Use of the CAS Standards by Career Services Directors at

Four-year Public Colleges and Universities

by

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Abstract

The general purpose of this national study was to document career services director use of the CAS professional standards by institutional size, career services experience level, director experience level, director degree level, CAS standards awareness, CAS standards possession, and barriers to use. Also considered were the types of CAS standards use and satisfaction from use.

There were significant differences in CAS standards awareness by years of experience in career services and by years of experience as career services director. No differences were found with regard to perceived barriers to CAS standards use. Significant differences were discovered by institutional size, as well as by director degree level, regarding the extent of use and satisfaction from use of the CAS standards. Finally, key factors identified with regard to predicting CAS standards use included level of awareness, and the degree to which both previous CAS standards use had not been helpful and fear of finding non-compliance were perceived as barriers.

This study suggests that future research should concentrate on the reasons why practitioners are either satisfied or dissatisfied with use of the CAS standards and how the self-assessment guide is perceived and used. Additionally, an examination of how the different types of use influence perceived barriers merits consideration.

Dedication

My parents, Annie and Raymond Ratcliffe, shaped many of the values and convictions I have today. Although their own educational opportunities were severely limited, my parents were profoundly committed to the concept of education as a key to opportunity. They made numerous personal sacrifices in support of my education and were a constant source of inspiration and encouragement. For all they did to help me reach this point, I am eternally grateful. I also hope to emulate their values and truly remarkable parenting qualities with my own children. This dissertation is dedicated to their loving memory.

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Balancing doctoral studies with full-time employment requires strong support from all entities. The Virginia Military Institute has substantially supported my doctoral studies in numerous ways and my gratitude is profound. My office co-workers, Donna Broomall and Carter Hopkins, have been generous in their work-related sustenance during this research initiative and I am deeply appreciative. Special thanks are given to my supervisor, Dr. Susan Barr, whose considerations and support were critical in enabling this work to be completed. Representatives of CAS and NACE were also encouraging and helpful in the completion of this research.

My doctoral studies have been a period of significant change and professional growth. The members of my family have directly experienced much of this transformation and their boundless love, patience, and confidence have been priceless contributors, both to this research and the enrichment of my life. They have my deepest love and gratitude.

One of my richest blessings in life is to be a parent to my children Lindsey, Michael, and Cole. Their lives have been impacted in numerous ways during this time and their sacrifices and changes have been considerable. I have learned much from each of them, and continue to watch with great pride and admiration as their lives and achievements unfold.

My greatest source of enthusiastic support and encouragement has been my wife Donna. She has provided a shining example through her faith and many significant accomplishments, and continues to provide inspiration and assurance in all aspects of my life. I thank her for the remarkable love we share.

Finally, my faith in God has provided the vision, perseverance, and reassurance necessary to complete this work.

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Chapter 1

Overview of the Study

The field of career services has undergone substantial evolution from a job placement orientation to a multi-faceted and significant student services functional area with multiple internal and external constituencies, including students, employers, alumni, and faculty/staff members. This dramatic growth in the scope of services is exemplified by the addition of cooperative education, internships, on-line databases, career fairs, career planning courses, part-time student employment, service learning, graduate and professional school advising, and other services. The modern career services office bridges the institutional and employer constituencies and is becoming increasingly interdependent with other institutional student service units and academic departments (Herr, Rayman & Garis, 1993; Kroll & Rentz, 1996; Roth, 1994). Additionally, career services interaction with key areas such as admissions, alumni affairs, and the development office is leading to increased collaboration.

The diversity of programming and services demands a wide range of skills and knowledge, creating fragmentation with multiple identities and professional affiliations for practitioners. Additionally, this fragmentation can be exacerbated by the operational specialization that occurs with decentralized administrative models. Both the knowledge and skill diversity and the practitioner specialization have led to identity vagueness and ambiguity for the roles and relationships of the career services unit within an institution. Similarly, this lack of clarity and purpose extends to the career services profession in defining and articulating its emerging role within higher education (Bechtel, 1993; Greenburg, 2001; Rayman, 1993; Stewart, 1993).

Whether career services is a profession remains debatable. It is generally accepted that the nature of career services has evolved from being one of basic service provision into the current state with professionally educated practitioners offering comprehensive and complex programs and services that are integral to an institution. However, Scott (1983) pointed out that among career services offices there was a lack of commonality regarding basic definitions, operating procedures, reporting structures, sense of purpose, and philosophical and theoretical framework. Bechtel (1993) suggested that in the absence of a traditional organization theme or a set of generally accepted practices, career services units were usually organized and operated according to local institutional characteristics and needs.

In its current struggle for identity as a profession, the field of career services continues to face some of the same issues. Greenberg (2001) noted that the fragmentation of the career services profession was both a strength and weakness. While the diversity of the field serves to enrich the choices, activities, and professional development of practitioners, the wide variety of required duties and clients makes it difficult to apply consistent standards across the field. Thus efforts to promote career services certification have failed.

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Yet one method to enhance professionalism in student services could be the use of standards for professional practice, and the professional standards created by the Council for the Advancement of Standards in Higher Education (CAS) are an important step in that direction (Miller, 1984; Patterson & Carpenter, 1989; Winston & Moore, 1991). The 1986 publication of the CAS professional standards for higher education was a significant milestone in the emergence of the student affairs profession. Currently, this collaboration of 34 professional associations reflects profession-wide commitment to universally accepted standards for professional practice in 29 diverse student affairs functional areas (CAS, 2001).

The CAS standards are consensual in nature and flexible enough to be applied to a variety of institutional settings. When used correctly, the standards make a significant contribution to quality assurance in higher education. Evidence suggests the standards have value for practitioners in a number of areas, including program planning and development, self-studies for accreditation, program assessment and evaluation, and in-service education (Creamer, 2003).

Through its national professional association, the field of career services has been an active proponent of professional standards, having first developed its own standards for professional practice in 1975 (CPC, 1975). The College Placement Council (CPC), which later became the National Association of Colleges and Employers (NACE), also played an influential role in the development of the CAS standards (Meyer, 1986). Career planning and placement, which later became career services, was one of the 16 functional areas included when the first CAS standards were published in 1986 (CAS, 1986). The various iterations of the CAS standards have reflected the evolution of career services (CAS, 1986; CAS, 1997; CAS, 1999; CAS, 2001; CAS 2003).

Through the long-term and collaborative efforts of CAS and CPC/NACE, effective professional standards have been developed and articulated for career services practitioners. The CAS standards provide an opportunity to universally define excellence and assure quality in career services practice. How receptive career services practitioners are to the increased accountability that accompanies the use of professional standards remains a key question.

Significance of the Study

The need for research related to use of the CAS standards in higher education was obvious. Creamer (2003) suggested descriptive research would be helpful in providing information regarding the level, frequency, and type of use of the CAS standards by educational practitioners in academic and student affairs functional units. Other possible research questions regarding the CAS standards include the recognition and credibility of the CAS standards in the higher education community and the identification of potential barriers that inhibit their use (CAS, 2001).

This study provided the opportunity to investigate, on a national basis, the awareness level career services directors had with the CAS standards, if and how the standards were used, and the levels of satisfaction for various types of use. This study

also provided information that could be shared with CAS and NACE regarding how effective the distribution and promotion of the CAS standards had been, identify potential barriers to use, as well as determine how satisfied practitioners were with specific applications of the standards. Additionally, this study had potential implications for the application of professional standards based on the results regarding the effective use of the standards. Finally, the study provided information that may longitudinally promote professionalism among career services practitioners.

Statement of the Problem

It was not known to what extent the career services community was aware of the CAS standards and their potential for application. In the literature, there was little evidence of research regarding the awareness and use of the CAS standards in higher education, especially in the field of career services. Tangential to the CAS standards use issue were questions regarding the satisfaction level for each specific type of use and the identification of barriers that inhibit use. The attainment of such information was helpful in ascertaining why or why not the CAS standards were being used effectively in career services. There was no evidence that anyone had exclusively analyzed the use of the CAS standards in the career services field.

This study addressed those issues. Therefore, the research problem was to analyze the influence of institutional size, director background, and level of director experience on the awareness, use, satisfaction level, and barriers to use of the CAS standards in career services program management for public four-year colleges and universities.

Purpose

The general purpose of this study was to document use of the CAS standards by career services directors. The study linked institutional size, director educational level, years of career services experience, and years of director experience to the awareness, possession, use, and level of satisfaction related to the use of the CAS standards by career services directors, as well as potential barriers to such use. The study targeted public four-year colleges and universities belonging to NACE, the national professional association for career services. The following ancillary purposes were addressed:

1. Determine the levels of career services director awareness of the CAS standards.
2. Identify barriers to the use of the CAS standards in career services units.
3. Determine the types of career services director use of the CAS standards.
4. Determine the levels of director satisfaction when using the CAS standards for career services units.

Delimitations

The study was delimited to public four-year colleges and universities in the 50 states and the District of Columbia listed in the *2003 Higher Education Directory*, and which were included in one of the following six categories based on the 2000

Carnegie Classification: (a) Doctoral/Research Universities-Extensive, (b) Doctoral/Research Universities-Intensive, (c) Master's Colleges and Universities I, (d) Master's Colleges and Universities II, (e) Baccalaureate Colleges-Liberal Arts, and (f) Baccalaureate Colleges-General. There were 505 institutions identified in these six categories.

Of those institutions previously identified, the study was further restricted to the institutions currently holding membership in NACE. By cross-referencing the NACE membership directory with the *2003 Higher Education Directory*, it was determined that 481 (95.2%) of the 505 institutions listed in the *2003 Higher Education Directory* also had membership in NACE (Burke, 2003, NACE, 2002b). Additionally, this study was delimited to those persons identified in the NACE directory as the career services unit director for each institution.

Research Questions

Seven main research questions were developed to address the purposes of the study. Additional specificity was addressed in the supporting questions that follow.

Research Question #1

Were there significant differences in career services director awareness of the CAS standards by institutional size, career services experience level, director experience level, and director degree level?

(1a) Were there significant differences in career services director awareness of the CAS standards by institutional size?

(1b) Were there significant differences in career services director awareness of the CAS standards by career services experience level?

(1c) Were there significant differences in career services director awareness of the CAS standards by director experience level?

(1d) Were there significant differences in career services director awareness of the CAS standards by director degree level?

Research Question #2

Among those respondents who were aware of the CAS standards, what were the factors contributing to that awareness?

Research Question #3

Were there significant differences in barriers to career services director use of the CAS standards by institutional size, career services experience level, director experience level, and director degree level?

(3a) Were there significant differences in barriers to career services director use of the CAS standards by institutional size?

(3b) Were there significant differences in barriers to career services director use of the CAS standards by career services experience level?

(3c) Were there significant differences in barriers to career services director use of the CAS standards by director experience level?

(3d) Were there significant differences in barriers to career services director use of the CAS standards by director degree level?

Research Question #4

Among those respondents who possessed the CAS standards, how many also possessed the career services self-assessment guide and, if so, which edition?

Research Question #5

Were there significant differences in the extent of career services director use of the CAS standards by institutional size, career services experience level, director experience level, and director degree level?

(5a) Were there significant differences in the extent of career services director use of the CAS standards by institutional size?

(5b) Were there significant differences in the extent of career services director use of the CAS standards by career services experience level?

(5c) Were there significant differences in the extent of career services director use of the CAS standards by director experience level?

(5d) Were there significant differences in the extent of career services director use of the CAS standards by director degree level?

Research Question #6

Were there significant differences in career services director satisfaction from use of the CAS standards by institutional size, career service experience level, director experience level, and director degree level?

(6a) Were there significant differences in career services director satisfaction from use of CAS standards by institutional size?

(6b) Were there significant differences in career services director satisfaction from use of CAS standards by career services experience level?

(6c) Were there significant differences in career services director satisfaction from use of CAS standards by director experience level?

(6d) Were there significant differences in career services director satisfaction from use of CAS standards by director degree level?

Research Question #7

Were there significant differences in career services director use of the CAS standards by institutional size, career services experience level, director experience

level, director degree level, CAS standards awareness, CAS standards possession, and barriers to CAS standards use?

Assumptions

There were two assumptions germane to this study.

1. It was assumed that the career services directors were aware of any use of the CAS standards in their respective career services units.
2. It was assumed that the NACE members included in this study fairly represented all of the public four-year colleges and universities in the individual states and District of Columbia.

Limitations

Limitations existed in this study that may have affect the overall quality of the results. These limitations included the following:

1. Selection was a limiting factor in this study, as membership in NACE was required to participate.
2. Because the sample did not represent all of the institutions in higher education, the results of the study cannot be generalized beyond four-year public institutions.
3. Instrumentation was also considered as a limiting factor. The sources of awareness, the types of use, and barriers to use included on the instrument were not all-inclusive. The use of open-end questions for the sources of awareness, types of use, and barriers to use added potential new categories which may not have been included in the analysis.

Definitions

Council for the Advancement of Standards in Higher Education (CAS) – a consortium of 34 professional organizations organized for the purpose of developing and promoting standards in student affairs, student services and student development programs (CAS, 2001).

National Association of Colleges and Employers, Inc. (NACE) – a non-profit professional association that provides resources, products, and other services to a national membership that includes career services and employer recruitment professionals.

Career services – a student services functional unit that provides programs, services and resources related to career planning, experiential learning, and employment for students and alumni.

Barrier – an obstruction or impediment.

Standard – a statement reflecting expectations of acceptable professional practice.

Type of use – purpose for which the use was intended.

Organization of the Study

This study is organized into five chapters. Chapter 1 has presented an overview of the study. Chapter 2 provides a review of the extant literature; related contributions from the literature are reported. Chapter 3 provides the research methodology for the study. Items discussed include population and sampling, pilot study, instrumentation, data collection, and the analysis procedures that were employed. Chapter 4 contains the findings of the study and the reporting of the data, while Chapter 5 provides a discussion of the results and implications for future practice and research with specific recommendations.

Chapter 2

Review of the Literature

The emergence of student affairs as a profession has not been without struggle. Penney (1969) questioned whether student affairs would ever be recognized as a profession, noting that the student affairs field was becoming more diversified and fragmented as new areas of specialization developed, compounded by little commonality of activities, interests, and objectives that would warrant any type of shared professional identification.

Stamatakos (1981) described the importance of dealing directly with recognized shortcomings regarding the acceptance of student affairs as a profession. One key issue was the development and imposition of performance and review standards that are mandatory to both improve the quality of work and achieve professional status. Stamatakos (1981b) suggested that the area of student affairs was still in the process of becoming a profession. Expectations from the constituencies of student affairs are high with regard to professional preparation, professional behavior, professional performance, and continual professional development.

Carpenter (1983) proposed a developmental model as a paradigm for professional growth and described the professional preparation, professional practice, and professional association implications of a developmental model. Student affairs professionals were becoming increasingly valuable partners in higher education and professionalism was a critical ingredient in both preparation for and practice in the field. The CAS professional standards were a promising development towards commonality of training and preparation.

Patterson and Carpenter (1989) described student affairs as an emergent profession and lauded the CAS standards and guidelines as a major step in that direction, particularly in the area of professional preparation. However, compliance with the CAS standards was voluntary and the lack of provisions for enforcement may have been detrimental to the field.

Carpenter, Miller, and Winston (1994) challenged earlier criticisms of student affairs as a profession. There had been significant enhancement of the student affairs developmental base and professional preparation was receiving considerable attention. The development of professional standards and guidelines was also an indicator of the emergence of student affairs as a profession.

Career services practitioners have encountered many of the same issues regarding their identity as a profession. Bechtel (1993) observed that career services practitioners were often viewed by institutional constituencies simply as administrators completing a task rather than as a profession. The lack of common philosophical and operational perspectives added credence to that viewpoint and the lack of unanimity, combined with diverse practitioner orientations, often resulted in

career services being organized based on institutional traditions and needs. Career services practitioners were neither vocal nor convincing of the significance of their contributions to students and the institution. Most of these concerns remain as current issues for career services practitioners.

Professional standards can add considerably to the process of developing professionalism in both student affairs and career services. Miller (1984), as well as Winston and Moore (1991), noted that the use of professional standards promotes a higher level of professionalism for student affairs. The same might be said for career services practitioners whose quest to be recognized as a profession somewhat parallels what student affairs practitioners have experienced over the years.

There is universal awareness and acceptance of the CAS standards and guidelines as a means to improve professional practice in student affairs. By extension, the same assumption might be made for career services. How the CAS standards are used in professional practice and the resulting effects of that use are questions of research interest in student affairs. This was an opportunity to better ascertain how CAS standards are used in career services and what the resulting benefits are to practitioners.

Career Services

The institutional role of career services has become increasingly complex and diverse. There are simultaneous interactions and collaborative efforts with multiple constituencies and the impact of the career services functional unit can be far reaching. Yet among those same constituencies, the perception of the scope and significance of career services unit contributions often remains somewhat nebulous.

Evolution of Career Services

As early as the Colonial Era, job placement responsibilities were assumed by faculty members, or dons, who worked closely with graduating students to secure ministerial positions with churches. As American higher education evolved from an elitist to an egalitarian model and as specialty or professional schools were established, this narrowly focused traditional model was no longer sufficient (Kroll & Rentz, 1988).

As a higher education administrative function, career services traces it history to the early twentieth century. Yale University established the first placement office in 1919 and the staff was responsible for providing vocational guidance and counseling to students (Teal & Herrick, 1962). This unit also worked to match students with employment opportunities during the academic year, summer months, and after graduation, hence use of the term "placement." As student and employer service needs increased, placement offices were established on many campuses. Additionally, practitioners began to incorporate vocational choice theory into their work (Kroll & Rentz, 1988).

The decades of the 1920s and 1930s saw a decline in the number of jobs and an increasing number of graduates seeking placement assistance. After Word War II, there was a dramatic increase in employment opportunities as the economy shifted from war defense to manufacturing consumer products (Kroll & Rentz, 1988). The significant number of returning veterans resulted in Federal contracts for over 400 higher education institutions to provide job-related counseling and placement to the veterans and these services were continued and even expanded after the contracts had expired (Blaska & Schmidt, 1977).

Wrenn (1951) noted this time as the largest expansion period in the history of placement services and by 1950 the majority of colleges and universities had established placement offices. Between 1947 and 1960, over 65 percent of the current career services offices were established as the recruiting of college graduates reached an all-time high (CAS, 2001).

During the 1960s, employment placement activities declined dramatically as many students pursued graduate and professional education. The 1970s brought an economic recession and combined with the increased number of graduates, job market supply and demand needs were relatively balanced. It was during this period that the career planning function, which had primarily been the responsibility of the counseling center, began to merge with the placement office on many campuses. The combined career planning and placement units placed emphasis on the holistic career development of students (Kroll & Rentz, 1988/1996).

The decade of the 1980s was one of significant external global and national trends that redefined the career planning process for students. These trends included the global economy, workplace restructuring, demographic changes, technology advancement, and increased worker educational levels (Kroll & Rentz, 1996). There was increased interest among students, academic administrators, and placement professionals in the skills and strategies related to career decision-making for assisting with the job search (Kroll & Rentz, 1988). The scope of services expanded as many career planning and placement offices assumed responsibility for experiential education in the form of cooperative education, internships, student employment, and volunteer service (Smith & Gast, 1995). However, the focus of many career planning and placement offices remained principally toward providing programs and services related to career counseling, placement counseling and referrals, and student employment. The CAS professional standards and guidelines introduced in the mid-1980s reflected those three program emphases (CAS, 1986).

Cassella (1990) suggested that a new career center paradigm was in order as the fundamental purpose of career services had evolved over time from placement to career planning and placement to the current network emphasis. The principal work of career planning and placement had been progressively changing toward acquiring and disseminating more extensive and higher quality information. Career planning and placement had become an intersection where students, alumni, employers, and faculty members met and success became increasingly dependent upon how well the

office served as an information crossroads connecting these constituencies with each other and the services they need.

What evolved in the 1990s were comprehensive career centers serving students, alumni, employers, and faculty/staff members. Services were expanded and new delivery methods for programs and services were implemented. Technology was a very significant part of this transition in areas such as on-line databases, electronic recruiting processes, and computer-assisted career assessment and guidance. Career planning courses were offered to teach lifelong career skills, assessment strategies were developed and implemented, career fairs were scheduled, and internship and service learning initiatives were developed and expanded. Other initiatives for career planning and placement included job development and graduate and professional school advising.

The career services field changed its focus from one-time placement services in 1975 to a more diverse approach by 1997 that emphasized the development of lifelong career decision-making and job search skills, with dramatic growth in experiential learning services. Between 1975 and 1997, the majority of institutions changed the name of their career planning and placement function from "placement" to "career services," reflecting the broader mission and expanded programs and services. In 1997, 88 percent of career services offices were centralized units and 78 percent reported to student affairs, with 15 percent reporting to academic affairs (Collins, 1998).

Current Status

By 2002, almost half of the offices had the term "career services" in their title. Ninety-two percent of the offices were centralized units and 73 percent reported to student affairs. Services most frequently provided to students included resume construction/critique, career counseling, career planning/job search workshops, career libraries, career fairs, resume referrals to employers, campus interviewing, employer information sessions, and electronic job listings. User fees for services were becoming more common and include registration and credential set-up fees for students, registration and counseling fees for alumni, and job fair and advertising fees for employers (NACE, 2002a).

Rayman (2001) identified seven broad and current functions of the current career services office: career planning and counseling, placement, career programming, information support, communications, professional development and training, and assessment. Smith and Gast (1995) suggested four emerging roles for career services: (a) catalyst for the use of technology, (b) collaborator with employers, alumni, faculty members, parents, and community members to deliver high quality services, (c) educator for the institutional community on career issues, and (d) consultant for outcomes assessment and other accountability initiatives.

Herr, Rayman and Garis (1993) noted the complexity of career services work and suggested that career services offices remain an evolving organizational form. Working with diverse institutional constituencies and employers, career services provides a bridge between the two groups.

There are a number of challenges faced by career services practitioners today, and the emerging roles define the profession. While career services offices are generally successful contributors to the institutional mission, they tend to operate in isolation without much coordination or communication with other student affairs units (Bechtel, 1993; Roth, 1994). The need to develop and maintain effective cooperative and collaborative relationships with internal and external constituencies, including faculty members, administrators, student groups, alumni, parents, employers, and community members is significant for improving the delivery of student services (Bechtel, 1993; Rayman, 1993; Roth, 1994; Smith & Gast , 1995). In short, it is imperative that career services be interdependent with academic and other student services units (Herr, Rayman, & Garis, 1993).

The combination of changing career development needs and increasing student diversity require innovative programs and services to meet the unique needs of special populations including women, minorities, and international students. Career services must anticipate, assess, and quickly respond to these changing needs and expectations (Rayman, 1993; Yerian, 1993).

