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Advancing Women In Leadership

The Career Path and Profile of Women Chief Academic Officers in Public Community Colleges

Cynthia B. McKenney, Ph.D.

Brent D. Cejda, Ph.D.

MCKENNEY & CEJDA, SUMMER, 2001

"...it would appear that for women a variety of credentials and experiences have become the medium of exchange."

The position of chief academic officer (CAO) is complex and demanding. The holders of this office are generally recognized as the highest-ranking academic administrator of their institution and are charged with directing its academic mission. They are looked to for leadership, vision, and wisdom. This position is also the one most commonly held prior to assuming a presidency of an institution of higher education (Plotts, 1998; Ross & Green, 1998; Twombly, 1986). Vaughan (1989) reported that 50% of the presidents in community colleges held the CAO position immediately prior to the presidency. Twombly (1988) also confirms the importance of the CAO position in the career path leading to the community college presidency. Given their impact on the academic programs of their institutions and the likelihood that they will advance to the presidency, investigations into the career paths of these academic professionals are warranted.

Twombly (1999) asserts that examinations of the status of women in faculty and administrative positions have recently shifted focus. Historically, studies identified women, described their experiences, and then compared their experiences to those of men (Bayer & Astin, 1975; Moore & Sagaria, 1981; Townsend, 1993; Twombly, 1993). Feminist critical policy studies (Marshall, 1997) provide a new focus and suggests a complexity much greater than that of earlier research on women's role in higher education. Moreover, this new scholarship has demonstrated that well-meaning equal opportunity policies have not worked to bring the relative number of women holding higher education positions to the level of representation of female students or to end discrimination or unequal work experiences (Brooks, 1997; Eggins, 1997). As a method, feminist critical policy studies pose gender as a fundamental category of analysis, focus on local context, are concerned with the experiences of women, have transformation as a goal, and are change oriented. This study will address the three feminist critical policy study parameters of gender as an independent category, local context and concern for the experiences of women. The scope of this study will not attempt to address the issues of transformation and change.

A key aspect leading to the shift in the scholarship on academic women is the fact that they make up an increasing proportion of faculty and administrators, especially in the community college sector. The community college CAO position clearly indicates this increased representation. Moore, Twombly and Martorana (1985) sampled 2049 administrators from 1219 public and private institutions. The CAOs that responded to the survey accounted for 271 of the total responses, constituting a 22.2% response rate for the total number of institutions surveyed. In addition, this study reported that women made up 15.9% of the CAO population in community and junior colleges. Several years later Vaughan (1990) surveyed the same population and found that 21% were female. Additionally, Hawthorne (1994) surveyed CAOs in 1,243 two-year colleges and obtained a 57% response rate with no evidence of bias. This study determined women held 27% of the CAO positions in community colleges. Finally, in a recent study with a 59% response rate found women comprised 39% of the public community college CAOs (McKenney & Cejda, 2000). This study, in conjunction with the previous investigations, suggests that the number of women CAOs in public community colleges has continued to increase. The 39% from this most recent study mirrors the representation of women among the total faculty at community colleges (38%), a higher percentage than in any type of four-year institution (Clark, 1998).

In examining representation, Kanter (1977) identified 35% as a minimal level necessary to reach 'critical mass,' the point at which a category of individuals moves from 'token' representation to a collective 'group.' This concept of critical mass has continued to be incorporated in research focusing on academic women (Riger, Stokes, Raja, & Sullivan, 1997; Twombly, 1999). Recognizing the demographic evidence, Clark (1998) called for research on women faculty and administrators in the community college that moves beyond male-versus-female comparisons to in-depth investigations of their experiences and professional advancement. Given these parameters, this study addresses women CAOs as a group unto themselves in the community college setting. Of the criteria Marshall (1997) outlines, the investigation also demonstrates a concern for the actual experiences of women and consideration for the specific context of the public comprehensive community college. The theoretical framework for this study is grounded in the concept of an organizational career and the theory of labor markets. We define an organizational career as a sequence of positions within an organization. From labor market theory, we conceptualize the organization as all public comprehensive community colleges holding membership in the American Association of Community Colleges (AACC). Finally, the definition of comprehensive community college follows that of the North Carolina State Department of Community Colleges (1969): those that provide college transfer, general education, occupational education, occupational extension, continuing education, and community service.

