administration in 1996. Building construction details, equipment planning, staff coordination, and collection management issues were essential to the success of the Drinko building project.

**Teaching**

**Public Library Technology Certificate & Major Program Coordinator, Marshall Community and Technical College**, March 2006 – present. Report to the Associate Dean of General Studies; assist in the creation and administration of the PLT program that is among the first five programs at Marshall delivered exclusively and entirely online; coordinate PLT Advisory Board meetings and membership; assist in accreditation preparation and renewal process for PLT courses; obtain, maintain, and evaluate PLT faculty; aid in the development and evaluation of PLT courses; advise PLT students; and assist with the admissions and recruitment process for the MCTC programs.

**Adjunct Faculty, Marshall Community and Technical College, Internet Specialization Program (ISP)**, January 1997 to May 2001. Taught one to three classroom sections of the 1 credit hour course entitled Research on the Internet; maintained/enhanced the course web pages used in the course; assisted in the planning and development of other ISP courses as the program transitioned from Computer Technology to Information Technology; created the WebCT version of the course; updated and maintained the online section of the course via the WebCT interface.

DRAIN-JORDAN LIBRARY, West Virginia State University, (formerly WV State College), Institute, West Virginia 25112-1002. (304) 766-3116.
Acting Library Director, April 1995 to June 1995. Appointed along with the Head of Reference to perform director's duties, assist in the search for a viable candidate and facilitate the transition of new administration; assisted in the completion of documents for a North Central Accreditation Team visit during this short tenure.

Public Services Librarian - Circulation, August 1990 to April 1995. Supervised and maintained all activities of the automated Circulation Department; performed reference and public services for faculty, students, staff, and other library users; conducted library orientation tours; performed complex searches on the Internet and CD-ROM databases; served as collection development liaison to the English and Humanities divisions.

Part-time Faculty/Community College, August 1991 to May 1995. Taught College 101, a required course for the Community College Division Associate's Degree program designed for nontraditional students; provided library content to course text and coordinated library unit for all sections of this program.

PROFESSIONAL ACTIVITIES

Courses Developed and Taught

Public Library Capstone Experience (PLT299) - provides the capstone experience in which students will perform an internship in the field while developing and refining their general education portfolio; the portfolio will consist of samples of their work garnered from the field experience and each library course within the program. (PR: Instructor permission). Developed on WebCT for 100% online delivery, taught each semester.

Public Library Reference & Advanced Reference (PLT230e & PLT235e) - study of basic reference sources for public libraries with emphasis on library materials evaluation, the reference interview, search strategies and impact of new technology on libraries. Advanced course concentrates on enhancement of search, writing, and reference interview skills and the development of interactive information services weblog. Developed on WebCT for 100% online delivery, taught annually during the summer and fall terms.

Public Library Administration and Organization (PLT240e) - focus on principles of administration and organization for public libraries, including planning, policy development, financial management, personnel management, and state and national library laws. Developed on WebCT for 100% online delivery, taught annually during the spring term.

Instructional Technology of Libraries Special Topics/Independent Study (ITL480 and ITL485) - taught on demand to provide opportunities for students and/or provide clinical experience for school media specialists desiring continuing education credits, certification, or re-certification. ITL480: Collection Management Project for the Barboursville Public Library conducted during spring 2004.


University 101 (UNI101): New Student Seminar - taught fall 2002 for University College. Introduction to college life intended for freshmen and new transfer students to encourage full use of university resources and improve retention.

English Special Topics (ENG580): International Women Writers - developed and taught spring 1999 with Dr. Amy E. Hudock. Literature course consisting of eight weeks of literature content and eight weeks of web development to create a Webliography and showcase student research.

Publications


Presentations

*Bifurcate to Survive!* Workshop based on the article of the same name by Drew Racine conducted for the faculty and staff of the West Virginia University Libraries, Morgantown, WV, November 17, 2006.


*Teach Act Summary & the “Lucky13” Best Practices for Faculty,* copyright seminar for the Bluefield State College faculty, Bluefield State College, Bluefield, WV, November 3, 3006.

*Meeting Rural Library Workforce Needs in the Hills of West Virginia,* poster session for EDUCAUSE 2006 in Dallas, Texas, October 9-12, 2006.

*Librarian as Scholar? If I can do it, so can you!* for the West Virginia Library Association Annual Conference, Huntington, WV, October 24, 2006.

*Public academic libraries and a regulated academy: Is there an opening for an entrepreneurial spirit?* Presentation with Dr. Dennis M. Anderson, Distinguished Professor, for the Education and Law Policy Forum National Student Conference, University of Georgia, Athens, Georgia, September 30, 2006.
Revelations, a dramatic reading by Carrie Kline, former Rockefeller Scholar in the MU Center for the Study of Ethnicity and Gender in Appalachia, presented at Slippery Rock University for the Women’s Studies Association, Slippery Rock, PA, October, 2005.