For career services practitioners, another challenge is how to make optimal use of available technology to effectively and efficiently meet the changing career needs of students and service expectations of students and other constituencies, especially employers. Approaches that are high tech and high touch are required to maximize student use and satisfaction. Career services practitioners must embrace emerging technology as an ally and serve as a catalyst for its effective utilization (Rayman, 1993; Kroll & Rentz, 1996; Smith & Gast, 1995), shaping that use to provide more staff time for tasks requiring human interaction (Rayman, 1993). Increased use of technology, however, will require continual review of funding sources (Sandeen, 1996; Stewart, 1993) and careful prioritization of available resources.

Similar to other functional units, career services is facing increasing demands for assessment and more accountability for the quality of services and programs. The innovative and efficient use of existing resources is increasingly vital (Rayman, 1993) and so is the need for evaluation programs that effectively measure the impact of programs and services (Kroll & Rentz, 1996; Rayman, 1993; Yerian, 1993).

The effective integration of services such as cooperative education, internships and student employment into a comprehensive program delivery system provides a challenge for both program design and resource allocation (Kroll & Rentz, 1996). Additionally, determining the scope of services provided to alumni and the

role career services should play in institutional development initiatives are areas that also merit consideration (Rayman, 1993; Smith & Gast, 1995).

Greenberg (2001) noted that fragmentation in the profession is occurring because practitioners must develop a wide range of skills and attributes to effectively respond to the increasing diversity of programs and services. The range of clients and the variety of required duties makes the development of consistent standards and certification criteria difficult. Bechtel (1993) expressed similar concerns and described how the variation of programs, practitioner backgrounds, and organizational patterns leads to diverse and multiple professional identities and affiliations for practitioners. As a result, it is difficult to describe and classify career programs and services, exacerbating the vagueness and ambiguity regarding the roles and relationships career services has within the institution.

How important the career services function is depends largely on the perception of each constituency and practitioners have been remiss in emphasizing their significance and contributions to the institution and related constituencies (Bechtel, 1993; Rayman, 1993). The effective education of all constituency groups regarding how central the career services is to the success of the institution remains a challenge for practitioners.

The vagueness and ambiguity of the career center within the institution extends to the profession. There is a profound need to develop a more definitive professional identity and more pronounced sense of mission and purpose. As career services professionals become their own advocates, they must also articulate continuously their emerging role within higher education (Bechtel, 1993; Rayman, 1993; Stewart, 1993).

National Association of Colleges and Employers

NACE, formerly CPC, is the national professional association for career services and employment recruitment professionals. NACE has been instrumental as an information and professional development resource in promoting optimal relations between employer and college and university members.

Evolution of NACE

Professional associations in the career services field began on the regional level with the creation of regional placement associations. The expansion of institutional placement services led to a need to improve placement activity coordination and promote the exchange of information. The first regional association was the Eastern College Placement Officers, which was established in 1926. During the rapid placement growth period following World War II, six other independent regional placement associations were formed whose collective service areas covered the continental United States by 1951: (a) Rocky Mountain Placement Association, (b) Southern College Placement Association, (c) Middle Atlantic Placement

Association, (d) Midwest College Placement Association, (e) Southwest Placement Association, and (f) Western College Placement Association. Membership included both college placement officials and employer recruitment specialists (Kroll & Rentz, 1988; Powell & Kirtz, 1980; Stephens, 1970; Teal & Herrick, 1962).

These seven regional associations operated autonomously, yet cooperatively, and as they grew in size, so did the complexity of interregional communication and coordination. The regional associations convened an advisory board that became CPC in 1957. CPC was created primarily as a clearing house for the regions, to create and distribute placement publications, and to encourage research efforts (Babbush, 1982; Kroll & Rentz, 1988; Stephens, 1970).

Through the years, CPC assumed additional roles and forged its identity as the national professional organization for career services. Stephens (1970) noted that CPC was the primary communications and information resource for practitioners. New dimensions were added to CPC services, including professional development and vocational guidance materials.

CPC and the regional associations, while self-governing and autonomous, continued to work cooperatively and collaboratively to serve the profession. Each region elected a regional representative to serve on the CPC board, for example. In 1994, the regional associations and CPC made a cooperative agreement that included new association names, common administrative years, and other factors that solidified the relationship.

The report of that agreement, entitled the *New Organizational Structure for the Profession,* delineated the roles of the national and regional associations. The national organization was to provide a national and international voice, as well as serve as an advocate for the profession. Specific activities included professional development events of general and specific interest, service as the principal media contact for the profession, development and updating statements of professional and ethical conduct, the establishment of national standards for the profession, and the promotion of the profession as a career field (NACE, Special Report from the Presidents, 1994).

In 1995, CPC changed its name to NACE and most of the regional associations followed suit: (a) Middle Atlantic Association of Colleges and Employers, (b) Southeastern Association of Colleges and Employers, (c) Midwestern Association of Colleges and Employers, (d) Southwestern Association of Colleges and Employers, (e) Rocky Mountain Association of Colleges and Employers, (f) Western Association of Colleges and Employers, and (g) Eastern College and Employers Network. In 1997, the Eastern College and Employers Network merged with the Middle Atlantic Association of Colleges and Employers to become the Eastern Association of Colleges and Employers. The new association names reflected the movement of practitioners away from the emphasis on placement to define the profession.

NACE has clearly established itself as the national association for the profession, providing services to a membership that approximates 4000 member organizations, almost equally divided between college and employer members. Professional development events, benchmarking data, research information, publications, salary surveys, ethics and principles of professional practice are all examples of current NACE activities.

NACE Standards

Stephens (1970) noted the need for placement personnel to be recognized as a profession and described several tasks that needed to be addressed in that process. These tasks included establishing educational standards, developing a body of specialized knowledge, and adopting a set of professional standards. Leadership from CPC was expected for establishing and implementing national professional standards.

CPC created *the Professional Standards for Career Counseling and Placement* in 1975. The document contained guidelines for assessment of services and addressed the topics of staffing, operations, and facilities. The standards were presented as suggestions, not requirements, as the following excerpt indicates:

> …. the following suggestions are presented for basic standards in the areas of staffing, operations, and facilities that should enable a college or university to provide a quality of program within the educational framework to assist in the career development of its graduates. (CPC, 1975, p. 3)

In 1972, prior to the development of the professional standards, CPC had developed the *Career Counseling and Placement Guides* as a means for self-study and evaluation by practitioners. When the third edition of this document was published in 1978, it was revised to coincide with the professional standards and provided self-evaluation consistent with the standards (CPC, 1978).

Practitioner acceptance and use of the CPC professional standards and guidelines was apparently limited. In a survey of placement directors at 1,265 four-year colleges and universities, Scott (1983) noted the universal lack of practitioner understanding and compliance with these standards that had been developed for career planning and placement. Agreement on universal standards for the field and effective communication of those standards to practitioners, administrators, and accrediting agencies were required if career planning and placement was to achieve professional status (Scott, 1983).

By 1979, efforts were underway to develop professional standards and guidelines for student affairs and CPC was involved in the development of the CAS professional standards from the beginning. Representatives of the American College Personnel Association (ACPA), National Association of Student Personnel Administrators (NASPA), and CPC met informally on the initial topic of academic preparation standards for graduate programs in student personnel. The notion of developing a set of standards for professional practice emanated from that meeting.

As a specialty association working in conjunction with the broad-based associations (ACPA and NASPA), CPC was instrumental in the development and early success of the new CAS standards published in 1986 (Meyer, 1986).

Yerian (1993) noted that career planning and placement offices generally used annual reports, follow-up surveys of graduates, as well as accreditation self-studies and visits as the principal means of evaluation. However, the summative nature of these types of evaluation tended to be limiting for program improvement. The development and implementation of the 1988 CAS *Career Planning and Placement Self-Assessment Guide* provided opportunity for more extensive internal evaluation that could also be formative.

CPC responded to the need for extensive attention to evaluation in 1992 by creating a Professional Standards and Measurement Task Force to consider measurement standards and reporting by career services offices, as well as develop a self-assessment methodology for practitioners. This initiative culminated in the 1995 NACE (formerly CPC) publication of *Sourcebook for Conducting Evaluations and Measurements in Career Services* (NACE, 1995, 1998b).

By the 1990s, the evolution of career services included many programming and service dimensions that the 1986 CAS standards did not address (NACE, 1998c); Yerian, 1993). In 1995, NACE created a professional standards task force to develop professional standards for career services to reflect the broad variation of programs and services. Three years later, the NACE *Professional Standards for College and University Career Services* (NACE, 1998c) and the companion *NACE Professional Standards Evaluation Workbook* (NACE, 1998b) were published.

The new NACE professional standards and guidelines were similar to and expanded upon the 1997 CAS standards and guidelines for career planning and placement. Sections were added to the NACE standards for graduate education and experiential learning, as well as employer relations. More specificity for assessment and evaluation was included and the human resources section was expanded to cover specific career services functions and the core competencies and knowledge required for each (CAS, 1997; NACE, 1998).

The 2000 revision of the CAS standards and guidelines for career services expanded considerably the 1997 version and incorporated most of the elements of the 1998 NACE standards. In a three-year span, the CAS and NACE professional standards became remarkably similar (CAS, 1997/1999/2001; NACE, 1998c). The NACE standards have not been updated since 1998.

CAS Standards and Guidelines

The professional standards developed by the CAS provide concrete guidance regarding excellence in professional practice for student affairs professionals. Whether used for evaluation, staff development, program planning, accreditation or

other purposes, the CAS standards remain a widely accepted, unified, and valuable resource for student support and services practitioners.

Evolution of CAS

The evolution of student affairs has been very significant, growing from a few faculty members attending to student needs on a part time-basis to the current system of complex institutional divisions that employ highly skilled and knowledgeable specialists, and which are designed to be complementary to the academic mission of an institution (CAS, 2001). Through the years, the profession of student affairs has gained stature and vision and has become recognized as an essential part of the mission of higher education (Mable, 1991).

Mable and Miller (1983; 1991) noted that student affairs practitioners lacked criteria with which to judge the quality of their work. Although there was concern about the lack of professional standards, little was done through the mid-1970s to create standards of practice and professional preparation. Mable (1991) suggested that this missing ingredient of comprehensive standards for program development, evaluation, self-study, and accreditation was a significant issue. Miller (1984) observed that the members of the emerging student affairs profession were neither educated about nor had used professional associations to develop standards to ensure program quality and integrity.

Prior to 1986, there was no single set of universal standards that could be applied to professional practice and preparation programs. For the most part, the standards, guidelines, or ethical statements that did exist had been developed in relative isolation and independently at different times by various associations. Yet this was a time in higher education when accountability and self-regulation were significant issues (Meyer, 1986).

One of the early attempts at establishing professional standards was the work of the Council of Student Personnel Associations in Higher Education from which emanated guidelines for professional preparation in 1967. Simultaneously, there was interest in developing counselor education standards and in 1973 the Association for Counselor Education and Supervision (ACES) published standards for accrediting educational programs in counseling and personnel services. ACES was a division of the American Personnel and Guidance Association that later became the American Association for Counseling and Development. ACPA adopted its own set of preparation standards in 1979 (Miller, 1991).

NASPA and ACPA started a collaborative effort in 1979 to develop profession-wide standards that eventually led to the creation of the Council for the Advancement of Standards for Student Services/Development Programs. The development of the CAS standards was influenced by ACPA standards for preparation (Miller, 1991).

In June 1979, representatives of ACPA, NASPA, and CPC met informally to consider the creation of standards for professional practice, preparation programs, and accreditation programs. The involvement of two broad-based associations (ACPA and NASPA) and one specialty association (CPC) demonstrated the need for an inter-associational approach and was instrumental in the successful development of the CAS standards (Mable, 1991; Meyer, 1986).

Representatives of 13 professional associations met in the October 1979 as the ad-hoc Inter-association Conference on Student Development and Services Accreditation Issues that was the forerunner of CAS. Their goal was to identify key accreditation issues for student affairs and consider the creation of standards for preparation and professional practice. The first formal organizational meeting of the Council for the Advancement of Standards for Student Services/Development Programs was in January 1980 (Mable, 1991; Meyer, 1986). There were 11 charter member associations when CAS was incorporated (CAS 2001).

CAS was incorporated to develop general standards, functional standards, and standards for professional preparation programs. This was the first attempt, on a national scale by multiple student affairs organizations, to develop consensual and universal standards of professional practice and academic preparation for a wide array of student service functions (Meyer, 1986).

Members of the CAS consortium began their efforts with three major goals:
> The first was to establish, adopt, and disseminate two types of standards and guidelines, one for student services and student development programs, and the other for the preparation of professional practitioners for the field.
> The second goal was to assist professionals and institutions in the utilization and implementation of these standards and guidelines for the evaluation and improvement of student services and development programs and professional preparation programs.
> Third, CAS strove to establish a system of regular evaluation of standards and guidelines to keep pace with the changing needs and practices of the profession. This evaluation was intended to result in periodic amendments and dissemination of updated standards and guidelines. (CAS, 1986, p. 1)

Meyer (1986) noted that the early development of the CAS standards was influenced by emphasis on accreditation as a means of self-regulation for student affairs. Over time, the emphasis on accreditation decreased, but the interest in using the CAS standards for institutional self-assessment activities remained strong. CAS intended to offer standards useful for higher education institutions and which could also be used by accrediting agencies. The focus shifted to developing standards that could be used by practitioners for program evaluation and development.

Supported by the American Council on Education's Advisory Committee on Self-Regulation Initiatives and the Council on Postsecondary Accreditation (COPA), the six-year development of the CAS standards was completed in 1986. Because the standards were developed without requirement of a specific type of organizational structure, the CAS standards could be applied universally within higher education (Nichols, 1989). At that time, there were 20 member associations and two associate member associations of CAS (Mable, 1991; CAS 1986). The development of the standards and guidelines was a collaborative and consensus-building process by the member associations. When completed, the *CAS Standards and Guidelines for Student Services/Development Programs* were distributed, courtesy of the American College Testing Program, to the chief academic officer and the chief student affairs officer at every college and university in the United States (CAS, 1986).

The CAS standards contained both standards and guidelines, which were carefully distinguished from each other. Standards reflected the essential elements and minimum requirements expected of an institution and its student services/development and professional preparation programs. Each standard was printed in bold type and the inclusion of auxiliary verbs such as "shall" or "must" emphasized the minimum requisite threshold. For compliance with acceptable practice, an institution had to satisfy the requirements stated in each standard. Guidelines specified recommended elements of programs and practice, used auxiliary verbs such as "should" or "may," and were used to interpret or explain the standards. Guidelines were also offered as suggestions consistent with effective and appropriate professional preparation or professional practice (CAS, 1986).

General standards, common elements across several functional areas, had been developed for these 13 component areas: (a) mission, (b) program, (c) leadership and management, (d) organization and administration, (e) human resources, (f) funding, (g) facilities, (h) legal responsibilities, (i) equal opportunity/access/affirmative action, (j) campus and community relations, (k) multicultural programs and services, (l) ethics, and (m) evaluation. General standards applied to all student development and student services programs (CAS, 1986).

Functional area standards and guidelines had been developed that were specific to programs in student affairs and other institutional divisions. Designed as extensions of and in conjunction with the general standards, functional area standards and guidelines were developed for these 16 areas: (a) academic advising, (b) career planning and placement, (c) college unions, (d) commuter student programs and services, (e) counseling services, (f) disabled student services, (g) fraternity and sorority advising, (h) housing and residential life programs, (i) judicial programs and services, (j) learning assistance programs, (k) minority student programs and services, (l) recreational sports, (m) religious programs, (n) research and evaluation, (o) student activities, and (p) student orientation programs (CAS, 1986).

As use of the CAS standards and guidelines increased, the need for self-assessment procedures became obvious as a means to make operational the standards

and guidelines. The CAS *Self-Assessment Guides* were introduced in 1988 and these documents enabled professionals to use self-study processes and standards–based criterion measures to evaluate how well they met each standard and guideline. The documented analysis required by the self-assessment guides provided a comprehensive understanding for practitioners as they sought to make necessary changes and enhancements identified in this process (Mable, 1991).

To promote use of the *Self-Assessment Guides*, CAS published a training manual entitled *Putting the CAS Standards to Work* in 1988 and a revised version in 1998. This publication was developed to enhance user understanding and training in utilizing the CAS standards (Yerian, 1988/1998).

A review and revision process for the CAS standards and guidelines was begun in 1989 to update all of the functional standards (Mable, 1991). Since that time these documents have undergone regular revisions to keep them current. The addition of five member associations and three functional areas, Admission Programs and Services, Alcohol and Other Drug Programs, and Women Student Programs and Services, enhanced the scope of CAS. The name of the organization was changed in 1992 to the Council for the Advancement of Standards in Higher Education (CAS) to better reflect the broader context of the efforts of the organization (CAS, 1997).

A major revision of the 1986 standards and guidelines was completed by CAS with the publishing of *The Book of Professional Standards for Higher Education 1997*. There were some changes made in the names of the 13 standard components published in 1986 and the revised standard components included the following: (a) mission, (b) program, (c) leadership, (d) organization and management, (e) human resources, (f) financial resources, (g) facilities, technology and equipment, (h) legal responsibilities, (i) equal employment, access, and affirmative action, (j) campus and community relations, (k) diversity, (l) ethics, and (m) assessment and evaluation. A major enhancement was the addition of contextual statements for each functional area that described the context and nature of the standards and guidelines for that area. This new edition also included revision and updates for previous functional standards and guidelines, and added four new functional areas: (a) Financial Aid, (b) International Student Programs and Services, (c) Registrar Programs and Services, and (d) Student Leadership Programs. With those additions, there were total of 23 functional areas and one professional preparation program area. By that time the number of CAS member organizations had grown to 29 (CAS, 1997).

When *The Book of Professional Standards for Higher Education 1999* was published, there was one new area, TRIO and Other Educational Opportunity Programs, added to bring the total to 24 functional areas and one professional preparation program area. The number of member professional associations remained at 29 (CAS, 1999).

The Book of Professional Standards for Higher Education 2001 was the third revision of the CAS professional standards and when published, this edition contained

standards for 28 functional areas and one professional preparation program. Four new functional areas were added which included: (a) Campus Information and Visitor Services, (b) College Health Programs, (c) Educational Services for Distance Learners, and (4) Lesbian, Gay, Bisexual, & Transgender Programs. The number of professional associations holding membership in CAS had grown to 34 (CAS, 2001).

New general standards were adopted by CAS in 2002 that improved the usability of the standards and guidelines. Clarification and illustration of the relevant and desirable outcomes was thought to be beneficial to help practitioners provide the evidence required by the standards and guidelines (Creamer, 2003).

The publication of *The Book of Professional Standards for Higher Education, 2003* reflected the revision of standards in all of the functional areas and the academic preparation area. Standards were also written for an additional functional area, Conference and Event Programs, bringing that total to 29. The number of professional associations holding membership in CAS was 32 (CAS, 2003).

CAS Standards and Career Services

Since CPC was a charter member of CAS, standards for the career services functional area were included in the original *CAS Standards and Guidelines for Student Services/Development Programs* published in 1986. As with the other functional areas, the standards and guidelines for career planning and placement were used in conjunction with and interpreted in accordance with the CAS general standards. The major program elements were career counseling, placement counseling and referral, and student employment (CAS, 1986).

The CAS standards revision in 1997 meant few changes for career planning and placement. Standards for leadership and facilities, technology, and equipment became more definitive while the standards for financial resources were made more general. The standards were expanded in organization and management, human resources, legal responsibilities, equal opportunity, access, and affirmative action, as well as assessment and evaluation (CAS, 1986/1997). There were no changes in the standards and guidelines for career planning and placement when *The Book of Professional Standards 1999* was published (CAS, 1999).

In 2000, the standards and guidelines for career planning and placement were revised significantly as reflected in *The Book of Professional Standards for Higher Education 2001.* One obvious change was that the name of the functional area was changed to "career services" to be consistent with the evolution of the field. Standards and guidelines were expanded in most component areas. For example, the program component added standards and guidelines on information and resources, experiential learning, job search services, employer services, consultation, and outcomes assessment. The human resources component added a major section regarding the functions, core competencies, and knowledge domains required for career services. Many of these changes reflect the content of the 1998 NACE *Professional Standards*

for College and University Career Services and the companion *NACE Professional Standards Evaluation Workbook* and the standards and guidelines of the 1998 NACE and the 2001 CAS documents are remarkably similar (CAS, 2001; NACE, 1998).

Value of Using Standards in Higher Education

While the CAS standards are universally known as a valuable resource for educational practitioners, the reasons for adoption in practice must be linked to the enhancement of the overall quality of student support programs and services. The "why" question regarding the use of professional standards merits consideration.

Quality and Institutional Effectiveness

Accountability has been a focus of many higher education institutions for several years. Multiple stakeholder groups are seeking to determine if institutions are meeting intended outcomes. Providing evidence regarding institutional effectiveness and program quality remains a challenge for institutions of higher education and the opportunity to use professional standards as one measure of evidence has been addressed by numerous authors (Bogue & Saunders, 1992; Bryan & Mullendore, 1993; Komives & Woodard, 2003; Mable & Miller, 1983/1991; Miller, 1984; Nichols, 1989; Nuss, 2003; Patrick & Niles, 1987; Schuh & Upcraft, 2001; Schwartz & Bryan, 1998; Upcraft, 2003; Winston & Dagley, 1985).

The use of assessment is a valid and systematic way to answer questions from stakeholders about program quality and effectiveness. In the student affairs area, for example, assessment can be used to: (a) demonstrate importance or worth, (b) measure quality of programs, facilities, and services, (c) determine cost effectiveness, (d) define strategic goals and objectives, (e) aid in evaluation, (f) influence policy development and decision making processes, and (g) provide evidence for accreditation processes. A key element of a comprehensive assessment model is the use of accepted national standards against which to compare programs, facilities, and services (Upcraft & Schuh, 1996).

Bogue and Saunders (1992) suggested three types of performance standards as an operational measure of quality: (a) predetermined criterion standards, (b) normative or comparative standards that measure performance against other programs, and (c) connoisseurship standards that use the opinions and values of a team of judges to measure performance. The use of such standards requires operational definition of institutional mission and goals and public disclosure, through the use of external standards, of the performance of programs and services. Examples of such public disclosure include comparative analysis with other institutions, program review, and accreditation.

Assessment and Evaluation

In response to the increasing demands for accountability, institutions must clearly define their purposes and use comprehensive assessment and evaluation strategies to assure stakeholders they are achieving what they intended. The use of professional standards promotes the evaluation of program quality and staff member performance (Mable & Miller, 1983).

Professional standards provide a framework for evaluation by defining programs and services to be evaluated and the processes by which that evaluation will take place. Additionally, standards can be beneficial in defending individual decisions and actions within an institution (Winston & Dagley, 1985).