Purpose

The purpose of this study was twofold. First, we wanted to gather personal and professional data concerning the career experiences of women CAOs in public comprehensive community colleges. Second, we hoped to use this data to identify significant career path predictors to facilitate the advancement of women who aspire to the community college CAO position.

Methodology

Data used in this study came from a national survey of CAOs in public comprehensive community colleges (McKenney & Cejda, 2000). The survey consisted of a series of questions designed to illicit institutional type, mode of movement, number of years in the position, type of contract, and title of the position for the four jobs held prior to the office of CAO. In addition, demographic information including age, gender, race, marital status, and degrees attained was garnered to create a profile of the current CAO. The questionnaire was pilot tested and minimal changes were made.

The sample was drawn from the population of 1487 AACC member institutions. Limiting the population

to 1) accredited institutions that are state or locally controlled, and 2) institutions matching the definition of a comprehensive community college resulted in a sample of 628 administrators functioning in the capacity of CAO. These individuals were surveyed by mail during the 1998-1999 academic year. A total of 369 usable questionnaires were returned, yielding an overall response rate of 59%. Of these 369 responses, 142 (39%) were received from women CAOs.

Descriptive statistics along with CHAID analysis (Chi-Square Automatic Interaction Detector) (Statistical Innovations, Inc., 1994) was used to identify and analyze the data. The CHAID analysis created a visual "tree structure" or dendrogram identifying what factors made a significant impact on the career paths (Perreault & Barksdate, 1980).

To determine career paths for the CAOs in this study, position titles were grouped according to Higher Education General Information Survey (HEGIS) classifications. These classifications were determined after reviewing position titles; thus, not all of the HEGIS classifications were utilized. The nine classifications and their definitions are :

1. Vice President-Responsible for all or most functions and operations of an institution under the direction of the Chief Executive Officer [President].
2. Chief Academic Officer-Directs the academic program of the institution. Includes those individuals who were listed as both Academic and Student Affairs Officer.
3. Chief Student Affairs Officer-Responsible for the direction of student life programs.
4. Primary Academic Officer-Responsible for a specific component of the organization [college, division] or a specific function or operation [associate provost for technology] under the direction of the Chief Academic Officer.
5. Chair or Head-Responsible for a specific course of study [department, program] under the direction of either the Primary Academic Officer or the Chief Academic Officer.
6. Other Higher Education-Administrative position within an institution of higher education that does not fit any of the classifications listed.
7. Faculty-Responsible for delivering the academic program.
8. K-12-Positions in educational institutions serving students from kindergarten through the 12th grade.
9. Other-Positions held outside of educational organizations.

To quantify the sizes of the communities serviced by these public comprehensive community colleges, the categories utilized by the AACC on their community college locator website were utilized. These categories were developed by the Bureau of the Census from information provided on the Integrated Postsecondary Education Data Set (IPEDS) and are as follows:

1. Rural-Population of less than 2,500 or a non-incorporated community.
2. Small Town-An incorporated community with a population between 2,500 and 25,000.
3. Large Town-An incorporated community not within a metropolitan statistical area (MSA), as defined by the Bureau of Census, with a population greater than 25,000.

4. Suburban-An incorporated community within a MSA, as defined by the Bureau of Census, that is not a central city within the MSA with a population greater than 25,000.

5. Medium to Large City-A central city within a MSA with a population greater than 250,000.

In order to classify the institutional configurations of these public comprehensive community colleges, we also used AACC designations for type of school. Three designations are used by the AACC: Single Campus College, Multi-Campus College, and Multi-Campus District. Placement in the respective designations is based on information provided on IPEDS. We were not able to obtain specific definitions of these designations from the AACC.

Results

The demographic characteristics collected in this study allowed for the development of a profile of the women CAO. The mean age of the 142 female respondents was 51.36 (range 36-64, S.D. 5.36). The racial distribution of the women CAOs is shown in Table 1. The Caucasian component of the sample was predominant (84.4%) followed by African-American (8.2%), Hispanic (3.3%), American Indian (3.3%) and Asian (0.8%).