The Doc Student Portfolio: A Meaningful Alternative to Residency and Comps Theme: Challenging the Present, with Carol Perry, Ericka Zimmerman, & Dr. Teresa Eagle, for the 59th National Council of Professors of Educational Administration (NCPEA) Summer Conference, Washington, D.C., July, 2005

La Movida a las Montañas en Appalachia: Investigating Hispanic College-Going Rates and Philanthropic Giving, paper presented for the Faces of Appalachia panel, for the upcoming annual Appalachian Studies Association Conference in Radford, VA in March, 2005.

The Use of Computer-mediation Simulation to Teach College Management, with Dr. Dennis P. Prisk, for the 45th Annual Conference, Southern Regional Council on Educational Administration (SRCEA), Raleigh, NC, November, 2004.


Web-Based Workforce Development: A Public Library Training Model, presented with Heather Campbell & Carol Perry, for the WV State joint Information Technology Conference, Charleston, WV, August, 2004.

The Portfolio Process Q&A, with Dr. Dennis P. Prisk, Carol Perry & Ericka Zimmerman, presented at the Marshall University Graduate College Leadership Studies Doctoral Student Seminar, Charleston, WV, spring 2004

Copyright at Marshall University, compliance seminar discussing the new MU Copyright Policy, Teach Act provisions, and Fair Use in the classroom presented with David W. Johnson, Executive Director of Distributed Education, on behalf of the Copyright Sub-Committee of the Information Technology Committee (ITC). Presented several times during 2003-04.

Public Library Certification Program: Questions and Answers, with Carol Perry, presented at the West Virginia Libraries Association Annual Conference, the Greenbrier, December, 2003 and the WVLA Spring Fling meeting, Flatwoods, WV, April, 2004.

Revelations, a dramatic reading by Carrie Kline, former Rockefeller Scholar in the MU Center for the Study of Ethnicity and Gender in Appalachia. Presented at the Center for the Study of Ethnicity and Gender in Appalachia Webs of Diversity online conference, Huntington, WV, March 2003.


Connecting Our WV Libraries, OCLC Question and Answer Session, with Barbara McWilliams, OCLC, and Byron Holdiman, PALINET, Morgantown, WV, September 2002.

Virtual Mountains to Climb: Challenges in Academic School Library Collaboration to Develop a School Library Media Program in West Virginia, with Dr. Celene Seymour, American Library Association Annual Conference, Atlanta, GA, June 2002.

Copyright Do’s and Don’ts Panel Discussion, panelist, Regional Association of Colleges and Research Libraries, Morgantown, WV, May 2002.

Continuing Education Roundtable, presenter with Library Science school representatives from the University of South Carolina and Clarion University, West Virginia Libraries Association, Spring Fling meeting, Flatwoods, WV, April 2002.

WV Technology Convergence, panelist and moderator, guest speaker, Allen Taylor of MU Information Technology division, Frances O’Brien, WV University, Tammy Richards, WV Library Commission, and Jane Hughes, Kanawha County Public Library, WVLA Spring Fling, April 2002.

Revelations, a dramatic reading by Carrie Kline, former Rockefeller Scholar in the MU Center for the Study of Ethnicity and Gender in Appalachia. Presented at the Appalachian Studies Association annual meeting, Helen, GA, March 2002.

Projects
Leadership Studies Doctoral Student Portfolio, successfully defended June 7, 2005 (Online Portfolio)

Digital Collection Development and Maintenance: A campus-wide endeavor in which the digital media collections from units such as University Communications, the Department of Art, Special Collections, and others combine information storage and retrieval efforts to enhance accessibility of unique collections. Software acquisition, and a campus-wide training and development program will be implemented during FY 2006-07.

PLT Program: Development of a 30 hour undergraduate certification program and major in General Studies to help train existing and future paraprofessionals in WV public libraries in conjunction with the Community and Technical College, WV Library Commission, and MU Community and Technical College. Projects include seeking NCA accreditation, ongoing training for adjunct faculty, and finalization of the major courses. The PLT Certificate and Major for the Associate of Applied Science degree are two of the five online degrees that MU offers completely online. The Southern Growth Policies Board recognized the PLT program as a 2005 Regional Innovator. The award was presented at the June 2005 conference entitled Rising Together: The Summit on the Rural South.

ITL Program: Development of School Library Media Specialization Curriculum at the graduate level 2000-2004, with Dr. Celene Seymour et. al. Reinstatement of former program. New emphasis on technology and online delivery of courses using WebCT.