Standards can also be used to conduct analytical self-studies related to the student affairs divisional and functional unit goals and objectives. Because they provide clear criteria of what student affairs services and programs must provide, standards and guidelines are the essence of the self-study process (Mable, 1991). However, the use of standards for assessment and evaluation requires that effective and comprehensive assessment programs be instituted to analyze effectiveness and outcomes associated with programs and services. The failure to do so is to fall short of meeting the standards themselves (Winston & Moore, 1991).

Consistency of Definitions for Exemplary Practice

Mable and Miller (1983, 1991) observed that professional standards provide practitioners with consistent definitions of exemplary practice and uniform reference points that help provide direction for new or improved program development. Additionally, professional standards provide quality assurance in programming and staffing leading to better experiences for students. Finally, professional standards provide consistent criteria for accreditation purposes with, as Miller (1984) noted, the same standards being used by both the accrediting agency and the institution.

The use of professional standards in program development enables higher education leaders to measure the quality of their programs and services against professional standards that define and delineate levels of exemplary practice. Key areas might include mission, organizational patterns, resources, ethics, and relationships with other entities. Program development and accreditation are two areas in which professional standards can provide the most significant benefits (Miller, 1984).

Value to Stakeholders

Within the student affairs domain, one reality is increased demand for accountability and evaluation of services. It becomes a matter of survival when many groups are competing for the same resources. Responding to those demands requires an approach that is well reasoned, evidence-based, and sensitive to political

influences. One method of evaluation is to compare performance with criteria established by national organizations (Patrick & Niles, 1987).

The emphasis on evaluating programs and services within the context of an institution's mission insures the uniqueness of the institution is recognized and protected (Winston & Moore, 1991). Because there is no assumption that any particular organizational or administrative structure is required, professional standards like CAS can be applied to all types of higher education institutions (Nichols, 1989).

In an era of increased expectations for institutional effectiveness and accountability, student affairs will have to provide evidence of the difference it makes in student learning and performance. What student affairs offices contribute to that educational process must be carefully analyzed and determined as required by professional standards such as CAS (Mable & Miller, 1991).

Professional standards and guidelines provide an excellent framework to guide student development processes. Globally, the distinctiveness, image, reputation, and value of student affairs can be promoted both internally and externally. Practitioners who use professional standards for program and service implementation and evaluation can increase and enhance influence and involvement. But to do so requires that student affairs practitioners continually engage in self-study processes that are critical for determining program success, institutional effectiveness, and student development (Mable & Miller, 1991).

The use of professional standards provides concrete analysis of programs and services, thereby increasing the likelihood that the subsequent information shared with stakeholders is more valid, reliable, and accurate. As a result, the planning of programs and services becomes purposeful and distinctive with clear goals and objectives (Mable & Miller, 1991). Additionally, standards provide direction and strategy for higher education program and services, promoting quality and leading to improvement (Nuss, 2003).

Finally, the use of standards promotes and increases professionalism (Miller, 1984; Winston & Moore, 1991). For student affairs practitioners, that can result in enhanced credibility among stakeholder groups.

Application of CAS Standards in Professional Practice

Tangential to evaluating the value of using professional standards in student support programs and services, the "why" question, practitioners must also consider the "how" question regarding the use of professional standards. An understanding of the various types of applications for the CAS standards is helpful in promoting use.

Education of Stakeholders

The interest and commitment of chief student affairs officers is a major factor in the use of CAS standards and guidelines in colleges and universities. A primary need is to increase the awareness and visibility of the CAS standards and guidelines among that group (Marron, 1991).

There are a number of potential applications of the CAS standards for student affairs practitioners and this use depends largely on the awareness level of the chief student affairs officer regarding the value of the standards. Professional standards can be a significant component in educating various internal and external stakeholders about the mission, goals, and objectives of the student affairs division. When used to deal with campus political climates, professional standards can be used to explain, defend, and enhance the credibility of programs and services within the division, improving political maneuverability. Involving students and faculty members in the review process promotes greater understanding of the institutional contributions made by student affairs programs and services (Bryan & Mullendore, 1993). Student affairs practitioners can also use the CAS standards as a framework to educate senior administrators regarding the student affairs planning process (Marron, 1991).

Assessment and Evaluation

Assessment and evaluation efforts can be improved through the use of professional standards. Miller (1996) suggested that the use of standards and guidelines provides criterion measures against which higher education professionals can judge the quality and character of their facilities, programs, and services. CAS standards are also quite beneficial for internal program review initiatives. Mable and Miller (1991) noted the CAS standards promote the regular and continuing analysis of the effectiveness of student affairs functions and enhance the influence of student affairs on student success and outcomes. Assessing and evaluating the strengths and weaknesses of student affairs programs and services can be significantly enhanced by the benchmarks professional standards provide (Bryan & Mullendore, 1993; Cooper & Saunders, 2000; Schuh & Upcraft, 2001). Additionally, professional standards can provide a framework for annual reports that can be more comprehensive and better reflect the self-study processes that are required (Mable & Miller, 1991; Marron, 1991).

Program Planning

CAS standards provide guidance for effective strategic planning and program development and facilitate evaluation of how well intended goals and objectives are accomplished (Mable & Miller, 1991). Additionally the CAS professional standards facilitate the review of program components, delineate areas of non-compliance, and establish a clear focus for developing goals and objectives and determining related priorities (Bryan & Mullendore, 1991, 1993).

Accreditation Self-Study

Accreditation self-study is a key area in which professional standards are used. Standards provide consistent criteria for use by the institution and accrediting agency. As accrediting agencies seek evidence of program quality, professional standards provide an external and widely accepted definition of quality against which the institution can measure its compliance (Bryan & Mullendore, 1991) and develop recommendations to address areas of concern. CAS standards can be used for program reviews and to organize accreditation self-study initiatives (Arminio & Gochenauer, 2003; Marron, 1991; Whitt & Blimling, 2000).

Staff Development

When staff members are engaged in evaluation processes using the CAS standards, they gain a broader perspective of criteria that define departmental, divisional, and institutional quality. Due to the consistency of language and format professional standards provide, staff members can also compare their programs with those at similar institutions. The use of professional standards facilitates comprehensive study of program components across a department or division and that can be a significant staff development experience (Arminio & Gochenauer, 2003; Bryan & Mullendore, 1991, 1993). Additionally, staff members can use the standards and guidelines to determine their level of effectiveness in implementing the standards in their daily work (CAS, 2001).

Budget Justification

The competition for available resources at many institutions can be fierce at times. Providing evidence of need that has broad implications continues to be a challenge for college and university administrators. Professional standards such as CAS, when viewed by an institution as the minimal threshold for expectations, can be instrumental in justifying additional resources to remedy compliance issues and provide developmental funding for program development (Arminio & Gochenauer, 2003; Bryan & Mullendore, 1991, 1993).

CAS Utilization Research

Previous research related to the awareness and utilization of the CAS standards in higher education had been focused, in large part, on the Chief Student Affairs Officer (CSAO). Meyer (1986) authored a comprehensive historical analysis of the evolution of the CAS standards and also surveyed student services/development practitioners to gain some understanding of their attitudes toward the newly developed standards. One hundred institutions were selected for the sample and the CSAO at each institution was included. Additionally, selected directors were surveyed from each of the following functional areas: career planning and placement, counseling, student activities, and disabled students. This was the first

systematic effort to ascertain the perceptions and use of the CAS standards and to gain feedback that would lead to improvement.

For each of the four functional areas, 25 unit directors and 25 CSAOs were asked to respond to the survey. There were 35 total respondents for the career planning and placement area but no distinction was made as to how many were CSAOs and how many were career planning and placement directors. Respondents were asked to review the following general standard components for each of the four functional areas considered: (a) mission, (b) program, (c) organization and administration, (d) human resources, (e) funding, (f) facilities, (g) campus and community, (h) ethics, and (i) evaluation. Individual questions were designed to gather responses for each set of standards with respect to clarity, completeness, realism, and the usefulness of the standards for the purposes of program evaluation, program improvement, and staff development (Meyer, 1986).

The majority of the respondents believed that the general and career planning and placement standards and guidelines were well written and comprehensive, and contained all of the major elements. With regard to the career planning and placement standards and guidelines, the majority of the respondents agreed the subsections were comprehensive and applicable to their type of institution. Additionally, the respondents agreed the standards were useful for program improvement, staff development, self-study, and accreditation (Meyer, 1986).

Marron (1989) surveyed CSAOs from 600 four-year colleges and universities regarding their use of the CAS standards and guidelines. The sample was systematically random based on institutional size and type and there were 436 respondents. The findings of the study indicated with regard to utilization, institutional size was not a factor and public institutions made use of the standards more than private institutions. Additionally, the respondents believed that while the CAS document was comprehensive, the distribution had not been sufficient for full standard utilization, the actual use has been minimal, and the long-term effect could not be predicted. Types of use included as a reference guide and for formal and informal staff discussions. Finally, the CSAOs were divided regarding whether the CAS standards should be used for accreditation.

Grant (1990) investigated the CSAO perception of the CAS standards relevancy and CSAO use of the standards for the evaluation of student services programs at two-year colleges in Ohio and contiguous states. There were 59 responses received from the 104 institutions surveyed. Findings revealed that 89 percent of the respondents believed the standards were most relevant or moderately relevant and that 60 percent were using the standards. While there was no significant relationship between the CSAO perceived relevancy and use of the standards, the respondents did indicate that the CAS standards are generally relevant for evaluation purposes.

Mann, Gordon, and Strode (1991) surveyed 250 randomly selected CSAOs from four-year colleges and universities regarding the extent and basis of change that has occurred in student affairs practice since the development and publication of the CAS standards. Responses from 130 CSAOs provided evidence that the while the CAS standards had made an impact in student affairs practice, the respondents did not perceive the CAS standards to be a basis for change. The CSAOs did indicate that the CAS standards were being used for implementing change in the areas of student involvement, holistic development, and assessment.

Cooper and Saunders (2000) studied the perceived importance of the CAS general standards "must statements" and the professional development impact of the CAS standards for student affairs practitioners. Surveys were sent to 230 student affairs practitioners holding membership in the Southern Association for College Student Affairs and 109 usable responses were received. The areas rated most important were global concerns such as financial management, legal and ethical issues, and collaboration. Areas perceived as least important were more narrowly defined and specific, such as assessment, written ethical statements and intern hiring policies. There were differences regarding the perceived importance of the "must statements" based on ethnicity, position level, and institutional type. Generally, the respondents were comfortable regarding how their knowledge and skills related to the most important standards. Areas identified for additional training included liability exposure and legal issues.

Love (2000) collected information from graduate faculty at several institutions about their use of the CAS standards and self-assessment guide in student affairs preparation programs. Major themes in the feedback included: (a) how prescriptive the CAS standards should be, (b) the incorporation of technology into the CAS standards, (c) expectations in the standards that are out of the control of program faculty, and (d) the need for guidelines on the frequency and degree to which the self-assessment should be completed.

Arminio and Gochenauer (2003) surveyed a random sample of 5,506 student affairs practitioners and faculty members from 22 of the professional associations belonging to the CAS consortium. Based on responses from 1,481 participants, the authors sought to determine who uses the CAS professional standards, how they are used, and what evidence exists that the CAS Standards and Guidelines have enhanced student learning. Results were obtained from statistical analysis and more extensive themes identified from open-ended questions.

Sixty-one percent of the respondents had heard of CAS with significant differences by job title and Vice-Presidents/Associate Vice-Presidents were identified as the group most likely to have heard of CAS. Types of use that were made of the CAS standards included: (a) assessment and evaluation, (b) reference guide, (c) to influence learning, (d) accreditation review, (e) budget request justification, (f) development of goals and mission statements, and (g) professional/staff development.

Respondents were also asked if there was a connection between CAS and positive learning outcomes. Twenty-four percent of the participants measured learning outcomes and of that group, 41% reported a connection between the CAS standards and learning outcomes. There were significant differences by job title for those who measured learning outcomes and respondents from public institutions were significantly more likely to indicate that the CAS standards positively influenced their programs and services.

The area in which the CAS standards were most influential was assessing current programs and then expanding current programs. When respondents were not certain if CAS standards influenced learning outcomes, they offered the following reasons: (a) the process of assessment is just beginning, (b) assessment is centralized on campus, (c) student satisfaction is measured more than learning outcomes, and (d) standards other than CAS were being employed. Criticisms of the CAS standards included: (a) the standards are not user friendly for small institutions or at those with one professional staff member, (b) their current institution does not use the CAS standards on a regular basis, and (c) lack of knowledge regarding how to obtain updated materials.

The data indicated that while the number (15%) of student affairs leaders not familiar with the CAS standards was similar to the study conducted by Mann et al. (1991), there was an increase in practitioners who report that the CAS standards provide a positive influence on programs and services. The CAS standards were used more at public institutions than private ones. The authors suggested that future research should include how much new CAS initiatives influence higher education learning outcomes of program and services.

Research Opportunities

Perhaps the most significant value of the CAS standards is the utility of their application for program development, program self-study, and staff development purposes. There is evidence the CAS standards and guidelines are being used for program assessment and to enhance the quality of professional practice at many institutions (CAS, 2001: Creamer, 2003).

But as Creamer (2003) noted, there is a paucity of evidence that indicates the effects of using the CAS standards and guidelines on either programs and services or student learning and development. By design, the CAS standards can promote quality educational processes in the programs and services of each functional area. But whether or not the use of the CAS standards improves educational practice remains in question.

Some key research questions that beg consideration at this time include how well recognized and credible are the CAS standards and guidelines among higher education practitioners (CAS, 2001). Other key questions relate to understanding the

type and frequency of practitioner use of the CAS standards and guidelines and how professional practice is influenced by their use (Creamer, 2003).

Much of the previous research, as mentioned earlier, related to the chief student affairs officer awareness and use of the CAS standards and guidelines. Little information was available that considered the use of the standards by functional area practitioners.

There was little research that had been published on career services use of either the CAS or the NACE standards and guidelines for professional practice. This study sought to help fill that void by investigating the career services function and how the CAS standards contributed to director behaviors required for successful program achievement.

Chapter 3

Research Methodology

This was a study of career services director use of the Council for the Advancement of Standards in Higher Education (CAS) professional standards at four-year public colleges and universities. Specifically, the study examined career services director awareness of and perceived barriers to use of the CAS standards, as well as the types and extent of use, and related levels of satisfaction.

A descriptive research approach was employed for this study since the major purpose was to examine how the CAS standards were being used by career services directors. Because data was collected at a single point in time describe the population, as well as to determine relationships among variables, a cross-sectional survey design was employed (Babbie, 1990; Fink, 1995; Rea & Parker, 1997).

Population Selection

The population studied consisted of career services directors at publicly supported four-year colleges and universities in the 50 states and the District of Columbia that were listed in the *2003 Higher Education Directory*, and which were included in one of the following six categories based on the 2000 Carnegie Classification: (a) Doctoral/Research Universities-Extensive, (b) Doctoral/Research Universities-Intensive, (c) Master's Colleges and Universities I, (d) Master's Colleges and Universities II, (e) Baccalaureate Colleges-Liberal Arts, and (f) Baccalaureate Colleges-General. There were 505 institutions identified in these six categories (Burke, 2003).

Of the institutions previously identified, the study was restricted to the career services offices currently holding membership in the National Association of Colleges and Employers (NACE), the national professional association for career services practitioners. By cross-referencing the NACE membership directory with the *2003 Higher Education Directory*, it was determined that 481 (95.2%) of the 505 institutions listed in the *2003 Higher Education Directory* also had membership in the National Association of Colleges and Employers (Burke, 2003; NACE, 2002b). Thus, this sub-population fairly represented the population as a whole and was surveyed for this study. With the exception of the one institution employing the researcher, all of the NACE member four-year public institutions were included. The survey instrument recipients were identified as the directors of the career services unit at each respective institution.

Survey Instrument

The information to be analyzed for this study was collected using a questionnaire entitled *The Use of CAS Standards in Career Services* that was developed by the researcher for this purpose (see Appendix C). There were five parts

on the questionnaire, the first of which collected demographic data regarding the respondents. This data included each director's years of experience, both in the career services field and as director of a career services unit, and the highest educational degree earned by each respondent.

Part two was intended to determine the level of awareness respondents had regarding the CAS standards and the level to which specific sources contributed to that awareness. The third part sought to gauge the perceived significance of specific barriers to the use of the CAS standards. Part four was to ascertain whether or not respondents possessed a copy of the CAS standards and the career services self-assessment guide, as well as the specific edition of each. The fifth part was intended to ascertain whether or not respondents used the CAS standards and if so, the type, extent, and satisfaction level of each type of use.

A pilot study of the survey instrument was conducted with 60 career services directors at selected four-year private institutions holding NACE membership (see Appendix A). Responses were received from 54 of those institutions for a response rate of 90%. After making necessary changes, the survey instrument was mailed to the director of the career services unit at each of the public four-year institutions included in this study.

Variable Specification

This section presents the independent or predictor variables, the dependent or criterion variables, and the means by which each was measured. The independent variables for this study included demographic data, respondent awareness level, office possession of the CAS standards, and barriers to use of the CAS standards. Dependent variables included use of the CAS standards, type and extent of CAS standards use, and the respondent satisfaction with CAS standards use for each specific type of use. It should be noted that based upon the specific research question that was addressed, the dependent variable in one case may have been used as an independent variable in another case.

Demographic Data

Four demographic variables were considered, the first three of which collected ordinal data. The first variable is institutional size, which was obtained from the *2003 Higher Education Directory* for each responding institution (Burke, 2003). The total respondents were divided into three groups based on actual enrollments: (a) less than 5,000 students, (b) between 5,000 and 15,000 students, and (c) more than 15,000 students. Secondly, the number of years of experience each respondent had in the field of career services was identified based upon three categories: less than 5 years, 5-10 years, and more than 10 years. The same levels were used for the third background variable, which was years of experience as director of a career services unit.

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The fourth demographic variable was the highest educational degree of the respondent. Five degree categories were used for this categorical variable: (a) Less than Bachelor's, (b) Bachelor's, (c) Master's, (d) Other Post-Bachelor's, and (e) Doctorate.

CAS Standards Awareness

Respondents were asked the extent to which they were aware of the CAS standards. The level of awareness of the CAS professional standards was measured using a seven-point ordinal scale ranging from *Not aware* (1) to *Very aware* (7).

If respondents were aware of the standards, potential sources of that awareness were listed which included: (a) graduate studies, (b) professional journals, (c) professional meetings and conferences, (d) the chief student affairs officer, (e) colleagues within the career services office, (f) colleagues within the institution, and (g) colleagues from outside the institution. An open-ended question was used to identify additional sources of CAS standards awareness. The extent to which each source contributed to respondent awareness of the CAS standards was measured using a seven-point ordinal scale ranging from *Not a contributor* (1) to *Major contributor* (7).

Barriers to CAS Standards Use

Respondents were asked to indicate the level of significance that specific types of barriers had on using the CAS professional standards. The types of barriers included: (a) lack of funds, (b) lack of staff resources, (c) lack of time, (d) lack of training on how to use the CAS standards, (e) lack of perceived value, (f) lack of institutional support, (g) lack of perceived necessity, (h) not helpful based on past use, and (i) fear of finding non-compliance.

A seven-point ordinal scale ranging from *Not significant* (1) to *Very significant* (7) was used to measure the level of significance for each type of barrier. An open-ended question was also employed to identify additional types of barriers to use and the level of significance for each additional barrier type.

CAS Standards Possession

This variable was intended to determine whether or not the respondent's career services office possessed a copy of the CAS standards. Discrete categories of yes and no were used for this variable.

Use of CAS Standards

The variable was intended to ascertain whether respondents had used the CAS professional standards. The two discrete response categories for indicating current or previous use were yes and no.

Type and Extent of CAS Standards Use

If respondents were currently using or had previously used the CAS standards, questions regarding the different purposes for which respondents used the CAS standards were presented. Types of CAS standards use listed included:
(a) comprehensive program review, (b) on-going program evaluation, (c) strategic planning, (d) to develop programs, (e) to build program credibility, (f) resource justification, (g) to educate stakeholders, (h) staff development, (i) to determine staffing needs, (j) accreditation self-study, (k) to justify the existence of a current program, and (l) as a general reference guide. An open-ended question was used to identify additional types of CAS standards use. A seven-point ordinal scale ranging from *Have not used* (1) to *Extensive use* (7) was employed to measure the extent of each type of use.

Satisfaction with CAS Standards Use

For each type of CAS standards use noted by respondents, a question was asked regarding the level of respondent satisfaction with that type of use. For measurement of the satisfaction levels, a seven-point ordinal scale ranging from *Not satisfied* (1) to *Very satisfied* (7) was used.

Research Procedures

The questionnaire entitled *The Use of CAS Standards in Career Services* (see Appendix C) was mailed to those persons identified in the NACE directory as the career services unit director for each institution. Each survey was accompanied by a cover letter (see Appendix B) explaining the study and providing necessary instructions. Included in the cover letter were statements of support from CAS and NACE officials that were intended to improve the overall response rate. A self-addressed postage-paid envelope was also included.

Subject identification codes were assigned and recorded on each survey for the purposes of identifying respondents and following up with non-respondents. A return rate log of returned questionnaires was maintained. Returned questionnaires were checked for completeness and response errors. A follow-up electronic message with a copy of the cover letter and survey instrument was sent to non-respondents within three weeks after the original mailing.

Data Analysis

Raw data from each questionnaire was coded and entered into an established data file using predetermined identification numbers. Analyses were performed using SPSS software to determine response rates, population characteristics, and the relationships between the independent and dependent variables.

Response rates were determined by computing the percentages for those who completed and returned the survey. Respondent characteristics were described through the use of frequency distributions and percentages on the demographic variables: institutional size, experience in career services, experience as career services director, highest educational degree, and office possession of the CAS standards.

Analysis of variance (ANOVA) was the principal statistical analysis method for each of the following research questions:

1. Were there significant differences in career services director awareness of the CAS standards by institutional size, career services experience level, director experience level, and director degree level?

2. Were there significant differences in barriers to career services director use of the CAS standards by institutional size, career services experience level, director experience level, and director degree level?

3. Were there significant differences in the extent of career services director use of the CAS standards by institutional size, career services experience level, director experience level, and director degree level?

4. Were there significant differences in career services director satisfaction from use of the CAS standards by institutional size, career services experience level, director experience level, and director degree level?

In each case, two types of three-way ANOVA were performed for the independent variables of institutional size, years of career services experience, years of experience as director, and director degree level. One type included the independent variables of institutional size, years of career services experience, and director degree level. The second type of three-way ANOVA included the independent variables of institutional size, years of director experience, and director degree level. Factor analysis was used for the perceived barriers and types of use to determine if clusters existed and the number of factors could be reduced.