A frequency distribution of the highest degree attained query was also completed. The Ph.D. represented the highest credential obtained by the greatest number of CAOs (41.4%) followed by the Ed.D. (34.9%). The remaining portion of the CAOs completed a Master's (22.6%) or a professional or other type of degree (less than 1%). No CAOs reported the baccalaureate degree as their highest credential.

The final demographic aspect was current marital status. Slightly more than two-thirds (67%) of the CAOs are currently married. It is interesting to note that only 4.2% of the women CAOs had never been married, all of these remaining single as members of a religious order.

Career Paths

We decided to establish 5% of the sample as a minimal level to establish career paths. There were no five- or four-step career paths that met this minimal level. The three-step grouping provided 26 career paths with eight meeting the minimal 5% level. As shown in [Figure 1](#), three of the most common career paths of women CAOs represented more than 10% of the sample, Faculty-Chair-CAO (12%), Faculty-PAO-CAO (11.3%), and Chair-PAO-CAO (10.6%).

To identify significant predictors for the career paths of women CAOs, a CHAID analysis and the associated dendrogram were generated (Figure 2). The analysis provided evidence that the most important factor that significantly predicts the career path of CAOs in community colleges was the immediate previous position. The second most important factor affecting the career paths was the career entry port. Third and finally, the remaining significant predictor was the number of higher education positions in the career sequence. As the most significant predictor of career path, a distribution frequency for the first prior position was created. [Table 2](#) reveals that the most common prior position was that of a Primary Academic Officer (32.6%), followed by serving as the Chief Academic Officer at another institution (25.5%).

The CHAID analysis identified the number of higher education positions as the third and final significant predictor for career path. In order to examine the differences in the number of positions held by these women, three means were computed: 1) the total number of all positions held, 2) the number of faculty positions held, and 3) the number of administrative positions held. These means are summarized in [Table 3](#). Women CAOs in comprehensive community colleges generally hold two administrative positions in their career and one faculty position.

To determine the number of years women serve in faculty and administrative positions, descriptive statistics were used to compute seven means: 1) the total number of years held in all positions, 2) the total number of years held in all faculty positions, 3) the total number of years held in all administrative positions, 4) the number of years in the CAO position 5) the number of years held in the first prior position, 6) the number of years held in the second prior position, 7) the number of years held in the third prior position, and 8) the number of years held in the fourth prior position. The results from this analysis are summarized in [Table 4](#) and indicate that women CAOs served more years as administrators than as faculty members. In addition, the number of years served in prior positions gradually increases with each sequential position.

Institutional Profiles

In order to identify the types of institutions served by female CAOs and the relative size of the towns in which these institutions are located, demographic information on the colleges and their communities was collected from the AACC. A number of multi-campus institutions and districts report only the total student headcount. In such instances, and when the CAO was not responsible for all campuses or the district, we excluded the data from our analysis. As a result, we were able to gather institutional and community demographics for 110 (77%) of the women CAOs. [Table 5](#) presents the frequency distribution of student headcount for institutions with women CAOs. The results indicate 63.6% of the women CAOs serve institutions with student headcounts ranging from 3,000 to 11,999. Thus women CAOs generally serve in moderate sized institutions.

The distribution of the institutional configurations for community colleges served by women CAOs using the AACC designations of single campus, multi-campus college, and multi-campus district is presented in [Table 6](#). Almost two-thirds (65.1%) of the women CAOs serve at single campus facilities.

The AACC uses five designations that may be used to describe the size of communities serviced by community colleges. In order from smallest to largest these designations are rural, small town, large town, suburban, and mid to large city. [Table 7](#) presents descriptive information concerning community size, revealing that 44% of the women CAOs are employed in communities with populations of 40,000 or less (rural, small town, large town).