Copyright at MU: Development and revision of existing Copyright Policies for campus-wide dissemination and compliance. Currently serving as the Information Technology Digital Millennium Copyright Act (DMCA) compliance officer and Chair of the Copyright Committee.

Personal Research Interests
La Carpa Garcia: Mexican Tent Show, 1914-1947: Research on my family's show that was provided to the Witte Museum and Hertzberg Circus Museum in San Antonio, TX. The projects entailed gathering images, scanning materials, providing documentation, and working with my family and the museum
curators to provide support for the carpa exhibits. The exhibits ran from 1998 to 2003 at the Hertzberg and during summer 2004 at the Witte Museum.

**A Century of Progress Homes of Tomorrow from the 1933 Chicago World’s Fair:** Provided research materials for a grant obtained by Dr. Kathy Seelinger, from the WV Department of Culture and History in 1996, to restore the Good Housekeeping Stran-Steel Home in Huntington, WV. Webpages are available to provide World’s Fair researchers with information on this unique exhibit that ran from 1933 to 1935. The research on this topic has been showcased in several publications including the November 2006 issue of Structure Magazine, New York’s Newsday Magazine and a recent architectural catalog and encyclopedia of Wirt C. Rowland’s works published by the Historical Society of Clinton, Michigan.

### PROFESSIONAL PARTICIPATION AND RECOGNITION, 2002-2007

**Conference Attendance and Participation**
- EDUCAUSE, Dallas, TX, October 9-12, 2006, presenter.
- American Libraries Association (ALA) Annual Conference, Chicago, IL, June 2005, attendee and committee participant.
- ASA Annual Conference in Radford, Virginia, March 2005, presenter.
- Western Pennsylvania/West Virginia Regional Chapter of the Association of College and Research Libraries (WP/WVRC-ACRL ) meeting, Bethany, WV, spring, 2004, attendee.
- WVLA Annual Conference, the Greenbrier, December 2003, presenter.
- ASA Annual Conference, Richmond, KY, March 2003, presenter.
- Appalachia Wired: Webs of Diversity, Sponsored by the Center for the Study of Ethnicity and Gender in Appalachia, Huntington, WV, March, 2003, presenter.
- WP/WVRC-ACRL meeting, Pittsburgh, PA, February, 2003, presenter.
- ALA Midwinter Conference, Philadelphia, PA, January, 2003, ALA Councilor and new member of the Distance Library Services Section/ACRL.
- WVLA Annual Conference, Pipestem State Park, WV, October 2002, presenter.

### Awards
- Recipient of the Southern Growth Policies Board Regional Innovator award for the Public Library Technology Certificate Program, 2005
- Recognized as an Appalachian Educational Laboratory Co-Venture Minority Research Fellow, summer 2004
- Recipient of the MELUS Service Award, 2002

**Current State, Regional, & National Association Memberships**
- American Association of University Professors (AAUP)
- Appalachian Studies Association (ASA)
- Multi-Ethnic Literature of the United States (MELUS)
- West Virginia Library Association (WVLA)
- Western Pennsylvania/West Virginia Regional Chapter of the Association of College and Research Libraries (WPWVC/ACRL)

**Current Marshall University Committees**
- Associate Deans Council
- Center for the Study of Ethnicity and Gender in Appalachia
- Copyright Sub-Committee, Chair and University DMCA Representative
- Drinko Art Acquisition Committee, Chair
- Electronic Publishing Oversight Committee
- Faculty Development Committee for Online and Multimedia Instruction
- Information Technology Council
- Information Technology Strategic Planning Committee
- Library Dean's Advisory Group
- Library Faculty Organization
- NCA Criterion III, 3rd Committee, Co-Chair

**Current Board & Governance Memberships**
- Center for the Study of Ethnicity & Gender in Appalachia Board Member 2000-present
- Marshall Community & Technical College Public Library Technology Advisory Board, 2006-present
- Marshall University Yeager Scholars Steering Committee, 2006-present
- Multi-Ethnic Literature of the United States, Editorial Board Member, 2000-present

**Current Community Service Committees & Memberships**
- United Daughters of the Confederacy, Border Rangers Chapter Member/Webmaster, 2003-present.
- West Virginia State Society Daughters of the American Revolution, Westmoreland Chapter, Member & State Officer/Webmaster, 1996-present.
- West Virginia University Marching Band Alumni Association, 1988-present.

**Former Community Service, MU/Association Committees, & Board Memberships**
- American Library Association Council, WV Chapter Councilor 1999-2003
- BASF Community Advisory Panel, 1999-2003
- MU Core Curriculum Committee, 2005-2006
- West Virginia Libraries Association, Executive Board Member 1999-2003
- West Virginia Network, Policy Board Member 2001-2004

*References Available Upon Request*