Descriptive data analysis was used for the following research questions:

1. Among those respondents who were aware of the CAS professional standards, what were the factors contributing to that awareness?

2. Among those respondents who possessed the CAS professional standards, how many also possessed the career services self-assessment guide, and if so, which edition?

Frequency counts and percentages were among the descriptive statistics reported for these questions.

Multivariate discriminate analysis was used as the principal method of data analysis for the following general research question:

Were there significant differences in career services director use of the CAS standards by institutional size, career services experience level, director experience level, director educational level, CAS standards awareness, CAS standards possession, and barriers to CAS standards use?

The relationship between multiple independent variables and a single categorical dependent variable was examined to predict whether or not respondents use the CAS professional standards. Because the dependent variable was categorical (non-metric) and the independent variables were metric, multivariate discriminate analysis was an appropriate statistical analysis method (Hair, Anderson, Tatham & Black, 1998).

Results from the statistical analysis of the survey data are reported in chapter four.

Chapter 4

Results of the Study

The purpose of this chapter is to report the findings from the data analysis, following the procedures specifically described in Chapter 3. Demographic information regarding the respondents is presented, along with data addressing each of the research questions.

Demographic Profile of Respondents

The population for this study was 481 career services directors at four-year public colleges and universities holding membership in the National Association of Colleges and Employers (NACE). One institution was excluded since the researcher was the career services director at that institution.

The institution name and enrollment size of each institution in the population were entered into an electronic file with an assigned survey number for tracking responses. Using mailing labels provided by NACE, the coded survey, cover letter with statements of support from CAS and NACE representatives (Appendix B), and a self-addressed stamped envelope were mailed to each institution. None of the surveys were returned as being non-deliverable, indicating there were 480 possible responses. Approximately three weeks after the original mailing, follow-up to non-respondents was conducted electronically and included attached files of the original documents that had been mailed earlier.

As each response was received, it was cross-referenced with the data file containing survey numbers and the date of receipt was recorded. A daily receipt log was also maintained that included the institution name, enrollment size, survey number, and case number for the SPSS data set.

A total of 346 surveys were returned for an overall response rate of 72.1% (see Table 1), and directors from institutions in 48 states participated in the national study. In addition to a high response rate overall, the response rates within each of the three institutional size categories were also high. There were response rates of 67.2% for institutions of less than 5,000 students, 73.5% for institutions with enrollments between 5,000 and 15,000 students, and 73.9% for universities with more than 15,000 students.

A chi-square test for independence was conducted to determine whether there was a relationship between the variables of institutional size and survey response rate. There was no significant relationship between institutional size and survey response rate χ^2 (2, $N = 480$) = 3.63, $p > .05$.

The experience levels of the respondents were considered in two ways. One type was the years of experience in the field of career services and the second type

Table 1

Respondent Frequency Data by Institutional Size, Experience, and Degree Level

Source (*N* = 346)	*N*	%
Institutional size		
< 5,000	82	23.7
5,000-15,000	156	45.1
> 15,000	108	31.2
Career Services Experience		
< 5 years	44	12.7
5 – 10 years	58	16.8
> 10 years	244	70.5
Director Experience		
< 5 years	131	37.9
5 – 10 years	75	21.7
> 10 years	140	40.4
Degree Level		
Less than bachelor's	1	0.3
Bachelor's	25	7.2
Master's	255	73.7
Other post-bachelor's	2	0.6
Doctorate	63	18.2

was years of experience as director of a career services unit (See Table 1). The majority of respondents (70.5%) had at least 10 years of overall career services experience. The experience as director was more varied with 37.7% having less than five years director experience, while 40.4 % had more than 10 years of director experience.

When asked to specify the highest degree earned (see Table 1), most of the respondents had earned either a master's degree (73.7%) or a doctorate (18.2%). It was interesting to note that one director at a medium size university had been director for 5-10 years and did not possess at least a bachelor's degree.

Awareness of the CAS Standards

After providing the demographic data, respondents indicated their level of awareness for the CAS standards using a 7-point ordinal scale ranging from *Not aware* (1) to *Very aware* (7). Frequency data for the respondent CAS standards awareness level are included in Table 2. Almost one fourth of the 343 respondents (24.8%) indicated no awareness of the CAS professional standards. Conversely, over one half of the respondents (55.1%) reported an awareness level of five or higher, with over one fourth (25.4%) noting an awareness level of 7 for *Very aware*.

The frequency data for CAS standards awareness was analyzed a second time, excluding those respondents who had indicated a 1 for *Not Aware*. Thus, this second analysis (Table 2) included only those 258 respondents who had indicated some awareness of the CAS standards by reporting an awareness level ranging from 2 through 7. Over one third (33.7%) of those respondents who were aware of the CAS standards rated their awareness level at 7 for *Very Aware*. A total of 189 (73.3%) of this group rated their CAS standards awareness level at five or above, while 26.7 % rated their awareness level between two and four.

Comparative central tendency and dispersion data for all respondents ($N = 343$) within the 1 to 7 range included a mean awareness level of 4.28, a median awareness level of 5.00, and a standard deviation of 2.33. Comparatively, for those who indicated CAS standards awareness in the two to seven range ($n = 258$), the mean (5.36) and median (6.00) awareness levels increased, and the standard deviation (1.58) decreased.

Some respondents added open-ended comments for the CAS standards awareness section. Three people commented that they used the NACE standards instead of the CAS standards. Of those individuals, two indicated some awareness of the CAS standards while one indicated no awareness. One respondent with 5-10 years as director and a master's degree indicated no awareness and simply stated "Pay no attention. Don't care."

Table 2

Extent of CAS Standards Awareness

Awareness level	All respondents N = 343		Respondents with some awareness n = 258	
Score	*N*	*%*	*n*	*%*
1	85	24.8	-	-
2	18	5.2	18	7.0
3	23	6.7	23	8.2
4	28	8.2	28	10.9
5	55	16.0	55	21.3
6	47	13.7	47	18.2
7	87	25.4	87	33.7

Note. Range of scores = Not aware (1) to Very aware (7)

The principal research question regarding career services director awareness of the CAS standards was as follows:

- Were there significant differences in career services director awareness of the CAS standards by institutional size, career services experience level, director   experience level, and director degree level?

Related sub-questions included:

- Were there significant differences in career services director awareness of the   CAS standards by institutional size?
- Were there significant differences in career services director awareness of the CAS standards by career services experience level?
- Were there significant differences in career services director awareness of the CAS standards by director degree level?
- Were there significant differences in career services director awareness of the CAS standards by director degree level?

To answer these questions, two types of three-way ANOVA were conducted with the dependent variable in both cases being CAS standards awareness level. The first type of three-way ANOVA included the independent variables of institutional size, career services experience level, and director degree level. The second type of three-way ANOVA included the independent variables of institutional size, director experience level, and director degree level. Because of concerns for the minimum number of cases required for analysis at each level, information for the two respondents possessing a post-bachelor's degree (Ed.S.) other than a master's degree was collapsed into the master's degree category. The alpha level was established at $p = .05$. Both types of three-way ANOVA were conducted first using the 1-7 range of CAS standards awareness levels.

A review of the analysis data for the three-way ANOVA for CAS standards awareness by institutional size, career services experience and director degree level indicated a significant difference in the means for the main effect of years of career services experience, $F(2, 27) = 4.67$, $p = .01$. There were no significant two-way or three-way interaction effects for the independent variables of institution size, career services experience, and director degree level (see Table 3).

Scheffé's post hoc test (Table 4) was performed for the career services experience main effect. The mean awareness level for respondents with 5-10 years of career services experience was significantly greater than for those with less than five years of career services experience with a mean difference of 1.64 ($p = .00$). For respondents with more than 10 years of career services experience, the mean was significantly greater than for those with less than five years experience with a mean difference of 2.14 ($p = .00$). In both cases, those directors with more than five years of career services experience indicated significantly greater CAS standards awareness than did those with less than five years of career services experience.

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Table 3

Three-way Analysis of Variance for Extent of CAS Standards Awareness by Institutional Size, Career Services Experience, and Degree Level

Source	SS	df	MS	F	p
Institutional size (S)	0.11	2	0.05	0.01	.99
Career services experience (CS)	45.17	2	22.59	4.67*	.01
Degree (D)	33.18	4	8.29	1.72	.15
S x CS	27.65	4	6.91	1.43	.22
S x D	10.33	4	2.58	0.53	.71
CS x D	22.95	4	5.74	1.19	.32
S x CS x D	25.50	6	4.25	0.88	.51
Error	1522.47	315	4.83		

*p < .05

Table 4

Scheffé Post Hoc Test of CAS Standards Awareness by Career Services Experience

Years of experience	Years of experience	Mean difference	*SE*	*p*
Less than 5	5 -10	-1.64**	.44	.00
	More than 10	-2.14 **	.36	.00
5 -10	Less than 5	1.64**	.44	.00
	More than 10	-0.50	.32	.31
More than 10	Less than 5	2.14**	.36	.00
	5 - 10	0.50	.32	.31

Note. Based on means from a 3-way ANOVA for CAS standards awareness
with the independent variables of institutional size, career services experience,
and director degree level.

** $p < .01$

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A second three-way ANOVA was conducted for CAS standards awareness using the variable of experience as director instead of career services experience. It revealed a significant difference in the CAS standards awareness means for the main effect of director experience, $F(2, 27) = 3.79$, $p = .02$. There were no significant two-way or three-way interaction effects for the independent variables (see Table 5).

Scheffé's post hoc test (see Table 6) for the director experience main effect revealed, based on the one to seven scale for level of CAS standards awareness, that the mean difference (1.07) between respondents with 5-10 years of director experience and those with less than five years of director experience was significant ($p = .00$). There was a significant ($p = .00$) mean difference of 1.56 between respondents with more than 10 years of director experience and those with less than five years of director experience. In both cases, those directors with more than five years of director experience indicated significantly greater CAS standards awareness than those with less than five years of director experience.

For those respondents indicating some level of awareness for the CAS standards represented by the 2-7 range, both types of three-way ANOVA were also conducted. The analysis data indicated no significant difference in the CAS standards awareness main effect for institutional size, career services experience and director degree level. There were also no significant two-way or three-way interaction effects between the same independent variables.

A second three-way ANOVA was conducted with the independent variables of institutional size, director experience, and director degree level, and it revealed no significant difference in the CAS standards awareness means for the main effects. There were also no significant two-way or three-way interaction effects for the same independent variables.

The data analysis revealed that there were significant mean differences in career services director awareness of the CAS standards by career services experience level and director experience level. Directors with more than five years of career services experience had significantly greater awareness of the CAS standards than did respondents with less than five years of career services experience. Respondents with more than five years of experience as director also had significantly greater awareness of the CAS standards than did respondents with less than five years of experience as director.

After providing demographic data and indicating their respective levels of CAS standards awareness, the 85 respondents who reported no awareness of the CAS standards had completed the survey and returned it according to the instructions provided. For these cases, the response for each remaining variable was coded as not applicable under the missing data category. Any respondent indicating some awareness of the CAS standards was instructed to continue with the survey.

Table 5

Three-way Analysis of Variance for Extent of CAS Standards Awareness by Institutional Size, Director Experience, and Degree Level

Source	SS	df	MS	F	p
Institutional size (S)	13.45	2	6.72	1.39	.25
Director experience (DR)	36.54	2	18.27	3.79*	.02
Degree (D)	41.96	4	10.49	2.17	.07
S x DR	13.93	4	3.48	0.72	.58
S x D	8.80	4	2.20	0.46	.77
DR x D	7.00	4	1.75	0.36	.83
S x DR x D	16.16	6	2.69	0.56	.76
Error	1519.63	315	4.82		

*$p < .05$

Table 6

Scheffé Post Hoc Test of CAS Standards Awareness by Director Experience

Years of experience	Years of experience	Mean difference	*SE*	*p*
Less than 5	5 -10	-1.07**	.32	.00
	More than 10	-1.56**	.27	.00
5 -10	Less than 5	1.07**	.32	.00
	More than 10	-0.49	.32	.30
More than 10	Less than 5	1.56**	.27	.00
	5 - 10	0.49	.32	.30

Note. Based on means from a 3-way ANOVA for CAS standards awareness with the independent variables of institutional size, director experience, and director degree level.

** $p < .01$

Contributors to CAS Standards Awareness

The second research question addressed in this study was related to factors contributing to career services director awareness of the CAS standards:

- Among those respondents who were aware of the CAS standards, what were the factors contributing to that awareness?

On the survey, seven factors contributing to CAS standards awareness were listed that included: (a) *graduate studies*, (b) *professional journals*, (c) *professional meetings/conferences*, (d) *chief student affairs officer*, (e) *colleagues within office*, (f) *colleagues within institution*, and (g) *colleagues outside institution*.

Respondents were instructed to indicate the extent to which each of the factors contributed to their respective levels of CAS standards awareness. A 7-point scale was used that ranged from *Not a Contributor* (1) to *Major Contributor* (7). Additionally, respondents were able to list other sources of CAS standards awareness in reply to an open-ended option.

The central tendency and dispersion information for those factors is included in Table 7. The data analysis indicated that the factors contributing most to respondent awareness of the CAS standards were chief student affairs officer ($M = 3.95$) and professional meetings ($M = 3.82$). Those factors contributing the least to CAS standards awareness were graduate studies ($M = 2.27$) and office colleagues ($M = 2.53$).

Respondents noted the following additional sources contributing to CAS standards awareness: (a) conference presentations, (b) accreditation team and processes, (c) board involvement with NACE and/or CAS, (d) division assessment activities, (e) advertisements for CAS, and (f) individual research, including web-based resources. Assessment, accreditation, and professional association initiatives were most frequently mentioned as contributors to CAS standards awareness.

Barriers to CAS Standards Use

The next section on the survey was related to perceived barriers for director use of the CAS standards. Respondents were asked to indicate, using a 7-point scale, how significant specific factors were perceived as barriers to CAS standards use. The scale ranged from *Not Significant* (1) to *Very Significant* (7). The nine factors listed were: (a) *lack of funds*, (b) *lack of staff resources*, (c) *lack of time*, (d) *lack of training on how to use the CAS standards*, (e) *lack of perceived value*, (f) *lack of institutional support*, (g) *lack of perceived necessity*, (h) *not helpful based on past use*, and (i) *fear of finding non-compliance*.

Central tendency and dispersion data for each of the nine factors are included in Table 8. The most significant factors reported by respondents as perceived barriers

Table 7

Contributors to CAS Standards Awareness

Contributing Factor	*n*	*M*	*Mdn*	*SD*
Chief Student Affairs Officer	244	3.95	4.00	2.38
Professional meetings	244	3.82	4.00	2.12
Colleagues outside institution	244	3.32	3.00	2.21
Colleagues within institution	242	3.26	3.00	2.25
Professional journals	245	3.12	3.00	1.95
Colleagues within office	242	2.53	1.00	1.97
Graduate studies	244	2.27	1.00	2.10

Note. Range of scores = Not a contributor (1) to Major contributor (7)

Table 8

Barriers to CAS Standards Use

Barrier	*n*	*M*	*Mdn*	*SD*
Lack of staff resources	244	4.65	5.00	2.11
Lack of time	242	4.58	5.00	1.96
Lack of training	243	4.00	4.00	1.97
Lack of funds	243	3.90	4.00	2.16
Lack of perceived necessity	244	3.87	4.00	1.97
Lack of institutional support	242	3.76	4.00	1.98
Lack of perceived value	243	3.55	4.00	1.92
Not helpful in past use	236	1.86	1.00	1.37
Fear of finding non-compliance	241	1.76	1.00	1.18

Note. Range of scores = Not significant (1) to Very significant (7)

to use of the CAS standards were lack of staff resources ($M = 4.65$) and lack of time ($M = 4.58$). The least significant factors noted by respondents as perceived barriers to CAS standards use were not helpful based on past use ($M = 1.86$) and fear of finding non-compliance ($M = 1.76$).

In responding to the open-ended option to list other types of barriers, 6 of 11 directors noted that they used the NACE standards instead of the CAS standards. Other barriers mentioned included lack of interest, validity questions, and the use of alternative institutional or departmental planning and assessment processes.

Factor analysis of the nine types of barriers was conducted for data reduction purposes. Based on a minimum eigenvalue of 1.0, Principal Component Analysis was used as the extraction method and four components were extracted that accounted for 75.3% of the variance. The factors were rotated using Varimax with Kaiser Normalization and the rotation converged in six iterations. The rotated component matrix is included in Table 9.

The nine original barrier variables were collapsed into four new components identified as (a) *lack of resources barrier*, (b) *lack of importance barrier*, (c) *time and training barrier*, and (d) *not helpful/non-compliance barrier*. The lack of resources barrier component included the original barriers of lack of funds, lack of staff resources, and lack of institutional support. The lack of importance barrier component included the original barrier variables of lack of institutional support, lack of perceived necessity, and lack of perceived value. Because the loadings for the original lack of institutional support barrier were similar for the components of lack of resources barrier (.59) and lack of importance barrier (.57), institutional support was included in both components. The time and training barrier component included the original lack of time and lack of training variables. The not helpful/non-compliance barrier component included the original barrier variables of not helpful based on past use and fear of finding non-compliance.

These data were used to answer the following primary and secondary research questions regarding barriers to career services director use of the CAS standards:

- Were there significant differences in barriers to career services director use of the CAS standards by institutional size, career services experience level, director experience level, and director degree level?

Related sub-questions included:

- Were there significant differences in barriers to career services director use of the CAS standards by institutional size?
- Were there significant differences in barriers to career services director use of the CAS standards by career services experience level?
- Were there significant differences in barriers to career services director use of the CAS standards by director experience level?

Table 9

Factor Analysis for Barriers to CAS Standards Use

	Component			
Variable	Lack of resources barrier	Lack of importance barrier	Time and training barrier	Not helpful/ non-compliance barrier
Lack of funds	**.90**	.02	.00[a]	.08
Lack of staff resources	**.84**	-.03	.37	.07
Lack of institutional support	**.59**	**.57**	.09	.02
Lack of perceived necessity	.06	**.86**	.00[a]	.10
Lack of perceived value	-.07	**.83**	.17	.15
Lack of training	.02	.23	**.85**	-.03
Lack of time	.39	-.06	**.74**	.14
Fear of finding non-compliance	.08	-.00[a]	.24	**.85**
Not helpful in past	.06	.37	-.21	**.68**

Note. Bold variables are those used for each factor.

[a]Actual value is .001

- Were there significant differences in barriers to career services director use of the CAS standards by director degree level?

The principal data analysis method used to answer these questions was three-way ANOVA. Two types of three-way ANOVA were conducted with the dependent variable in both cases being barrier to CAS standards use. The first type of three-way ANOVA included the independent variables of institutional size, career services experience level, and director degree level. The second type of three-way ANOVA included the independent variables of institutional size, director experience level, and director degree level. The alpha level was established at $p = .05$. Both types of three-way ANOVA were conducted for each of the four barrier components.

Lack of Resources Barrier

A review of the analysis data for the lack of resources barrier indicated no significant difference in the means for the main effects of institutional size, career services experience, or director degree level. There were also no significant two-way or three-way interactions for the same independent variables.

A second three-way ANOVA was conducted for the lack of resources barrier using the factor of director experience instead of career services experience, and it revealed no significant difference in the means for the main effects. There was also no significant three-way interaction (See Table 10), but there was one significant two-way interaction between the factors of institutional size and director experience, $F(4, 24) = 3.76$, $p = .01$.

Data for the two-way interaction between institutional size and director experience (see Table 11) indicated that at the institutions with less than 5,000 students, the lack of resources barrier was most significant for directors with 5-10 years of director experience ($M = 5.21$) and least significant for those with more than 10 years experience ($M = 3.70$). At institutions with 5,000-15,000 students, the lack of resources barrier was most significant for directors with more than 10 years of director experience ($M = 4.82$) and least significant for those with 5-10 years experience ($M = 3.75$). At large universities of more than 15,000 students, the lack of resources barrier was most significant for directors with less than five years of director experience ($M = 4.66$) and least significant for those with 5-10 years experience ($M = 2.97$).

Based on a 7-point range from *Not Significant* (1) to *Very Significant* (7), and with an overall lack of resources barrier mean decrease of 2.24, the data suggested that as institutional size increases, the lack of resources barrier became less significant for directors with 5-10 years of director experience (see Table 11). For respondents with less than five years of director experience, lack of resources was a greater concern at small institutions and large universities. Conversely, the lack of resources was less of a barrier for respondents with more than 10 years of director experience at small institutions and large universities.

Table 10

Three-way Analysis of Variance for Lack of Resources Barrier by Institutional Size,
Director Experience, and Degree Level

Source	SS	df	MS	F	p
Institutional size (S)	2.72	2	1.36	0.51	.60
Director experience (DR)	0.88	2	0.44	0.17	.85
Degree (D)	6.46	2	3.23	1.22	.30
S X DR	39.77	4	9.94	3.76**	.01
S X D	11.40	4	2.85	1.08	.37
DR X D	22.18	4	5.54	2.10	.08
S X DR X D	17.61	6	2.93	1.11	.36
Error	578.97	219	2.64		

**$p < .01$

Table 11

Interaction Effects by Institutional Size and Years of Experience as Director on Lack of Resources Barrier

Institutional size	Years of experience as director	M	SE
< 5,000 students	< 5 years	4.29	.52
	5 – 10 years	5.21	.66
	> 10 years	3.70	.57
5,000 – 15,000 students	< 5 years	3.85	.77
	5 – 10 years	3.75	.42
	> 10 years	4.82	.57
> 15,000 students	< 5 years	4.66	.60
	5 – 10 years	2.97	.36
	>10 years	3.45	.26

Lack of Importance Barrier

Three-way ANOVA data analysis for the lack of importance barrier indicated no significant difference in the means for the main effects of institutional size, career services experience, and director degree level. There were also no significant two-way or three-way interaction effects for the same independent variables.

Likewise, the three-way ANOVA data analysis for the lack of importance barrier revealed no significant difference in the means for the main effects of institutional size, director experience, or director degree level. Nor were there any significant two-way or three-way interactions for the same independent variables.

Lack of Time and Training Barrier

A review of the analysis data for the time and training barrier indicated no significant difference in the means for the main effects of institutional size, career services experience, and director degree level. Additionally, there were no significant two-way or three-way interaction effects for the same independent variables.

A second three-way ANOVA was conducted for the time and training barrier using the factor of director experience instead of career services experience, and there was no significant difference in the means for the main effects (see Table 12). There was also no significant three-way interaction effect between the independent variables. However, the data indicated one significant two-way interaction effect, $F(4, 24) = 3.17$, $p = .01$, between the independent variables of institutional size and director experience.