We characterized mobility as four types: 1) internal to the institution, 2) movement within the state, 3) movement outside of the state, and 4) movement outside of higher education. To determine whether there is a difference in the mode of movement during the careers of CAOs, a frequency distribution of the women CAOs experiences was created and is presented in [Table 8](#). The results support internal mobility as the strongest type of movement for the three previous positions, with within state movement as the most common type for the fourth prior position. Movement outside of state is the greatest at the point of assuming the CAO position. We do not know, however, whether out-of-state movement occurred due to factors such as choice, or due to limited in-state CAO vacancies.

Discussion and Conclusions

The profile of a woman CAO in a public community college portrays a 51-year-old Caucasian female who is married and has earned a Ph.D. She has served in her current position for a little over five years. The entry port she used to gain employment in the community college was a faculty position. She has held approximately three positions in higher education of which two were administrative and one was faculty. Her immediate prior position was as a PAO or a CAO at another institution.

As a point of comparison, it is interesting to note the similarity between the percentage of women in the community college faculty (38%) and the percentage of women among the CAOs in this study (39%). In

contrast, Clark (1998) described that minority women comprise 3.6% of the total faculty in community colleges. Our data reveals that minority women comprise 6% of the CAOs in public comprehensive community colleges. This result might be explained, in part, by the fact that 14% of the women respondents chose not to reveal their ethnic background. It does, however, provide at least a hint of optimism and most certainly points to the need for additional studies.

The analysis of career paths proved to be the most challenging component of this study. Vaughan (1990) recognized this diversity when he identified the path to the position of CAO as fairly wide with many branches. Likewise, Twombly (1986) found that top-level administrative careers in community colleges did not always follow structured career lines. Even so, we were able to develop eight, three-position career paths that represent almost two-thirds (64%) of the sample. Three of the common career paths included 10% or more of the sample. In a similar effort, Twombly (1988) utilized 10% as the minimal limit for the first previous position, resulting in 6 categories, and 5% as the minimal limit for the second previous position, resulting in only one category.

Our findings support previous conclusions that an individual's career history influences his or her success in obtaining a CAO appointment. Specifically, the CHAID analysis indicated that the immediate previous position and the entry port were the two most important factors that affected the CAO position. Having the first prior position as a significant predictor supports the previous work on career paths that frequently focuses on this variable (Moore, 1982; Ross & Green, 1998).

A faculty position emerged as the primary entry port, reported in 53% of the women CAOs' career paths. PAO (17.6%) and chair or head (13.4%) emerged as the next two most frequent entry ports. Thus, these three positions served as the entry ports for more than four-fifths (83.8%) of the CAOs. This finding supports previous research on initial positions that provide access to community college careers (Arman, 1986; Boggs, 1988, Twombly, 1988).

The study also supports the notion of flexibility in the community colleges as it allows academic administrative careers to begin without requiring an initial faculty position. Only two of the eight common career paths began with a faculty appointment, illustrating the concept that an individual does not need to have a faculty position in a community college prior to moving into administration.

The career paths of these administrators are not as straight as the three predictors might seem to indicate. Prior to their current position, 55% of the respondents served either as the CAO for another institution or as a primary academic officer. This indicates many of these administrators have made lateral moves during their careers and supports Twombly's (1988) assertion that administrative experience rather than a particular position is an important determinant in the path to the CAO in community colleges. She states, "It is possible that type of experiences or positions held are more important than the order in which they were held" (p. 685).

Summary

This study was an initial investigation of the career paths of women CAOs as a group unto themselves in the community college setting. In completing the investigation we answered the call for research on women administrators in the community college that moved beyond male-versus-female comparisons. Using descriptive statistics, we developed a profile of the woman CAO. CHAID analysis was employed allowing for the identification of three significant career path predictors for CAOs along with the most significant predictor for women CAOs. A frequency distribution also allowed us to identify three common, three-position career paths comprised of 10% or more of the sample. Finally, descriptive statistics allowed for the development a profile of the public comprehensive community colleges served by women CAOs.

As 39% of the responding CAOs are women, the critical mass necessary for group consideration has indeed been reached. We are also guardedly optimistic about the representation of minority female CAOs. No different than earlier investigations that include both men and women, we found that the paths that women follow to arrive at the position of CAO are not clearly defined. Absent is a sequential set of positions through which the candidate desiring the position should gradually advance. Instead, it would appear that for women a variety of credentials and experiences have become the medium of exchange. Classroom experiences, obtaining a Ph.D., and holding an administrative appointment as a primary or chief academic officer are part of this value system.