Based on a 7-point ranging from 1 for *Not Significant* to 7 for *Very Significant*, and with an overall time and training barrier mean decrease of 2.21, the data suggested that as institutional size increases, respondents with 5 to 10 years of experience as director tended to consider the lack of time and training less of a barrier to CAS standards use (see Table 13). For respondents with less than five years experience, the time and training barrier was greatest at small institutions of less than 5,000 students and less important at mid-size or large institutions. Directors with more than ten years of experience had the least variation in response rates based on institutional size for the time and training barrier. The largest variance in means for that group was 0.82 between small and mid-size institutions.

Not Helpful/Non-compliance Barrier

Data analysis from the three-way ANOVA for the not helpful/non-compliance barrier indicated no significant difference in the means for the main effects of institutional size, career services experience, and director degree level. There were also no significant two-way or three-way interaction effects for the same independent variables.

Table 12

Three-way Analysis of Variance for Lack of Time and Training Barrier by Institutional Size, Director Experience, and Degree Level

Source	SS	df	MS	F	p
Institutional size (S)	12.78	2	6.39	2.43	.09
Director experience (DR)	3.91	2	1.96	0.74	.48
Degree (D)	1.15	2	0.58	0.22	.80
S x DR	33.31	4	8.33	3.17*	.01
S x D	3.24	4	0.81	0.31	.87
DR x D	2.22	4	0.55	0.21	.93
S x DR x D	6.81	6	1.13	0.43	.86
Error	576.01	219	2.63		

*p < .05

Table 13

Interaction Effects by Institutional Size and Years of Experience as Director on Lack of Time and Training Barrier

Institutional size	Years of experience as director	*M*	*SE*
< 5,000 students	< 5 years	5.50	.52
	5 – 10 years	5.40	.66
	> 10 years	3.70	.56
5,000 – 15,000 students	< 5 years	3.93	.77
	5 – 10 years	4.83	.42
	> 10 years	4.52	.57
> 15,000 students	< 5 years	4.07	.60
	5 – 10 years	3.19	.36
	> 10 years	3.85	.26

A second three-way ANOVA was conducted for the not helpful/non-compliance barrier using the variable of years of director experience instead of career services experience, and it showed no significant difference in the means for the main effects. Additionally, there were no significant two-way or three-way interaction effects between the same independent variables.

The data analysis revealed that there were no significant main effect differences in barriers to director use of the CAS standards by institutional size, career services experience level, director experience level, and director degree level. There were statistically significant interaction effects by institutional size and director experience level for both the lack of resources barrier and the time and training barrier.

Possession of CAS Standards

The next survey question was whether or not respondents possessed a copy of the CAS standards. The respondents ($n = 245$) were evenly divided as 123 (50.2%) of the respondents possessed a copy of the CAS standards while 122 (49.8%) did not have the standards (see Table 14).

The CAS standards have been published in five different versions ranging from the original document in 1986 to the most recent edition in 2003. Those directors who reported possession of the CAS standards were also asked to indicate the most recent version possessed. Although 123 respondents indicated possession of the CAS standards, only 117 respondents noted the most recent version possessed (see Table 14). Of that group of 117 respondents, 10 (8.5%) owned the 1986 publication, 13 (11.1%) had the 1997 version, 19 (16.2%) possessed the 1999 edition, 46 (39.3%) had the 2001 version, and 29 (8.4%) owned the 2003 version. While the majority (64.1%) had either the 2001 or 2003 version, it was interesting to find that for 8.5% of the respondents, the most recent version in their possession was the 1986 original publication.

The CAS Career Services Self Assessment Guide (SAG) is an important application document for the CAS standards. Directors were asked to indicate whether or not their respective career services offices possessed the SAG. Of the total 242 respondents, 136 (56.2%) indicated possession of the SAG, while 106 (43.8%) did not (see Table 14). The number of directors who possessed the SAG was 136 compared to 123 directors in possession of the CAS standards.

Interest in how many directors possessed both the CAS standards and the SAG led to the following research question:

- Among those respondents who possessed the CAS standards, how many also possessed the career services self-assessment guide and, if so, which edition?

Table 14

Frequency Data for CAS Standards and Career Services Self-Assessment Guide (SAG) Possession

Source	n	%
Possession of CAS (*n* = 245)		
Yes	123	50.2
No	122	49.8
CAS Version Possessed (*n* = 117)		
1986	10	8.5
1997	13	11.1
1999	19	16.2
2001	46	39.3
2003	29	24.8
Possession of SAG (*n* = 242)		
Yes	136	56.2
No	106	43.8
SAG Version with CAS Possession (*n* = 81)		
1988	6	7.4
1997	12	14.8
2001	38	46.9
2003	25	30.9

There were 87 respondents indicating possession of both the CAS standards and career services SAG and of that group, 81 noted the specific SAG version. Table 14 contains data regarding which versions of the career services SAG were possessed by those respondents who also possessed the CAS standards. Of the 81 respondents possessing the CAS standards and the career services SAG, over 77% owned either the 2001 or 2003 SAG version.

<div align="center">Use of CAS Standards</div>

Respondents were asked to indicate whether or not they had used the CAS standards in their current or any previous positions. Of the 245 responses, 155 (63.3%) directors indicated they had used the CAS standards while 90 (36.7%) had not used the standards.

At this point in the survey, respondents who had not used the CAS standards had completed the survey and were instructed to return it. Those respondents who had used the CAS standards were instructed to continue with the survey.

<div align="center">Types and Extent of Use</div>

Types of use and the extent of each type of CAS standards use were the next areas of investigation. Survey respondents were given a list of 12 different types of possible uses of CAS standards which included: (a) *for comprehensive program review*, (b) *for on-going program evaluation*, (c) *for strategic planning*, (d) *to develop programs*, (e) *to build program credibility*, (f) *for resource justification*, (g) *to educate stakeholders*, (h) *for staff development*, (i) *to determine staffing needs*, (j) *for accreditation self-study*, (k) *to justify the existence of a current program*, and (l) *as a general reference guide*. Using a 7-point scale ranging from *Have not used* (1) to *Extensive use* (7) for each type, respondents were asked to indicate the extent to which they had used the CAS standards.

Central tendency and dispersion data for the12 types of CAS standards use are listed in Table 15. The most extensive types of use were as a general reference guide (M = 4.69) and for comprehensive program review (M = 4.43). The least extensive types of use were to determine staffing needs (M = 2.72), to justify the existence of current program (M = 2.74), and to develop programs (M = 2.75).

In response to the open-ended question regarding other types of CAS standards use, directors indicated use for program evaluation, program development, and accreditation self-study. One other use cited was to prepare for external review.

Factor analysis of the 12 original types of CAS standards use was conducted for data reduction purposes. Based on a minimum eigenvalue of 1.0, Principal Component Analysis was used as the extraction method and three components were extracted that accounted for 63.3% of the variance. The factors were rotated using

Table 15

Types of CAS Standards Use

Type of Use	n	M	Mdn	SD
General reference guide	144	4.69	5.00	1.82
Comprehensive program review	148	4.43	5.00	2.11
Strategic planning	147	3.98	5.00	2.14
Accreditation self-study	145	3.73	4.00	2.39
On-going program evaluation	145	3.62	4.00	2.07
Resource justification	147	3.37	3.00	2.08
To build program credibility	145	3.24	3.00	2.13
To educate stakeholders	146	3.21	3.00	2.07
Staff development	147	3.16	3.00	2.12
To develop programs	145	2.75	2.00	1.95
To justify the existence of current program	146	2.74	1.00	2.17
To determine staffing needs	144	2.72	2.00	2.00

Note. Range of scores = Have not used (1) to Extensive use (7)

Varimax with Kaiser Normalization and the rotation converged in five iterations. The rotated component matrix is included in Table 16.

The 12 original type of use variables were collapsed into three new type of use variable components identified as (a) *program credibility*, (b) *program management*, and (c*) program review*. The program credibility component included the five original variables of resource justification, stakeholder education, staffing needs determination, program justification, and building program credibility. The program management component included the five original variables of staff development, general reference guide, strategic planning, on-going program evaluation, and program development. The program review component included the original two variables of accreditation self-study and comprehensive program review.

Those data were used to answer the following primary and secondary research questions:

- Were there significant differences in the extent of career services director use of the CAS standards by institutional size, career services experience level, director experience level, and director degree level?

Related sub-questions included:

- Were there significant differences in the extent of career services director use of the CAS standards by institutional size?
- Were there significant differences in the extent of career services director use of the CAS standards by career services experience level?
- Were there significant differences in the extent of career services director use of the CAS standards by director experience level?
- Were there significant differences in the extent of career services director use of the CAS standards by director degree level?

The principal data analysis method used to answer these questions was three-way ANOVA. Two types of three-way ANOVA were conducted with the dependent variable in both cases being type of CAS standards use. The first type of three-way ANOVA included the independent variables of institutional size, career services experience level, and director degree level. The second type of three-way ANOVA included the independent variables of institutional size, director experience level, and director degree level. The alpha level was established at $p = .05$. Both types of three-way ANOVA were conducted for each of the three CAS standards use components.

The total number of directors indicating any use of the CAS standards was 155 and the number of directors employing the standards for any specific type of use was less than 149 (see Table 15). The low number of respondents with bachelor's degrees and with less than five years of career services experience meant that, on occasion, different cells for each factor contained less than five cases. Therefore, the bachelor's degree category was collapsed into the master's degree category to form

Table 16

Factor Analysis for Type of CAS Standards Use

	Components		
Variable	Program credibility	Program management	Program review
Resource justification	**.81**	.23	.12
Education stakeholders	**.78**	.28	-.04
Determine staffing needs	**.74**	.31	.13
Justify existence of current program	**.73**	.14	.22
Build program credibility	**.70**	.21	.25
Staff development	.22	**.82**	.02
General reference guide	.23	**.81**	-.07
Strategic planning	.29	**.69**	.19
On-going program evaluation	.34	**.62**	.32
Program development	.46	**.47**	.39
Accreditation self-study	.23	-.05	**.88**
Comprehensive program Review	.06	.46	**.55**

Note. Bold variable are those used for each factor

the new category of bachelor's/master's degree. Also, the career services experience level of less than five years was collapsed into the level of 5-10 years of career services experience to create a new level of less than 10 years of career services experience. The new categories of bachelor's/master's degree and less than 10 years of career services experience were used for data analysis of the types of CAS standards use and satisfaction from CAS standards use variables.

Additionally, and for exploratory purposes, the data for years of director experience and institutional size were temporarily collapsed into two levels to see if the increased number of cases in each cell might provide more comprehensive analysis information. However, this action proved to be no more informative, and the decision was made to use the original three levels for both the years of director experience variable and the institutional size variable.

One of the reasons for this consideration was that in some cases for the types of CAS standards use and satisfaction from CAS standards use variables, there were statistically significant differences indicated by the F value, but the follow-up post hoc or t-test procedures did not reflect a similar level of significance. This unusual situation sometimes happens when the F value is statistically significant, but not practically significant, in that only a small amount of the variance in the dependent variable is explained by the independent variable, as indicated by the eta squared (η^2) value (R. Howard, personal communication, May 20, 2004).

Program Credibility Use

The three-way ANOVA conducted in analyzing CAS standards use for program credibility using the factors of institutional size, career services experience, and director degree level showed an overall significant difference for the main effects of institutional size, $F(2, 11) = 9.37$, $p = .00$, and director degree level, $F(1, 11) = 8.25$, $p = .00$ (see Table 17). There was no significant three-way interaction noted for the independent variables. However, there was a significant two-way interaction effect indicated for the factors of institutional size and director degree level, $F(2, 11) = 3.96$, $p = .02$.

Scheffé's post hoc test (see Table 18) was conducted for main effect of institutional size and the data showed that directors from small institutions of less than 5,000 students used the CAS standards more for program credibility than directors at mid-size institutions of 5,000 to 15,000 students, and significantly more (1.33, $p < .01$) than those directors from large institutions of more than 15,000 students.

An independent-samples t-test was completed for the two levels of main effect of director degree level in Table 17 and the data indicated that those directors with doctorates ($M = 3.26$) used the CAS standards for program credibility more than directors with bachelor's/master's degrees ($M = 3.01$). The mean difference of 0.25 ($p = .47$) was not statistically significant based on the t-test; this can be attributed to the

Table 17

Three-way Analysis of Variance of CAS Standards Use for Program Credibility by Institutional Size, Career Services Experience, and Degree Level

Source	SS	df	MS	F	p
Institutional size (S)	47.38	2	23.69	9.37**	.00
Career services experience (CS)	5.59	1	5.59	2.21	.14
Degree (D)	20.87	1	20.87	8.25**	.00
S x CS	10.19	2	5.10	2.01	.14
S x D	20.04	2	10.02	3.96*	.02
CS x D	2.19	1	2.19	0.87	.35
S x CS x D	9.79	2	4.89	1.93	.15
Error	341.42	135	2.53		

* *p* < .05. ** *p* < .01.

Table 18

Scheffé Post Hoc Test of CAS Standards Use for Program Credibility by Institutional Size

Institutional size	Institutional size	Mean difference	SE	p
< 5,000	5,000-15,000	0.71	.39	.20
	> 15,000	1.33**	.41	.01
5,000-15,000	< 5,000	-0.71	.39	.20
	>15,000	0.62	.29	.10
>15,000	<5,000	-1.33**	.41	.01
	5,000-15,000	-0.62	.29	.10

Note. Based on means from a 3-way ANOVA for program credibility with the independent variables of institutional size, career services experience and director degree level.

** *p* < .01

low amount of variance (5.8%, $\eta^2 = .06$) for program credibility use that was explained by director degree level.

Based on the 7-point scale ranging from *Have not used* (1) to *Extensive use* (7), the two-way interaction effect between institutional size and director degree level (see Table 19) revealed that for institutions with less than 5,000 students, directors with doctorates used the CAS standards more for program credibility ($M = 5.63$) than did directors with bachelor's/master's degrees ($M = 3.36$). For institutions with enrollments of 5,000 – 15,000 students, directors with doctorates used the CAS standards more for program credibility ($M = 5.14$) than did directors with bachelor's/master's degrees ($M = 3.18$). However, at institutions with enrollments of more than 15,000 students, directors with bachelor's/master's degrees used the CAS standards more for program credibility ($M = 2.63$) than did directors with doctorates ($M = 2.31$).

The data suggested that at small and mid-size institutions, directors with doctorates use the CAS standards more for program credibility, but when the institutional size is greater than 15,000 students, directors with doctorates tended to use the CAS standards less for program credibility. The response pattern for directors with bachelor's/master's degrees showed little variation (≤ 0.8) in the mean for CAS standards use for program credibility.

A second three-way ANOVA was conducted to analyze CAS standards use for program credibility using the variable of experience as director instead of career services experience, and it revealed overall significant differences for the main effects of institutional size, $F(2, 16) = 10.46$, $p = .00$, and director degree level, $F(2, 16) = 6.89$, $p = .01$ (see Table 20). There was no significant three-way interaction effect, but a significant two-way interaction effect was indicated for institutional size and director degree level, $F(2, 16) = 4.30$, $p = .02$.

The results from the Scheffé post hoc test conducted for main effect of institutional size were the same as those shown in Table 18. Directors from small institutions of less than 5,000 students used the CAS standards more for program credibility than did directors at mid-size institutions of 5,000 to 15,000 students, and significantly more (1.33, $p < .01$) than those directors from large universities of more than 15,000 students.

An independent-samples t-test was completed for the two levels of main effect of director degree level in Table 20 and the data indicated that those directors with doctorates ($M = 3.26$) used the CAS standards for program credibility more than directors with bachelor's/master's degrees ($M = 3.01$). The difference of 0.25 ($p = .47$) was not statistically significant based on the t-test; this can be attributed to the low amount of variance (5.0%, $\eta^2 = .05$) for program credibility use that was explained by director education level.

Table 19

Interaction Effects by Institutional Size and Degree Level on CAS Standards Use for Program Credibility

Institutional size	Degree Level	*M*	*SE*
< 5,000 students	Bachelor's/Master's	3.36	.40
	Doctorate	5.63	.73
5,000 – 15,000 students	Bachelor's/Master's	3.18	.26
	Doctorate	5.14	.84
> 15,000 students	Bachelor's/Master's	2.63	.38
	Doctorate	2.31	.50

Table 20

Three-way Analysis of Variance of CAS Standards Use for Program Credibility by Institutional Size, Director Experience, and Degree Level

Source	SS	df	MS	F	p
Institutional size (S)	52.80	2	26.40	10.46**	.00
Director experience (DR)	3.52	2	1.76	0.70	.50
Degree (D)	17.38	1	17.38	6.89*	.01
S x DR	21.46	4	5.36	2.13	.08
S x D	21.69	2	10.84	4.30*	.02
DR x D	0.41	2	0.20	0.08	.92
S x DR x D	10.34	3	3.45	1.37	.26
Error	328.04	130	2.52		

*p < .05. ** p < .01.

Table 21

Interaction Effects by Institutional Size and Director Degree Level on Program Credibility Use

Institutional size	Degree Level	*M*	*SE*
< 5,000 students	Bachelor's/Master's	3.22	.43
	Doctorate	5.53	.75
5,000 – 15,000 students	Bachelor's/Master's	3.13	.24
	Doctorate	4.16	.55
> 15,000 students	Bachelor's/Master's	2.56	.29
	Doctorate	2.21	.41

Analysis of the two-way interaction between institutional size and director degree level (see Table 21) revealed that for institutions with less than 5,000 students, directors with doctorates used the CAS standards more for program credibility ($M = 5.53$) than those with bachelor's/master's degrees ($M = 3.22$). At institutions with enrollments of 5,000-15,000 students, directors with doctorates used the CAS standards more for program credibility ($M = 4.16$) than those with bachelor's/master's degrees ($M = 3.13$). For institutions with enrollments of more than 15,000 students, directors with bachelor's/master's degrees used the CAS standards more for program credibility ($M = 2.56$) than those with doctorates ($M = 2.22$).

The data indicated that at small and mid-size institutions, directors with doctorates used the CAS standards more for program credibility, but when the institutional size was greater than 15,000 students, directors with doctorates tended to use the CAS standards less for program credibility. The response pattern for directors with bachelor's/master's degrees showed little variation (≤ 0.6) in the mean for CAS standards use for program credibility.

There were significant differences for use of the CAS standards for program credibility by institutional size and director degree level. Directors at small institutions of less than 5,000 students used the CAS standards significantly more for program credibility than did the directors at large universities of more than 15,000 students. The directors with doctorates used CAS standards more for program credibility than did those with bachelor's/master's degrees, except at large universities of more than 15,000 students. In general, as institutional size increased, directors with doctorates used the CAS standards less for program credibility.

Program Management Use

Results from the three-way ANOVA conducted for CAS standards use in program management, using the independent variables of institutional size, career services experience and director education, indicated overall significant differences for the main effects of institutional size, $F(2, 11) = 4.00$, $p = .02$, and director degree level, $F(1, 11) = 7.77$, $p = .01$ (see Table 22). There were no significant two-way or three-way interaction effects.

The Least Significant Difference (LSD) post hoc test (see Table 23) was conducted for main effect of institutional size and the data indicated that directors from small institutions of less than 5,000 students used the CAS standards more for program management than did those at mid-size and large institutions. When the small institutions of less than 5,000 students were compared to institutions with enrollments greater than 15,000, the mean difference was significant at 0.91 ($p = .02$). Also, while not significant, the mean difference between institutions with less than 5,000 students and those with 5,000 to 15,000 students was 0.64 ($p = .09$). Directors from large institutions with enrollments greater than 15,000 students used the CAS standards less for program management than directors from either small or mid-size institutions.

Table 22

Three-way Analysis of Variance of CAS Standards Use for Program Management by Size, Career Services Experience, and Degree Level

Source	SS	df	MS	F	p
Institutional size (S)	18.80	2	9.40	4.00*	.02
Career services experience (CS)	2.09	1	2.09	0.89	.35
Degree (D)	18.25	1	18.25	7.77**	.01
S x CS	13.20	2	6.60	2.81	.06
S x D	0.83	2	0.41	0.18	.84
CS x D	1.82	1	1.82	0.78	.38
S x CS x D	12.72	2	6.36	2.71	.07
Error	317.17	135	2.35		

* $p < .05$. ** $p < .01$.

Table 23

LSD Post Hoc Test of CAS Standards Use for Program Management by Institutional Size

Institutional size	Institutional size	Mean difference	SE	p
< 5,000	5,000-15,000	0.64	.38	.09
	> 15,000	0.91**	.39	.02
5,000-15,000	< 5,000	-0.64	.38	.09
	>15,000	0.27	.28	.33
>15,000	<5,000	-0.91**	.39	.02
	5,000-15,000	-0.27	.28	.33

Note. Based on means from a 3-way ANOVA for program management with the independent variables of institutional size, career services experience, and director degree level.

** *p* < .01

An independent-samples t-test was completed for the main effect of director degree level in Table 22. Those directors with doctorates ($M = 3.96$) used the CAS standards more for program management than did respondents with bachelor's/master's degrees ($M = 3.54$). The mean difference of 0.42 ($p = .173$) between directors with doctorates and those with bachelor's/master's degrees was not statistically significant based on the t-test. This can be attributed to the low amount of variance (5.4%, $\eta^2 = .05$) for program management use that was explained by director education level.

A second three-way ANOVA was conducted for CAS standards use for program management using the independent variable of experience as director instead of career services experience, which indicated an overall significant difference for the main effects of institutional size, $F(2,16) = 4.13$, $p = .02$, and director degree level, $F(2, 20) = 6.95$, $p = .01$ (see Table 24). There were no significant two-way or three-way interactions between the independent variables.

The Least Significant Difference (LSD) post hoc test was completed for the main effect of institutional size (see Table 25). The data indicated that directors from small institutions of less than 5,000 students used the CAS standards more for program management than did those at mid-size and large institutions. When the small institutions of less than 5,000 students were compared to institutions with enrollments greater than 15,000, the mean difference was significant at 0.91 (p = .02).

An independent-samples t-test was completed for the main effect of director degree level in Table 24. Those directors with doctorates ($M = 3.96$) used the CAS standards more for program management than respondents with bachelor's/master's degrees ($M = 3.54$). The difference of 0.42 ($p = .173$) was not statistically significant based on the t-test, which can be attributed to the low amount of variance (5.1%, $\eta^2 = .05$) for program management use that was explained by director degree level.

There were significant overall differences for use of the CAS standards for program management by institutional size and director degree level. Directors from small institutions of less than 5,000 students used the CAS standards most for program management, while directors from large universities of more than 15,000 students used the standards least. Also, those directors with doctorates tended to use the CAS standards more for program management than did directors with bachelor's/master's degrees.

Program Review Use

Results from the three-way ANOVA conducted for the component of program review, using the independent variables of institutional size, career services experience, and director degree level revealed an overall significant difference (see Table 26) for the main effect of institutional size $F(2, 11) = 5.09$, $p = .01$. There were no significant two-way or three-way interaction effects.

Table 24

Three-way Analysis of Variance for CAS Standards Use for Program Management by Institutional Size, Director Experience, and Degree Level

Source	SS	df	MS	F	p
Institutional size (S)	19.67	2	9.83	4.13*	.02
Director experience (DR)	0.16	2	0.08	0.03	.97
Degree (D)	16.55	1	16.55	6.95**	.01
S X DR	12.67	4	3.17	1.33	.26
S X D	3.96	2	1.98	0.83	.44
DR X D	1.77	2	0.89	0.37	.69
S X DR X D	13.50	3	4.50	1.89	.13
Error	309.67	130	2.38		

*$p < .05$. ** $p < .01$.

Table 25

LSD Post Hoc Test of CAS Standards Use for Program Management by Institutional Size

Institutional size	Institutional size	Mean difference	*SE*	*p*
< 5,000	5,000-15,000	0.64	.38	.10
	> 15,000	0.91*	.40	.02
5,000-15,000	< 5,000	-0.64	.38	.10
	>15,000	0.27	.28	.33
>15,000	<5,000	-0.91*	.40	.02
	5,000-15,000	-0.27	.28	.33

Note. Based on means from a 3-way ANOVA for program management with the independent variables of institutional size, experience as director, and director degree level.

* *p* < .05

Table 26

Three-way Analysis of Variance of CAS Standards Use for Program Review by Institutional Size, Career Services Experience, and Degree Level

Source	SS	df	MS	F	p
Institutional size (S)	33.27	2	16.64	5.09**	.01
Career services experience (CS)	0.18	1	0.18	0.05	.82
Degree (D)	5.16	1	5.16	1.58	.21
S x CS	18.88	2	9.44	2.89	.06
S x D	12.01	2	6.01	1.84	.16
CS x D	2.13	1	2.13	0.65	.42
S x CS x D	4.58	2	2.29	0.70	.50
Error	444.64	136	3.27		

**p < .01.

The LSD post hoc test was conducted for main effect of institutional size, which revealed that directors from small institutions of less than 5,000 students used the CAS standards more for program review than did those at mid-size and large institutions. Directors from large institutions with enrollments greater than 15,000 students used the CAS standards less for program review than directors from small or mid-size institutions. The difference (0.73, $p = .116$) between small institutions ($M = 4.64$) and large universities ($M = 3.91$) was not statistically significant based on the post hoc procedure. This can be attributed to the low amount of variance (7.0%, $\eta^2 = .07$) for program review use that was explained by institutional size.

A second three-way ANOVA was conducted for CAS use for the program review component using the independent variable of director experience instead of career services experience, and it showed overall significant differences for the main effect of institutional size, $F(2, 16) = 3.09$, $p = .05$, as noted in Table 27. There were no significant two-way or three-way interaction effects for the same independent variables.

The LSD post hoc test conducted for main effect of institutional size revealed that directors from small institutions of less than 5,000 students used the CAS standards most for program review and directors from large institutions used them least. The difference (0.73, $p = .116$) between small institutions ($M = 4.64$) and large universities ($M = 3.91$) was not statistically significant based on the post hoc procedure. This can be attributed to the low amount of variance (4.2%, $\eta^2 = .04$) for program review use that was explained by institutional size.

In summary, the data analysis for program credibility use revealed that there were significant overall differences in use of the CAS standards by institutional size and director degree level, and there were two-way interaction effects between institutional size and director degree level. There were no significant differences or interaction effects by career services or director experience level.

Directors at small institutions of less than 5,000 students used the CAS standards more for program credibility, program management, and program review than did directors at mid-size institutions, and significantly more than those at large institutions. Conversely, the directors from large universities used the CAS standards least for program credibility, management, and review.

Generally, directors with doctorates used the CAS standards more for program credibility and management than did those with bachelor's/master's degrees. The only exception was for program credibility at large universities of more than 15,000 students.

Table 27

Three-way Analysis of Variance of CAS Standards Use for Program Review by Institutional Size, Director Experience, and Degree Level

Source	SS	df	MS	F	p
Institutional size (S)	20.80	2	10.40	3.09*	.05
Director experience (DR)	0.00[a]	2	0.00[b]	0.00[c]	1.00[d]
Degree (D)	4.77	1	4.77	1.42	.23
S × DR	12.99	4	3.25	0.97	.43
S × D	18.01	2	9.01	2.68	.07
DR × D	0.14	4	0.07	0.02	.98
S × DR × D	9.57	3	3.19	0.95	.42
Error	440.35	131	3.36		

[a]Actual value is .005. [b]Actual value is .003. [c]Actual value is . 001.
[d]Actual value is .999.

* $p < .05$.

Satisfaction from CAS Standards Use

The next area of investigation was satisfaction from use for each of the 12 different types of CAS standards use, previously described, which included: (a) for comprehensive program review, (b) for on-going program evaluation, (c) for strategic planning, (d) to develop programs, (e) to build program credibility, (f) for resource justification, (g) to educate stakeholders, (h) for staff development, (i) to determine staffing needs, (j) for accreditation self-study, (k) to justify the existence of current program, and (l) as a general reference guide. Using a 7-point scale ranging from *Not Satisfied* (1) to *Very Satisfied* (7) for each type of use, respondents were asked to indicate their level of satisfaction for each type of use they had made of the CAS standards.

The areas of greatest satisfaction (see Table 28) were for use as a general reference guide ($M = 5.34$) and accreditation self-study ($M = 5.19$). Areas of least satisfaction included use for determining staff needs ($M = 4.30$) and resource justification ($M = 4.39$). However, the data suggested that respondents were generally satisfied with each type of use.

Because of the linkage of satisfaction level to the type of use variables, the 12 original variables for satisfaction were also collapsed by factor analysis into three new satisfaction variable components identified as (a) *program credibility*, (b) *program management*, and (c) *program review*. The program credibility component included the original satisfaction variables of resource justification, stakeholder education, staffing needs determination, program justification, and program credibility building. The program management component included the original satisfaction variables of staff development, general reference guide, strategic planning, on-going program evaluation, and program development. The program review component included the original satisfaction variables of accreditation self-study and comprehensive review.

These data were used to answer the following primary and secondary research questions:

- Were there significant differences in career services director satisfaction from the use of CAS standards by institutional size, career services experience level, director experience level, and director degree level?

Related sub-questions included:

- Were there significant differences in career services director satisfaction from the use of CAS standards by institutional size?
- Were there significant differences in career services director satisfaction from the use of CAS standards by career services experience level?
- Were there significant differences in career services director satisfaction from the use of CAS standards by director experience level?

Table 28

Frequency Data for Satisfaction from CAS Standards Use

Type of Use	N	Mean	Median	SD
General reference guide	119	5.34	6.00	1.23
Accreditation self-study	85	5.19	5.00	1.34
Strategic planning	104	4.98	5.00	1.39
Staff development	85	4.95	5.00	1.42
Comprehensive program review	119	4.92	5.00	1.48
To justify existence of current program	66	4.91	5.00	1.54
To build program credibility	82	4.90	5.00	1.42
On-going program evaluation	99	4.76	5.00	1.48
To educate stakeholders	85	4.67	5.00	1.56
To develop programs	73	4.63	4.00	1.47
Resource justification	90	4.39	5.00	1.70
To determine staffing needs	69	4.30	4.00	1.71

Note. Range of scores = Not satisfied (1) to Very satisfied (7)

- Were there significant differences in career services director satisfaction from the use of CAS standards by director degree level?

The principal data analysis method used to answer these questions was three-way ANOVA. Two types of three-way ANOVA were conducted with the dependent variable in both cases being level of satisfaction for each type of CAS standards use. The first type of three-way ANOVA included the independent variables of institutional size, career services experience level, and director degree level. The second type of three-way ANOVA included the independent variables of institutional size, director experience level, and director degree level. The alpha level was established at $p = .05$. Both types of three-way ANOVA were conducted for each of the three satisfaction components for CAS standards use.

Satisfaction from Program Credibility Use

The data from the three-way ANOVA procedure conducted for the program credibility satisfaction component using the independent variables of institutional size, career services experience, and director education level indicated a significant mean difference for the main effect of institutional size $F(2, 11) = 7.14$, $p = .00$ (see Table 29). There was no significant three-way interaction effect, but there was a significant two-way interaction effect between institutional size and director degree level $F(2, 11) = 4.89$, $p = .01$.

The Least Significant Difference post-hoc test was conducted for the main effect of institutional size (see Table 30). Directors from mid-size institutions with between 5,000 and 15,000 students had significantly more satisfaction from use of the CAS standards for program credibility than directors from large institutions of more than 15,000 students. Based on a scale of 1-7 for satisfaction, there was a significant mean difference of .66 ($p = .03$) between mid-size and large institutions. Although not significant, the mean difference between directors from small institutions of less than 5,000 students and those from large institutions of more than 15,000 students was .77 ($p = .06$). Overall, directors from large universities had the least satisfaction from use of the CAS standards for program credibility while the directors at small institutions had the greatest satisfaction.

There was a two-way interaction effect between institutional size and director degree level (see Table 31). At small and mid-size institutions, directors with doctorates were more satisfied with using the CAS standards for program credibility than those with bachelor's/master's degrees. At institutions of less than 5,000 students, the means for satisfaction, based on a 1-7 scale, were 6.02 for respondents with doctorates and were 4.40 for those with bachelor's/master's degrees. For the mid-size institutions of 5,000 to 15,000 students, the mean satisfaction levels were 6.01 for directors with doctorates, and 4.43 for those with bachelor's/master's degrees. However, at institutions of more than 15,000 students, directors with doctorates were less satisfied ($M = 2.83$) with using the CAS standards for program credibility than those with bachelor's/master's degrees ($M = 4.12$).

Table 29

Three-way Analysis of Variance of Satisfaction from CAS Standards Use for Program Credibility by Institutional Size, Career Services Experience, and Degree Level

Source	*SS*	*df*	*MS*	*F*	*p*
Institutional size (S)	27.93	2	13.97	7.14**	.00
Career services experience (CS)	0.25	1	0.25	0.13	.72
Degree (D)	4.08	1	4.08	2.09	.15
S x CS	7.67	2	3.84	1.96	.15
S x D	19.17	2	9.58	4.90**	.01
CS x D	0.91	1	0.91	0.46	.50
S x CS x D	7.35	2	3.67	1.88	.16
Error	195.75	100	1.96		

** $p < .01$.

Table 30

LSD Post Hoc Test of Satisfaction from CAS Standards Use for Program Credibility by Institutional Size

Enrollment size category	Enrollment size category	Mean difference	*SE*	*p*
< 5,000	5,000-15,000	0.11	.38	.77
	> 15,000	0.77	.40	.06
5,000-15,000	< 5,000	-0.11	.38	.77
	>15,000	0.66*	.30	.03
>15,000	<5,000	-0.77	.40	.06
	5,000-15,000	-0.66*	.30	.03

Note. Based on means from a 3-way ANOVA for program management with the independent variables of institutional size, career services experience, and director degree level.

* $p < .05$

Table 31

Two-way Interaction Effects by Institutional Size and Degree Level for Satisfaction
from CAS Standards Use for Program Credibility

Enrollment size	Degree	*M*	*SE*
< 5,000 students	bachelor's/master's	4.40	.40
	doctorate	6.02	.64
5,000 – 15,000 students	bachelor's/master's	4.43	.25
	doctorate	6.01	.74
> 15,000 students	bachelor's/master's	4.12	.52
	doctorate	2.83	.53

The second three-way ANOVA conducted for satisfaction from CAS standards use for program credibility, including the independent variable of experience as director instead of career services experience, revealed a significant mean difference (see Table 32) for the main effect of institutional size $F(2, 16) = 3.97$, $p = .02$. There was no significant three-way interaction effect, but a significant two-way interaction was indicated for the independent variables of institutional size and director degree level $F(4, 16) = 3.21$, $p = .04$.

The LSD post-hoc test was conducted for the main effect of institutional size and the results were the same as those noted in Table 30. Directors from large institutions with more than 15,000 students had less satisfaction from use of the CAS standards for program credibility than did directors from small institutions and mid-size institutions. The difference of 0.66 ($p = .03$) between mid-size institutions and large universities was significant.

There was also a two-way interaction effect between institutional size and director degree level (see Table 33). The data suggested that directors with doctorates at small and mid-sized institutions were more satisfied with use of the CAS standards for program credibility than were respondents with bachelor's/master's degrees. At institutions of less than 5,000 students, the respective means for satisfaction, based on a 1-7 scale, were 5.80 for directors with doctorates and 4.61 for respondents with bachelor's/master's degrees. For mid-size institutions of 5,000 to 15,000 students the mean satisfaction levels were 5.30 for directors with doctorates and 4.50 for those with bachelor's/master's degrees. However, at institutions of more than 15,000 students, directors with doctorates were less satisfied ($M = 3.44$) than those with bachelor's/master's degrees ($M = 4.44$).

There were significant overall differences for satisfaction from use of the CAS standards for program credibility by institutional size. Directors at small institutions of less than 5,000 students had significantly more satisfaction from use of the CAS standards for program credibility than did the directors at large universities of more than 15,000 students. Overall, directors from small institutions of less than 5,000 students had the most satisfaction from use of the CAS standards for program credibility while directors at large universities had the least satisfaction.

In general, the directors with doctorates had more satisfaction from use of the CAS standards more for program credibility than did those with bachelor's/master's degrees, except at large universities of more than 15,000 students. The data suggested that as institutional size increases, directors with doctorates had less satisfaction from use of the CAS standards for program credibility.

Satisfaction for Program Management Use

The three-way ANOVA procedure conducted for the satisfaction component of program management using the independent variables of institutional size, career services experience, and director degree level showed overall significant differences

Table 32

Three-way Analysis of Variance of Satisfaction from CAS Standards Use for Program Credibility by Institutional Size, Director Experience, and Degree Level

Source	SS	df	MS	F	p
Institutional size (S)	15.84	2	7.92	3.97*	.02
Director experience (DR)	1.14	2	0.57	0.28	.75
Degree (D)	0.90	1	0.90	0.45	.50
S x DR	1.56	4	0.39	0.19	.94
S x D	12.80	2	6.40	3.21*	.04
DR x D	4.27	2	2.14	1.07	.35
S x DR x D	10.81	3	3.60	1.81	.15
Error	189.52	95	1.99		

*p < .05

Table 33

Two-way Interaction Effects by Institutional Size and Degree Level for Satisfaction from CAS Standards Use for Program Credibility

Enrollment size	Degree	Mean	*SE*
< 5,000 students	bachelor's/master's	4.61	.44
	doctorate	5.80	.67
5,000 – 15,000 students	bachelor's/master's	4.49	.24
	doctorate	5.30	.50
> 15,000 students	bachelor's/master's	4.44	.34
	doctorate	3.44	.44

(see Table 34) for the main effects of institutional size $F(2, 11) = 3.95$, $p = .02$, and director degree level, $F(1, 11) = 10.94$, $p = .00$. There were no significant two-way or three-way interaction effects.

The LSD post hoc test conducted for main effect of institutional size revealed that directors from small institutions of less than 5,000 students were most satisfied from use of the CAS standards for program management and directors from large universities were least satisfied. The difference (0.47, $p = .125$) between small institutions ($M = 5.15$) and large universities ($M = 4.68$) was not statistically significant based on the post hoc procedure. This can be attributed to the low amount of variance (6.1%, $\eta^2 = .06$) for satisfaction from CAS standards use for program management that was explained by institutional size.

An independent-samples t-test analysis was completed for the main effect of director degree level. Directors with doctorates were significantly more satisfied with use of the CAS standards for program management than those with less than doctorates. Based on the 1 to 7 scale for satisfaction level, there was a significant mean difference of 0.46 ($p = .04$) between directors with doctorates ($M = 5.22$) and those with bachelor's/master's degrees ($M = 4.76$).

A second three-way ANOVA procedure was conducted for the satisfaction component of program management using the variable of director experience instead of career services experience. It revealed overall significant differences for institutional size, $F(2, 16) = 3.44$, $p = .03$, and director degree level, $F(1, 16) = 8.10$, $p = .00$. There were no significant two-way or three-way interaction effects (see Table 35).

The LSD post hoc test conducted for main effect of institutional size revealed that directors from small institutions of less than 5,000 students were most satisfied from use of the CAS standards for program management and directors from large universities were least satisfied. The difference (0.47, $p = .125$) between small institutions ($M = 5.15$) and large universities ($M = 4.68$) was not statistically significant based on the post hoc procedure. This can be attributed to the low amount of variance (5.6%, $\eta^2 = .06$) for satisfaction from CAS standards use for program management that was explained by institutional size.

An independent-samples t-test analysis was completed for the main effect of director degree level. Directors with doctorates were more satisfied with use of the CAS standards for program management than were those with bachelor's/master's degrees. Based on the 1 to 7 scale for satisfaction level, there was a significant mean difference of 0.46 ($p = .04$) between directors with doctorates ($M = 5.22$) and those with bachelor's/master's degrees ($M = 4.76$).

Table 34

Three-way Analysis of Variance of Satisfaction from CAS Standards Use for Program Management by Institutional Size, Career Services Experience, and Degree Level

Source	SS	df	MS	F	p
Institutional size (S)	10.25	2	5.12	3.95*	.02
Career services experience (CS)	1.44	1	1.44	1.11	.29
Degree (D)	14.21	1	14.21	10.94**	.00
S x CS	2.93	2	1.47	1.13	.33
S x D	1.08	2	0.54	0.42	.66
CS x D	2.22	1	2.22	1 .71	.19
S x CS x D	2.40	2	1.20	0.92	.40
Error	157.08	121	1.30		

* $p < .05$. ** $p < .01$.

Table 35

Three-way Analysis of Variance of Satisfaction from CAS Standards Use for Program Management by Institutional Size, Director Experience, and Degree Level

Source	SS	df	MS	F	p
Institutional size (S)	9.24	2	4.62	3.44*	.03
Director experience (DR)	2.70	2	1.35	1.00	.37
Degree (D)	10.86	1	10.86	8.10**	.00
S x DR	2.22	4	0.56	0.41	.80
S x D	5.50	2	2.75	2.05	.13
DR x D	1.69	4	0.84	0.63	.54
S x DR x D	1.21	3	0.40	0.30	.82
Error	155.66	116	1.34		

*$p < .05$. **$p < .01$.

There were significant overall differences for satisfaction from use of the CAS standards for program management by institutional size and director degree level. Directors at small institutions of less than 5,000 students had more satisfaction from use of the CAS standards for program management while directors from large universities had the least satisfaction. Also, the directors with doctorates had significantly more satisfaction from use of the CAS standards for program management than did those with bachelor's/master's degrees.

Satisfaction from Program Review Use

Using the variables of institutional size, career services experience, and director education level, the three-way ANOVA procedure conducted for the satisfaction component of program review indicated an overall significant difference for the main effect of director degree level $F(1, 11) = 4.87$, $p = .03$. There were no significant two-way or three-way interaction effects (see Table 36).

An independent-samples t-test analysis was completed for the main effect of director degree level. Directors with doctorates were more satisfied with use of the CAS standards for program management than those with bachelor's/master's degrees. Based on the 1 to 7 scale for satisfaction level, there was a mean difference of 0.23 ($p = .43$) between directors with doctorates ($M = 5.09$) and those with bachelor's/master's degrees ($M = 4.86$). The difference was not statistically significant based on the t-test and this can be attributed to the low amount of variance (3.9%, $\eta^2 = .04$) for program review use that was explained by director degree level.

A second three-way ANOVA procedure was conducted for the satisfaction component of program review using director experience instead of career services experience, which showed no significant mean differences for the main effects of institutional size, director experience, and director degree level. There were also no significant interaction effects for the independent variables.

In summary, the data analysis for satisfaction from using the CAS standards revealed significant overall differences by institutional size and director degree level. There were no significant differences in CAS standards use satisfaction by either career services experience level or director experience level.

There were differences by institutional size for satisfaction from CAS standards use for program credibility and program management. Directors at small institutions of less than 5,000 students were the most satisfied from CAS standards use for program credibility and program management while those from universities of more than 15,000 students were the least satisfied.

Satisfaction from CAS standards use for program management and program review revealed significant overall differences by director degree level. Those directors with doctorates were more satisfied with use of the CAS standards for

Table 36

Three-way Analysis of Variance of Satisfaction from CAS Standards Use for Program Review by Institutional Size, Career Services Experience, and Degree Level

Source	SS	df	MS	F	p
Institutional size (S)	6.69	2	3.34	1.77	.17
Career services experience (CS)	1.00	1	1.00	0.53	.47
Degree (D)	9.20	1	9.20	4.87*	.03
S X CS	4.29	2	2.14	1.13	.33
S X D	0.15	2	0.08	0.04	.96
CS X D	2.44	1	2.44	1.29	.26
S X CS X D	4.32	2	2.16	1.14	.32
Error	224.74	119	1.89		

* *p* < .05

program management and program review than those with either bachelor's/master's degrees.

There was an interesting interaction pattern between institutional size and director degree level for program credibility use and satisfaction from program credibility use. Both types of 3-way ANOVA conducted for these variables revealed the same general interaction pattern (see Figure 1).

Directors with doctorates used the CAS standards more and had greater satisfaction than did directors with bachelor's/master's degrees at institutions of less that 15,000 students. However, at universities where the enrollment exceeded 15,000 students, the CAS standards use and satisfaction levels for directors with doctorates declined appreciably and were lower than the use and satisfaction levels for directors with bachelor's/master's degrees.

In general, the CAS standards use and satisfaction levels for program credibility declined for directors with doctorates as institutional size increased. At the same time, the response pattern for directors with bachelor's/master's degrees remained relatively stable with little variation in mean scores for CAS standards use and satisfaction for program credibility.

Factors Determining Use

The final objective of this research was to analyze the relationship among several factors for career services director use of the CAS professional standards. The general research question related to this relationship was as follows:

- Were there significant differences in career services director use of the CAS standards by institutional size, career services experience level, director experience level, director educational level, CAS standards awareness, CAS standards possession, and barriers to CAS standards use?

Multivariate discriminate analysis was used to examine this relationship and to model the categorical dependent variable of CAS standards use based on its relationship with the predictor variables.

There were two categorical levels (yes and no) for the dependent variable of CAS standards use by career services directors. The 10 independent, or predictor, variables included (a) *institutional size*, (b) *career services experience level*, (c) *director experience level*, (d) *director degree level*, (e) *CAS standards awareness*, (f) *CAS standards possession*, (g) *lack of resources barrier*, (h) *lack of importance barrier*, (i) *time and training barrier*, and (j) *not helpful/non-compliance barrier*.