We urge additional research on the experiences of women in both faculty and administrative roles. While certainly a beginning, our study was not an exhaustive investigation of administrative careers. Nor did we consider the entire gamut of personal, organizational, and external variables. In addition, a longitudinal study of women in this and other administrative positions in comprehensive community colleges is needed to identify the unique factors, to determine changing dynamics, and to lead to institutional transformation and change.

Dr. Brent D. Cejda is an Assistant Professor of Higher Education in the College of Education at Texas Tech State University.

Dr. Cynthia B. McKenney is an Assistant Professor of Horticulture in Research and Extension Horticulturist at Texas Tech University. Dr. McKenney can be reached by e-mail at: c-mckenney@tamu.edu.

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Table 1. Ethnic Representation of Women CAOs

Ethnicity	Frequency	Percent
African	10	8.2
American		
American Indian	4	3.3
Asian	1	.8
Caucasian	103	84.4
Hispanic	4	3.3
Total	122	100

Table 2. First Prior Position of Women CAOs

Title	Frequency	Percent
Chief Academic Officer	36	25.5
Vice President	8	5.7
Chief Student Affairs Officer	6	4.3
Primary Academic Officer	46	32.6
Chair of Head	15	10.6
Faculty	7	5.0
Other Higher Education Position	19	13.5
K-12 Experience	2	1.4
Other	2	1.4
Total	141	100

*The total number of respondents for this table reflects the number of individuals who chose to respond to this specific survey question.

Table 3. Number of Positions Held by Women CAOs

Type of Position	N	Mean Number Held	Standard Deviation
Higher Education	142	3.42	.878
Faculty	101	1.73	.823
Administrative	112	2.41	1.136

*The total number of respondents for this table reflects the number of individuals who chose to respond to this specific survey question.

Table 4. Years Served by Women CAOs

Position	N	Mean Years	Standard Deviation
CAO	142	5.05	4.04
First Previous	141	5.43	4.61
Second Previous	134	5.02	4.17
Third Previous	96	4.73	3.12
Fourth Previous	86	3.64	2.36
Total Faculty	124	13.39	9.88
Total	124	15.23	9.57
Administrative			
Total all	141	28.32	13.09
Positions			

Table 5. Student Headcount for Institutions with Women CAOs

Student Population Census	Frequency	Percent
1499 or less	8	7.3
1500-2999	10	9.1
3000-5999	36	32.7
6000-11999	34	30.9
12000-23999	16	14.5
24000 and above	6	5.5
Total	110	100

*The total number of respondents for this table reflects the number of individuals who chose to respond to this specific survey question.

Table 6. Campus Configuration of Institutions with women CAOs

Campus Configuration	Frequency	Percent
Single Campus Institution	69	65.1
Multi-Campus Institution	21	19.8
Multi-Campus District	16	15.1
District		
Total	106	100

*The total number of respondents for this table reflects the number of individuals who chose to respond to this specific survey question.

Table 7. Size of Communities with Institutions Served by Women CAOs

Community Size	Frequency	Percent
Rural	8	7.3
Small Town	34	30.9
Large Town	6	5.5
Suburban	27	24.5
Mid to Large City	35	31.5
Total	10	100

*The total number of respondents for this table reflects the number of individuals who chose to respond to this specific survey question.

Table 8. Frequency Distribution (%) of Mobility Type for Women CAO Positions

Mobility Type	Current Position (n=142)	1st Prior Position (n=142)	2nd Prior Position (n=131)	3rd Prior Position (n=120)	4th Prior Position (n=100)
Internal	54.9	66.9	48.9	43.3	34.0
Within State	18.3	14.8	26.7	31.7	37.0
Outside State	25.4	16.9	22.9	19.2	21.0
Outside Higher Ed	1.4	1.4	1.5	5.8	8.0

*The total number of respondents for this table reflects the number of individuals who chose to respond to each of these specific survey questions

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