Of the 346 total survey respondents, 258 had indicated awareness of the CAS standards. The discriminative analysis procedure included data for 239 of the 258 respondents who were aware of the standards. Of that group of 239 respondents, a
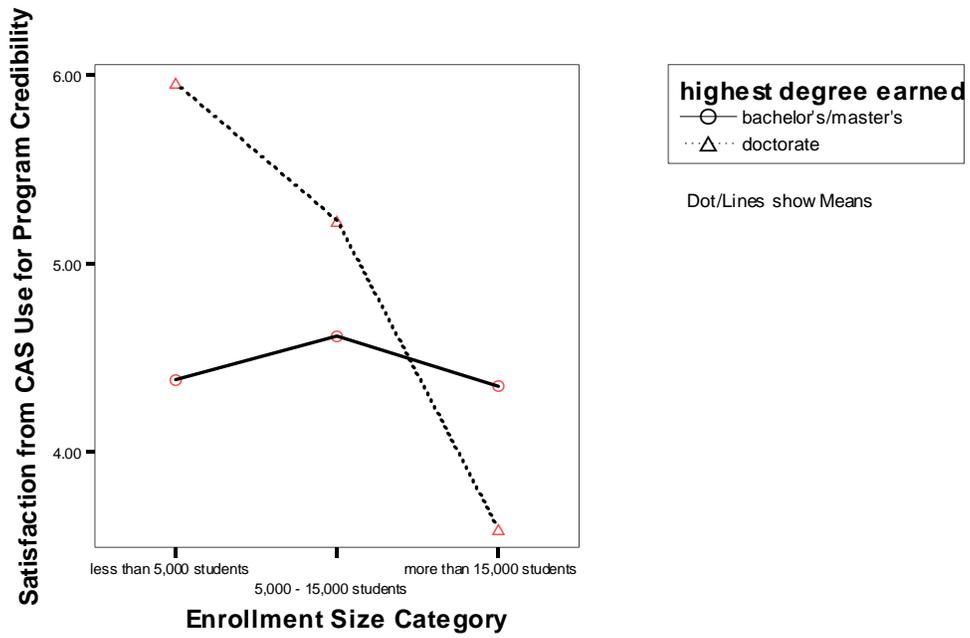
Figure 1. *Example of interaction pattern similarities between institutional size and director degree level for CAS standards use and satisfaction from use for program credibility.*

total of 153 were aware of and had used the CAS standards in their current or a previous position. The remaining 86 directors were aware of the CAS standards, but had not used the standards.

A pooled within-groups correlation matrix was computed for the predictor variables (see Table 37). The matrix includes the means for each corresponding values within the two matrices for each level of the dependent variable. The ten independent variables were entered individually into the regression equation using the

Wilks' Lambda procedure, a stepwise operation that seeks to minimize the Wilks' Lambda after each new variable has been entered into the equation. For this procedure, the Wilks' Lambda was intended to indicate whether each independent variable contributed significantly to explaining additional variance in the dependent variable. The default criterion for entry of a variable into the regression equation was $F \geq 3.84$ and the default criterion for removal of an already entered variable from the regression equation was $F \leq 2.71$. These F values represented significance levels of $p = .05$ and $p = .10$, respectively.

Hair, Anderson, Tatham, and Black (1998) indicated that the decision rule for continuing to significance levels beyond .05 is cost versus the value of the information. If the higher risks associated with including non-significant results are acceptable under this premise, then discriminant functions may be maintained that are significant at up to the $p = .30$ level. George and Mallory (2003) noted that in discriminant analysis, researchers may choose to set more generous entry and removal criteria and the selection of value levels of $p = .25$ and $p = .30$ are not uncommon. The exploratory nature of this study encouraged additional analyses to determine the optimal combination of prediction variables.

For comparative purposes, the data were run using the default values of $F \geq 3.84$ and $F \leq 2.71$ that approximate significance, as well as the more generous values of $F \geq 1.25$ and $F \leq 1.00$ for entry into, and removal from, the regression equation. Using the default values, there were two predictor variables (CAS standards awareness and helpfulness/compliance barrier) identified for the regression equation with a correct prediction level of 70.3%.

The use of the values of $F \geq 1.25$ for entry into and $F \leq 1.00$ for removal from the regression equation resulted in the identification of four more predictor variables (CAS standards possession, time and training barrier, lack of resources barrier, and institutional size) for the regression equation. Collectively, these six variables resulted in a correct prediction level of 71.5%. However, the addition of these four variables added very little to the prediction effectiveness of the regression equation and required less than commonly used significance levels.

The Wilks' Lambda denoting the ratio of the within sum of squares to the total sum of squares was .80. This was the proportion of the total variance in the

Table 37

Within-groups correlation matrix

Variable	1	2	3	4	5	6	7	8	9	10
1. Size[a]	1.00									
2. CSX[b]	.24	1.00								
3. DIRX[c]	.11	.57	1.00							
4. DEG[d]	.18	.07	.11	1.00						
5. AWAR[e]	.10	.12	.17	.04	1.00					
6. POSS[f]	.12	.04	- .04	- .00	- .24	1.00				
7. RSOU[g]	- .20	- .13	- .20	- .07	- .04	.47	1.00			
8. IMPT[h]	- .01	- .10	- .06	- .06	- .01	- .04	.47	1.00		
9. TMTR[i]	- .17	- .17	- .19	- .07	- .09	- .13	.44	.27	1.00	
10. HPCM[j]	- .01	- .08	- .04	- .02	.05	- .06	.20	.32	.16	1.00

Note.
[a]institutional size, [b]career services experience, [c]director experience, [d]director degree, [e]CAS standards awareness, [f]CAS standards possession, [g]lack of resources barrier, [h]lack of importance barrier, [i]lack of time and training barrier, [j]not helpful/non-compliance barrier.

discriminant scores that was not explained by the difference among groups. Because the criterion variable of CAS use had two levels, only one discriminant function was created. A chi-square analysis was conducted to see whether the two levels of the function significantly differed from each other based on the discriminant function. The high chi-square value of χ^2 (2, N = 239) = 53.44, $p < .01$ indicated that the function discriminated well.

The unstandardized canonical discriminant function coefficients for the discriminant equation were computed for the two variables and the constant. The coefficient for extent of CAS standards awareness was .72, the coefficient for the not helpful/non-compliance barrier was .37, and the constant was - 4.56. The discriminant equation created was as follows:

D = - 4.56 + .72 (CAS Awareness) + .32 (Not Helpful/Non-compliance barrier)

The group centroids are the average discriminant scores for subjects in the two groups for the dependent variable when the variable means are entered into the discriminant equation. These scores reflect the unstandardized canonical functions evaluated at group means. The group centroid for respondents reporting use of the CAS standards was .38, and the centroid for those not using the standards was -.67.

The discriminant score for each case was computed by entering the value for each of the two variables included in the discriminant equation. The classification results, a summary of the number and percent of subjects classified correctly, are noted in Table 38. Overall, there were 168 of 239 cases, or 70.3% of the original grouped cases, correctly classified by the procedure.

If each case was randomly assigned, those assigned to the *yes* category should be correct in 153 of 239 cases, or 64% of the time. The use of this discriminant model resulted in correct assignment to the *yes* category for 111 of the 153 respondents who had used CAS professional standards. The percentage of correctly predicted *yes* cases was 72.5%, an increase of 8% in accuracy over random assignment.

In a similar fashion, if each case was randomly assigned, those assigned to the *no* category would be correct in 86 of 239 cases, or 36% of the time. The use of this discriminant model resulted in correct assignment to the *no* category for 57 of the 86 respondents who had used the CAS professional standards. The percentage of correctly predicted cases was 66.3%, an increase of 30% in accuracy over random case assignment.

Table 38

Discriminant Analysis Classification Results for Predicting CAS Standards Use

Actual Group	Predicted Group		Actual Group Size	Percentage Classified Correctly
	Yes	No		
Yes	111	42	153	72.5
No	29	57	86	66.3
Predicted Group Size	140	99	239	70.3

Summary of Results

CAS Standards Awareness

Twenty-five percent of the 343 respondents indicated no awareness of the CAS standards and 25% reported being very aware. Significant differences in the level of CAS standards awareness were found based on both career services experience and director experience. The respondents with less than five years of either career services or director experience were significantly less aware of the CAS standards than were respondents with either 5-10 years, or more than 10 years, of the same types of experience.

Factors reported as contributing the most to CAS standards awareness were chief student affairs officer (CSAO) and professional meetings. The two factors that contributed the least to CAS standards awareness were graduate studies and office colleagues.

Barriers to Use

The respondents were asked to indicate how much each of nine factors was perceived as a barrier to CAS standards use. The two barriers rated as having the greatest impact were lack of staff resources and lack of time. The two factors with the least impact as barriers to using the CAS standards were not helpful in past use and fear of finding non-compliance.

Factor analysis was used to reduce the original nine types of barriers to CAS standards use to four new factors which included: (1) *lack of resources barrier*, (2) *lack of importance barrier*, (3) *lack of time and training barrier*, and (4) *not helpful with past use/fear of finding non-compliance barrier*. Three-way ANOVA procedures revealed no significant main effect differences for any of the types of barriers.

However, there were significant two-way interaction effects between institutional size and director experience for the lack of resources barrier and the lack of time and training barrier. As institutional size increased, the significance of those barriers decreased for respondents with 5-10 years of experience as director.

Additionally, for those directors with less than five years of director experience, the lack of resources and lack of time and training barriers had a greater impact at small institutions and large universities. For directors with more than 10 years of director experience, there was an opposite relationship as the two barriers had less of an impact at small institutions and large universities.

Possession of CAS Standards and SAG

Directors who were aware of the CAS standards were evenly split when responding whether or not they possessed a copy of the standards. Fifty-six percent of

the same group of directors indicated possession of the CAS Career Services Self-Assessment Guide (SAG).

Possession of one document tended to lead to ownership of the other. Of those 120 directors possessing the CAS standards, 71% also reported having the SAG. There were 136 directors who possessed the SAG and of that group, 67% also owned the CAS standards. Two thirds of the directors possessing the CAS standards or the career services SAG had either the 2001 or 2003 versions, the most recent versions produced by CAS.

Use of CAS Standards

Of the respondents indicating awareness of the CAS standards, over 63% had used them in their current or a previous position. The directors used the CAS standards most extensively as a general reference guide and for comprehensive program review. The CAS standards were used least extensively to determine staffing needs, to justify the existence of a current program, and to develop programs.

Through factor analysis, the original twelve types of use variables were reduced to three new factors: (1) *program credibility*, (2) *program management*, and (3) *program review*. Three-way ANOVA procedures revealed significant main effect differences and interaction effects.

There were significant overall differences by institutional size and director degree for use of the CAS standards for program credibility, program management, and program review. Directors at small institutions with enrollments of less than 5,000 students used the CAS standards for program credibility and program management significantly more than directors from large universities. Additionally, directors with doctorates used the CAS standards for program credibility and program management significantly more than did respondents with either bachelor's or master's degrees.

There was also a significant two-way interaction effect by institutional size and director educational level for program credibility. The level of CAS standards use for program credibility by directors with bachelor/master's degrees remained stable regardless of institutional size. Respondents with doctorates used the CAS standards more for program credibility at institutions of less than 15,000 students. However, at large universities of more than 15,000 students, there was a substantial decline and significant interaction in the use of the CAS standards for program credibility by respondents with doctorates. At large universities, those directors with doctorates used the CAS standards less for program credibility than did respondents with either bachelor's or master's degrees.

Satisfaction from CAS Standards Use

The areas of greatest level of satisfaction from use of the CAS standards were as a general reference guide and for accreditation self-study. The areas of least

satisfaction were CAS standards use for determining staff needs and for resource justification. Overall, the data suggest that directors were generally satisfied with each type of CAS standards use.

There were significant overall differences by institutional size for satisfaction from CAS standards use for program credibility and program management. Directors at institutions with enrollments of less than 5,000 students were significantly more satisfied than were directors at institutions with larger enrollments. For satisfaction from use of the CAS standards for program credibility, the difference between directors from small institutions and those from large universities was significant.

The distinction between small and large institutions for satisfaction from use for program credibility replicated the CAS standards use pattern. Directors from small institutions both used the standards significantly more for program credibility, and were significantly more satisfied than were directors from large universities.

Also, there were significant main effect differences by director education level for satisfaction from CAS standards use for program management and program review. Directors with doctorates were more satisfied with use of the CAS standards for program management and program review than were directors with either bachelor's or master's degrees.

There was also a significant two-way interaction effect by institutional size and director education level for program credibility. The level of satisfaction for directors with bachelor's or master's degrees remained stable across all three institutional size categories, while the level of satisfaction for respondents with doctorates declined when the institutional size was greater than 15,000 students.

At institutions of less than 15,000 students, respondents with doctorates were more satisfied when using the CAS standards for program credibility. However, at large universities of more than 15,000 students, there was a notable decline and significant interaction in satisfaction levels for use of the CAS standards for program credibility by respondents with doctorates. At large universities, those directors with doctorates were less satisfied with use of the CAS standards for program credibility than were respondents without doctorates. This interaction pattern was remarkably similar to the pattern from CAS standards use for program credibility.

Factors Determining CAS Standards Use

The multivariate discriminant analysis indicated that the two best predictor variables in determining whether or not career services directors would use the CAS standards were the level of *CAS standards awareness* and the *not helpful in past use/fear of non-compliance barrier*. The prediction model correctly classified 70.3 percent of the overall cases. When compared to predictions by chance, the ability to correctly predict whether respondents would use the CAS standards was improved for both the yes and no categories. The number of correctly classified *yes* cases was

increased by 8% from 64% for random assignment to 72% with the prediction model. The number of correctly classified *no* cases was substantially increased by 30% from 36% for random assignment to 66% with the prediction model.

Chapter 5

Discussion and Implications

This chapter provides conclusions based on the findings in Chapter 4. Included are an overview of the study, summary of major findings, and comparison of major findings with previous research. Implications for practice and research, as well as recommendations related to those implications also follow.

Overview of Study

This was a descriptive study of career services director use of the Council for the Advancement of Professional Standards in Higher Education (CAS) professional standards at four-year public colleges and universities holding membership in the National Association of Colleges and Employers (NACE). There were 480 institutions included in the study and responses were received from 346 (72%) of the directors surveyed.

Specifically, the study examined career services director awareness and perceived barriers to use of the CAS standards, as well as the types and extent of use and the related levels of satisfaction. Also considered was how many practitioners owned either one or both of the CAS standards and the career services Self-Assessment Guide (SAG).

Multivariate discriminate analysis was employed to analyze the relationship among institutional size, director experience, director educational level, CAS standards awareness, CAS standards possession, as well as barriers to use, types of use, and satisfaction from use of the CAS standards. Three-way analysis of variance was used to analyze the relationship between institutional size, career services experience, director experience, and director degree level on the awareness of the CAS standards, perceived barriers to use, types of use, and level of satisfaction for each type of CAS standards use.

Findings from this study delineated how career services directors became aware of the CAS standards, how the standards were used in professional practice, and suggested barriers to use of the standards. This information will be beneficial to career services directors, other institutional administrators, as well as to CAS and NACE.

Summary of Major Findings

The majority of the respondents to the survey had more than 10 years of career services experience, master's degrees, and had been director of a career services unit for either less than five years or more than 10 years. Almost one-quarter of the respondents had not heard of the CAS professional standards and one-quarter indicated they were very aware of the CAS standards.

CAS Standards Awareness

There were significant differences in CAS standards awareness by career services experience and director experience. Directors with more than five years of career services experience were significantly more aware of the CAS standards than were those directors with less than five years of career services experience. Such was the case for respondents with more than five years of director experience when compared to those with less than five years of director experience.

Contributors to CAS Standards Awareness

The major contributors to CAS standards awareness were chief student affairs officers and professional meetings. The least contributing factors were graduate studies and office colleagues.

Barriers to CAS Standards Use

With regard to perceived barriers to CAS standards use, the factors rated most significant were lack of staff resources and lack of time. The factors ranked least significant were fear of finding non-compliance and not helpful based on past use.

There were no significant main effect differences for the lack of resources barrier, lack of importance barrier, time and training barrier, and not helpful/non-compliance barrier. However, significant interaction effects by institutional size and director experience for the lack of resources and lack of time and training factors were indicated.

As institutional size increased, lack of resources and lack of time and training generally decreased as perceived barriers for respondents with 5-10 years of director experience. At small colleges and large universities, the lack of resources and lack of time and training factors were more significant as barriers for directors with less than five years of director experience, and less significant as barriers for directors with more than 10 years of director experience. Director experience exceeding 10 years was notable for the lack of time and training barrier and the level of significance for that barrier remained stable, with little variance, as institutional size increased.

CAS Standards and SAG Possession

Respondents were evenly divided regarding possession of the CAS standards and almost two-thirds with possession had either the 2001 or 2003 version. Over one half of the respondents were in possession of the career services SAG and over two thirds of those had either the 2001 or 2003 version. More respondents possessed the SAG than the CAS standards and of those respondents reporting possession of specific versions of the SAG, over two thirds also had the CAS standards.

Types of CAS Standards Use

With regard to types of CAS standards use, there were significant differences by institutional size and director degree level for program credibility, program management, and by institutional size for program review. Directors at small institutions of less than 5,000 students used the CAS standards most for all three types of use, and significantly more than the directors from large universities of more than 15,000 students for program credibility and program management. For all three types of use, the directors from large universities used the standards least. Directors with doctorates used the CAS standards significantly more for program credibility and program management than did directors with either bachelor's or master's degrees.

Satisfaction from CAS Standards Use

There were overall significant differences by institutional size for satisfaction from CAS standards use for program credibility and for program management. Directors from small institutions of less than 5,000 students were more satisfied than those directors from both mid-size institutions with enrollments of 5,000 to 15,000 and from large universities of more than 15,000 students. The directors from large institutions of more than 15,000 students were the least satisfied group from CAS standards use for program credibility and program management. The differences in satisfaction levels between directors from small institutions and those from large universities were significant for satisfaction from program credibility.

Additionally, there were overall significant differences by director degree level for satisfaction from CAS standards use for program management and program review. For both types of CAS standards use, directors with doctorates were more satisfied than were directors with bachelor's or master's degrees.

A significant interaction pattern by institutional size and director degree level was indicated for CAS standards use and satisfaction from use for program credibility. At institutions of less than 15,000 students, directors with doctorates used the CAS standards more for program credibility and were more satisfied with that use than were directors with either bachelor's or master's degrees. However, at large universities of more than 15,000 students, that trend was reversed as directors with doctorates used the CAS standards less, and were less satisfied with use for program credibility, than were directors with bachelor's or master's degrees.

It is reasonable to assume that directors with doctorates would generally be more likely to use the CAS standards and that trend was reflected at institutions with enrollments of less than 15,000 students. Often, student affairs divisions at small and mid-size institutions are more centralized and in the institutional competition for recognition, validation, and resources, professional standards may have more value for career services directors.

At large universities, student affairs divisions are more complex and reporting structures may be more decentralized. There is often a tendency by career services directors at large universities to use peer institutions for targeted benchmarking related to best practices, staffing, funding, and other issues. The use of CAS standards might be viewed as less beneficial for career services visibility, validation, and resource acquisition. Thus, assessment and benchmarking initiatives tend to be externally focused rather than using internal review processes that would include the CAS standards.

Factors Determining Use

To determine those factors that most affect use of the CAS standards, discriminant analysis of 10 factors was conducted. The final regression equation contained two predictor variables. The first variable was CAS standards awareness and the second variable was the not helpful/non-compliance variable.

When the discriminant score for each case was computed, the overall number of cases correctly classified by the equation was 168 of 239 or 70.3%. When the results from the prediction model were compared with those from random assignment, there was an 8% improvement in accuracy, from 64% to 72%, for predicting those directors who used the CAS standards. When predicting which directors did not use the CAS standards, a substantial 30% improvement, from 36% to 66%, in accuracy prediction was realized.

Comparison of Findings with Related Literature

Awareness of CAS Standards

Marron's survey (1989) of chief student affairs officers (CSAOs) revealed that 78% of the respondents from public institutions (n = 168) were aware of the CAS standards, and Mann et al. (1991) found that 84% of CSAOs (n = 130) were aware of the CAS standards. In a survey of members of professional associations belonging to the CAS consortium, Arminio and Gochenauer (2003) reported that 61% of the 1,481 respondents had heard of the CAS standards with 52% from public institutions. Also, in that study, it was noted that 60% of the directors/associate directors knew of the CAS standards. By comparison, the survey results from this study revealed that 75% of career services directors at four-year public institutions had some awareness of the CAS standards.

CAS Standards Possession

In a survey of CSAOs, Marron (1989) found that 120 (78%) respondents from public institutions were in possession of the CAS standards. For the career services directors in this study, all of whom were from four-year public institutions, the number who possessed the CAS standards was 123 (50%).

CAS Standards Use

Marron (1989) noted that CSAOs at public institutions used the CAS standards more than did those at private institutions and that 66 (55%) of the 120 public institution respondents had used the standards. In a survey of CSAOs at two-year colleges, Grant (1990) found that 60% of the 59 respondents had used the standards. Mann et al. (1991) discovered that 51% of 130 CSAOs had used the CAS standards and 33% were aware of, but had not used the standards. In this study, 155 (45%) of the 346 total respondents had used the standards. When considering only those 258 respondents who were aware of the CAS standards, there were 155 (60%) who had used the standards.

Types of CAS Standards Use

The literature is replete with application options for the CAS standards. Major areas of actual and potential use include: (a) accreditation self-study, (b) assessment and evaluation, (c) budget justification, (d) education of stakeholders, (e) political maneuverability, (f) professional/staff development, (g) program planning, development, and evaluation, (h) reference guide, (i) staff development, (j) student development/learning, and in general to enhance the quality of professional practice at institutions (Arminio & Gochenauer, 2003; Bryan & Mullendore, 1991,1993; CAS, 2001; Cooper & Saunders, 2000; Creamer, 2003; Mable & Miller, 1991; Mann, Gordon & Miller, 1991; Marron, 1989, 1991; Schuh & Upcraft, 2001; Whitt & Blimling, 2000).

Arminio and Gochenauer (2003) found that student affairs professionals tended to use the CAS standards for program guidance than just reading them. But more practitioners read the standards than used them for self-assessment activities. However, the self-assessment guides (SAGs) were more often used for self-assessment purposes than solely read or used for program guidance.

In this study, career services directors made the greatest use and were most satisfied with use of the CAS standards as a general reference guide. There were also more extensive levels of use and higher levels of satisfaction for comprehensive program review, accreditation self-study, and strategic planning.

Implications for Practice

The variation of organizational patterns, programs and practitioner backgrounds that led to diverse and multiple identities and affiliations for career services practitioners described by Bechtel (1993) continues today. The resulting vagueness and ambiguity regarding the roles and relationships that career services has within the institution provides an exceptional opportunity for practitioners to develop a more pronounced sense of mission and purpose, and a more definitive professional identity.

Carpenter, Miller, and Winston (1994) suggested that the development of professional standards and guidelines was an indicator of the emergence of student affairs as a profession. In a similar fashion, career services practitioners must become increasingly active in self-advocacy efforts and continuously articulate the emerging role career services has in higher education. In short, there is an opportunity for practitioners to determine the parameters of defining career services as a profession. The failure to act in pro-active ways may mean that others in higher education determine the role of career services within the institution.

If the field of career services is to gain visibility as a profession with value and accountability, there must be some system to evaluate competencies and identify best practices. Professional standards provide a critical component of that system.

CAS and NACE Standards

Based on comments from respondents, confusion is evident among directors regarding the CAS and NACE professional standards. Two respondents asked if the CAS standards were the same as the NACE standards, and several directors indicated they were aware of the NACE standards, but not the CAS standards. Some who reported awareness of the CAS standards indicated they used the NACE standards instead. When noting on the survey the most recent CAS standards version possessed, a few respondents substituted the year 1998, the year the current NACE standards were published, for either the 1997 or 1999 dates for CAS versions listed on the survey form.

The College Placement Council, predecessor to NACE, originally developed *Professional Standards for Career Counseling and Placement* in 1975 and was one of the founding organizations for CAS in 1980. In 1998, NACE responded to practitioner concerns that the profession had evolved with numerous dimensions not addressed by the CAS standards by publishing the *Professional Standards for College and University Career Services* (NACE, 1998c). The 1998 NACE standards are advertised and available to members, but have not been updated. When the updated CAS standards for career services were published in 2001, most of the 1998 NACE standards were incorporated (CAS, 2001).

It is apparent that some practitioners view the CAS and NACE standards as parallel sets of standards and choose one or the other. Presuming a practitioner's affinity for one's professional association, there may be less inclination to become familiar with or use the CAS standards because of the NACE branding for its own standards. The value of practitioners choosing between two sets of similar professional standards is not obvious.

An examination of the relationship between the CAS and NACE standards merits consideration. If the organizations share common reasons for the existence of professional standards, and if NACE continues to maintain a separate set of professional standards, more attention should be given to treating the standards as a

living document, updating it frequently and, as much as possible, making the NACE standards complementary to the CAS standards.

CAS Standards Awareness

One of the results from this study was that directors with less than five years of experience either in career services or as director of a career services unit were significantly less aware of the CAS standards than were directors with more than five years experience. As CAS and NACE consider further efforts at raising awareness of professional standards this group of practitioners should be a focal area for marketing and education efforts. Additionally, there exists a unique opportunity for graduate preparation programs to reflect upon and further develop their respective educational efforts related to the CAS standards.

How to emphasize practitioner awareness and encourage use of the CAS standards, especially to professionals with less experience, provides unique opportunities for CAS and NACE. As a long-time member of the CAS consortium and active contributor to CAS standards development, it is reasonable to assume that NACE would play an integral role in that process and overtly support use of the CAS standards in publications, training programs, and on its web site.

Strong levels of that support are not evident. For example, in the NACE publication *Principles of Professional Conduct for Career Planning and Employment Professionals*, no mention of practitioner familiarity with or the possible use of professional standards is apparent in the principles for career services professionals section (NACE, 1998a).

The NACE Management Leadership Institute for Career Services Professionals is a significant leadership development program for career services professionals offered every year since 1991. Course topics in the five-day program include strategic planning and management, marketing, financial management, legal and ethical issues in career center management, and a manager's tool box covering a variety of other management issues (NACE, 2004). What is not clear is how much attention, if any, is given to the importance and use of professional standards, whether they are CAS, NACE, or both.

Increasing practitioner awareness and encouraging use of the CAS standards requires relatively simple strategies and processes. For example, based on comments made about the survey for this study, several professionals became aware of the CAS standards and career services SAG for the first time, or discovered that the latest edition in their possession was outdated. Responses also included statements of intention to learn more about the CAS standards and to purchase the most recent CAS standards or SAG documents.

CAS Standards Possession

This study revealed that almost two thirds of those possessing the CAS standards had either the 2001 or 2003 versions. However, the substantive differences between those versions and previous editions of the standards are quite significant, which means that one third of practitioners possess standards that are essentially outdated. It is reasonable for the CAS standards to be viewed, dependent upon publication date, as having two definitively different levels of substance and applicability. This may explain why some directors view the CAS standards as minimal, less relevant, and question their effectiveness for use.

The sources of greatest CAS standards awareness for career services practitioners were chief student affairs officers and professional meetings. It seems that these are also viable resources for CAS and NACE to employ in not only increasing awareness of the different versions, but also encouraging practitioners to acquire and use the most recent versions.

Value of Professional Standards

Upon receiving the survey, one director sent an e-mail response with the following message: "I have your survey and in the middle of the CAS review for my office. It is killing me. Labor intensive and of little value." This director did not return the survey.

Another respondent wrote, "Did a comprehensive program review using CAS, however nothing came of it." Providing a different point of view, another director commented,

> My staff and I are presently using the CAS Standards and SAG to show the University Administration just how far we are off the mark in providing comprehensive career services to the University. Unfortunately, my boss (VPSA) and others in the administration think we are doing a superb job. In fact, we are given the services we offer and the staff that we have to support them, but we are way off the mark in terms of where we should be.

The use of professional standards must be increasingly viewed by practitioners as having value for their work.

Increased awareness of the CAS professional standards is a good starting point for practitioners. However, if use of the CAS standards is to grow, these same career services professionals must be convinced that the CAS standards will provide greater leverage in the competition for institutional resources and help address issues of assessment and accountability. If practitioners believe that use of the CAS standards will provide enough value in addressing those concerns, they may be more inclined to devote the resources required to effectively use the standards.

Perspectives on CAS Standards Use

The most significant barriers to CAS standards use in this study were lack of staff resources and lack of time. For a number of career services professionals, use of the CAS standards seems to be viewed as an arduous process that occurs once every few years, somewhat akin to, and often linked to accreditation initiatives. For example, in this study, respondents indicated considerable use and satisfaction from use of the CAS standards for comprehensive program review and accreditation self-study. Significant staff and time resources are required for these comprehensive review and self-study processes, which must be balanced with regular duties and responsibilities. Once these review and self-study processes are completed, the standards may then be put away until it is time to conduct the same processes again.

It seems generally accepted by career services practitioners that the CAS standards provide important thresholds applicable to higher education in general, and to career services specifically. Meeting and exceeding the standards seems an important concern, and making that determination may only occur every few years. Not wanting to fail meeting the standards, some practitioners may be inclined to give higher self-ratings to help ensure passing marks when compared to the baseline data. Whether or not this "pass-fail" approach is best is open to question.

This study revealed that the most extensive use made of the CAS standards was as a general reference guide, which was also the greatest source of satisfaction. One might argue that if the CAS standards were used as part of an on-going discovery process related to continuous process improvement, then more frequent use of the standards might be made. More attention to using CAS standards as a tool for on-going discovery may mitigate the perceived barriers of staff resources and time.

When considering how the CAS standards and SAG are perceived by career services professionals, strategies should be identified and employed by CAS and NACE to encourage the discovery process that use of the standards provides. Such activities might help change the view that numerous practitioners have towards the CAS standards from one of compliance relative to self-study for program review and accreditation to one of enlightening discovery that continually leads to process improvements.

There are opportunities to better educate career services practitioners in making the most effective use of the CAS standards. Whatever progress can be made by CAS and NACE in changing perspectives about application of the standards would be beneficial.

Use of CAS Standards

The clear distinction between small and large institutions raises some interesting questions regarding reasons behind the differences in levels of CAS standards use for program credibility and management by career services directors.

Perhaps student affairs divisions at small institutions are more centralized, a structure which promotes collegiality and collaboration, and which builds cohesiveness and affinity among individual units. In the increased competition for institutional recognition, validation, and resources, professional standards may have more value for career services directors from small institutions. Finally, it is possible that the CSAOs at small institutions place higher value on the CAS standards.

At large universities, the student affairs divisions are more complex and may include a sub-unit reporting structure whereby few, if any, individual units report directly to the chief student affairs or other chief divisional officer. Career services units at larger institutions may view themselves as more comprehensive and established, and the CAS standards would be of less benefit for visibility, validation, and acquiring additional resources. There is often a tendency for large universities to use peer institutions in targeted benchmarking for best practices, staffing, funding, and other issues. While the CAS standards are generally viewed as effective for articulating minimal expectations, benchmarking efforts tend to be external as large universities seek broad and quantitative baseline data for comparative purposes in planning, justifying resources, etc. The employment of internal review processes, including the CAS standards, is not necessarily optimal for that purpose.

Certification and Accreditation

Some professional groups provide opportunities for institutional units to become accredited or certified by the association. It seems unlikely there will be a process of certification or accreditation developed for career services units in the near future. In the absence of such professional certification or accreditation processes, career services units will not have the institutional influence that other institutional units with such processes have.

One respondent who used the CAS standards noted "Until career centers are certified by a national association and universities deem that certification important – CAS standards will be largely superficial measures." Neither CAS nor NACE are currently designed to provide certification or accreditation for career services units. However, the use of professional standards is one means of doing so, helping to provide influence in competition for resources and increased visibility within an institution. Both CAS and NACE should continually review what role, if any, they might play in accreditation or certification processes for career services.

Implications for Research

This study has provided valuable information regarding the career services director awareness of the CAS standards and perceived barriers to their use. Additionally, information has been gained regarding the types of CAS standards use and the satisfaction emanating from each type of use.

While a number of research questions have been addressed by this study, there remain ample opportunities for follow-up research regarding the use of CAS standards by career services practitioners. For those directors who used the CAS standards, it would be beneficial to know the reasons why or why not they were satisfied. Other research questions might entail more specificity regarding type of use, reasons for that use, and outcomes. For example, what are the reasons small colleges tend to use the standards more and have greater satisfaction than directors at mid-size institutions and, particularly, directors from large universities?

Another area that merits consideration for future study is the difference in perceived barriers between directors who have used the standards and those who have not. Examining whether and how specific types of CAS standards use influence the perceived barriers would add richness to such a study.

In retrospect, more attention could have been devoted in this study to use of the SAG by career services directors. As Arminio and Gochenauer (2003) discovered, the SAGs were used by student affairs practitioners for self-assessment purposes than for general information or program guidance. Since the SAG provides specificity for and essential application of the CAS standards, it would be of significant benefit to know if any relationship exists between the career services SAG and barriers to CAS use, as well as types of use and satisfaction from CAS use.

This type of study lends itself to replication for other functional units for which CAS standards have been created. If similar types of information were obtained, it would be helpful to CAS and related professional organizations in understanding practitioner awareness and use of the standards.

Recommendations

A significant issue is the relationship between CAS and NACE regarding professional standards and what might be done to alleviate the confusion that exists among practitioners between the two sets of standards. If there will continue to be two sets of standards in the future, which seems likely, they should be designed to be complementary and not parallel. It is certainly recommended that CAS and NACE representatives address this issue.

Each time the CAS standards and SAG for career services are updated, considerable efforts and valuable input are made by NACE representatives working with CAS. What is puzzling is why the NACE standards have not been updated concurrently with the CAS changes. If the NACE standards continue to be published, they should be updated each time the CAS standards are updated.

In a similar fashion, whenever the NACE standards are updated, CAS representatives should review the new NACE standards and consider incorporating any elements that make the two sets of professional standards more congruent and complementary. Both organizations will need to demonstrate flexibility and openness

to negotiation to achieve those goals and alleviate the perspective of some practitioners that the CAS and NACE standards are parallel and in competition with each other.

Additionally, NACE should consider the appointment of a committee to continuously address issues of professional standards and assessment initiatives for career services practitioners. The ongoing development of professional standards and assessment strategies and processes requires attention that an ad hoc group is not able to optimally give.

As the prominent national professional association for career services practitioners, NACE has an obligation to promote professionalism among its members, including the use of professional standards. NACE should explore and take advantage of opportunities to increase awareness and encourage the effective use of professional standards. Key areas might include the NACE publications *Principles of Professional Conduct for Career Planning and Employment Professionals* and *Sourcebook for Conducting Evaluations and Measurements of Career Services*, as well as the Management Leadership Institute.

CAS should take additional steps to encourage practitioners to acquire and use the most recent versions of the standards. For career services professionals, chief student affairs officers and professional meetings such as those offered by NACE can provide excellent delivery systems for that information. Alleviating the content disparity in the different versions of the CAS standards and SAGS actually possessed and employed by practitioners is critical for effective use.

It is recommended that NACE explore whether or not the development of certification or accreditation processes for career services practitioners is desired and can be done effectively to advance the profession. Included in that effort should be the contributions professional standards can make to professional practice.

Use of the CAS standards is considered by numerous career services practitioners to be an arduous process consuming considerable staff time and energies and the expectations for return on that investment within the institution may be neither readily apparent nor forthcoming. Therefore, practitioners question the value of using the standards and tend to do so when directed by institution officials as part of a comprehensive review or accreditation self-study initiative. It is recommended that CAS consider how the standards and SAGs can be effectively used, not only for compliance, but also for ongoing discovery as part of continuous process improvement. Thus the CAS standards and SAGs are treated as viable living documents and the process of evaluation is more continuous rather than every few years.

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APPENDIX A: Pilot Study Participants

Alfred University
Amherst College
Averett University
Bowdoin College
Bradley University
Bridgewater College
Bryn Mawr and Haverford Colleges
Bucknell University
Catholic University
Centre College
Clarkson University
Colorado College
Columbia University
Cornell University
Davidson College
Duke University
Ferrum College
Franklin & Marshall College
Furman University
Georgetown University
George Washington University
Hampden-Sydney College
Hollins University
Johns Hopkins University
Lehigh University
Loyola College
Lynchburg College
Marietta College
Muhlenberg College

New York University
Northeastern University
Princeton University
Randolph Macon Woman's College
Rensselaer Polytechnic Institute
Rice University
Rider University
Roanoke College
Rochester Institute of Technology
Shenandoah University
Stanford University
St. Joseph's University
Susquehanna University
Swarthmore College
Sweet Briar College
Teachers College – Columbia
University
Tufts University
University of Notre Dame
University of Richmond
Vanderbilt University
Villanova University
Virginia Wesleyan University
Wake Forest University
Washington and Lee University
Wesleyan University
Widener University
Worcester Polytechnic Institute

APPENDIX B: Letter and Statements of Support

<div align="right">January 26, 2004</div>

Dear Career Services Colleague:

     Your assistance is greatly needed for this research project regarding the awareness and use of the Council for the Advancement of Standards (CAS) professional standards by career services directors at four-year public colleges and universities. Because you are a member of the National Association of Colleges and Employers (NACE) and director of the career services unit at your institution, you have been selected for the study and your response is very important.

     Specifically, this study will consider the career services director awareness and perceived barriers to the use of the CAS standards, as well as the types and extent of use, and related levels of satisfaction. For this research project, the executive directors of both CAS and NACE have provided statements of support that are included on the reverse side of this letter.

     Findings from this study will delineate how career services directors become aware of the CAS standards, how the standards are used in professional practice, and identify barriers to use of the standards. This information will be beneficial to career services directors, other institutional administrators, as well as CAS and NACE.

     Please take a few minutes and complete the brief 10-item questionnaire that is enclosed and return it to me in the self-addressed stamped envelope that is provided. The approximate time required is 10 minutes. Your response by February 27, 2004 would be very helpful.

     The information you provide will be confidential and no personally identifiable information will viewed by anyone other than me. If you wish to receive a copy of the results of this study, please provide your e-mail address at the end of the survey. Should you have questions or concerns, please call me at 540-464-7579 or send an e-mail message to me at <u>sratcliffe@vmi.edu</u>.

                                         Sincerely,

                                         Sam Ratcliffe
                                         Director, Career Services
                                         Virginia Military Institute
                                            and
                                         Ph.D. Candidate,
                                         Higher Education and Student Affairs
                                         Virginia Tech

Statements of Support

For Dissertation Research Conducted by
R. Samuel Ratcliffe
Director, Career Services
Virginia Military Institute

Title: *Use of CAS Standards by Career Services Directors at Four-Year Public Colleges and Universities*

Council for the Advancement of Standards in Higher Education (CAS)

"The CAS Standards are designed and managed to promote student learning and development: quality programs and services for students. This research will provide CAS, along with career services offices, with valuable information about uses and interests. Your assistance and involvement matter very much."

Phyllis L. Mable
CAS Executive Director

National Association of Colleges and Employers (NACE)

"Since the 1970s the National Association of Colleges and Employers (NACE), formerly the College Placement Council (CPC), has been fully committed and working with members of the career services profession in the development and application of professional standards. As one of the 22 professional associations forming the Council for the Advancement of Standards in 1980, NACE still continues its support in the work of improving our ability to provide professionals with the best tools and information for the improvement of services and accountability. The research and report from this dissertation topic focused on the career center directors' use of the CAS Standards should expand our awareness of their application on campuses, barriers that may inhibit their usage, and may also offer implications for improved usage. This information will be extremely valuable for the members of NACE."

Marilyn F. Mackes
NACE Executive Director

This research project has been approved by the Institutional Review Board (IRB) at Virginia Tech. Questions may be directed to the IRB Chair, David Moore, at (540) 231-4991. Alternatively, you may contact David Alexander, the Educational Leadership and Policy Studies Department Chair, at (540) 231-5642 or Don Creamer, Professor and Faculty Advisor, at 540-231-9705.

The Use of CAS Standards in Career Services

This survey is designed to gather information from directors of career services units regarding their awareness and use of the Council for the Advancement of Standards in Higher Education (CAS) professional standards and guidelines for career services. Using the response options provided for each question, please indicate which best describes your situation.

1.	How many years of experience do you have in the career services field?	[ ] Less than 5 years [ ] 5-10 years [ ] More than 10 years
2.	How many years of experience do you have as director of career services?	[ ] Less than 5 years [ ] 5-10 years [ ] More than 10 years
3.	What is your highest degree earned?	[ ] Bachelor's [ ] Master's [ ] Other post-bachelor's degree [ ] Doctorate

4.   To what extent are you aware of the CAS standards?

Not aware 1 2 3 4 5 6 7 **Very aware**

If you are aware of the CAS standards, please continue to question #5.
If you are <u>not aware</u> of the CAS standards, you have completed the survey. Please return it according to the instructions at the end.

5.   If you are aware of the CAS standards, to what extent did each of the following contribute to your awareness?

Not a contributor 1 2 3 4 5 6 7 **Major contributor**

	1	2	3	4	5	6	7
Graduate studies	1	2	3	4	5	6	7
Professional journals	1	2	3	4	5	6	7
Professional meetings/conferences	1	2	3	4	5	6	7
Chief Student Affairs Officer	1	2	3	4	5	6	7
Colleagues within office	1	2	3	4	5	6	7
Colleagues within institution	1	2	3	4	5	6	7
Colleagues outside institution	1	2	3	4	5	6	7
Other (please specify):_____	1	2	3	4	5	6	7

(APPENDIX C Continued)

6. How significant do you perceive each of the following to be barriers to using the CAS standards?

	Not significant	1	2	3	4	5	6	7	Very significant
Lack of funds		1	2	3	4	5	6	7	
Lack of staff resources		1	2	3	4	5	6	7	
Lack of time		1	2	3	4	5	6	7	
Lack of training on how to use		1	2	3	4	5	6	7	
Lack of perceived value		1	2	3	4	5	6	7	
Lack of institutional support		1	2	3	4	5	6	7	
Lack of perceived necessity		1	2	3	4	5	6	7	
Used it in the past and it was not helpful		1	2	3	4	5	6	7	
Fear of finding non-compliance		1	2	3	4	5	6	7	
Other (please specify):_____		1	2	3	4	5	6	7	

7. Does your career services office possess a copy of *The Book of Professional Standards for Higher Education* published by CAS?   [ ] YES   [ ] NO

   If yes, indicate the most recent edition you have.   [ ] 1986   [ ] 2001
   [ ] 1997   [ ] 2003
   [ ] 1999

8. Does your career services office possess a copy of the *CAS Career Services Standards and Guidelines Self-Assessment Guide*?   [ ] YES   [ ] NO

   If yes, please indicate the most recent edition you have.
   [ ] 1988   [ ] 2001
   [ ] 1997   [ ] 2003

9. Have you used the CAS standards in your current or a previous position?

   [ ] YES
   [ ] NO

If you have used the CAS standards in your position, please proceed to item #10.

*If you **have not**, then you have completed the survey. Please return it according to the instructions provided at the bottom of this page.*

(APPENDIX C Continued)

10. If you have used the CAS standards in your career services position, for each
     type of use indicate the *extent of use* and evaluate your *level of
     satisfaction* with its use.

Type of Use	Extent of Use								Level of Satisfaction								
	Have not used	1	2	3	4	5	6	7	Extensive use	Not satisfied	1	2	3	4	5	6	7 Very satisfied
For comprehensive program review	1	2	3	4	5	6	7	N/A	1	2	3	4	5	6	7
For on-going program evaluation	1	2	3	4	5	6	7	N/A	1	2	3	4	5	6	7
For strategic planning	1	2	3	4	5	6	7	N/A	1	2	3	4	5	6	7
To develop programs	1	2	3	4	5	6	7	N/A	1	2	3	4	5	6	7
To build program credibility	1	2	3	4	5	6	7	N/A	1	2	3	4	5	6	7
For resource justification	1	2	3	4	5	6	7	N/A	1	2	3	4	5	6	7
To educate stakeholders	1	2	3	4	5	6	7	N/A	1	2	3	4	5	6	7
For staff development	1	2	3	4	5	6	7	N/A	1	2	3	4	5	6	7
To determine staffing needs	1	2	3	4	5	6	7	N/A	1	2	3	4	5	6	7
For accreditation self-study	1	2	3	4	5	6	7	N/A	1	2	3	4	5	6	7
To justify the existence of current program	1	2	3	4	5	6	7	N/A	1	2	3	4	5	6	7
As a general reference guide	1	2	3	4	5	6	7	N/A	1	2	3	4	5	6	7
Other(please specify):	1	2	3	4	5	6	7		1	2	3	4	5	6	7
Other(please specify):	1	2	3	4	5	6	7		1	2	3	4	5	6	7

Thank you for completing this survey.

*Please return it to Sam Ratcliffe in the envelope provided
or fax it to 540-464-7367 by February 27, 2004.*

If you would like to have a copy of the results of this study, please provide your
email address:

_____

APPENDIX D: Participating Institutions by State

Alabama

Athens State University
Auburn University
Jacksonville State University
Troy State University - Dothan
Troy State University - Montgomery
University of Alabama
University of Alabama @ Birmingham
University of Alabama in Huntsville
University of North Alabama
University of South Alabama
University of West Alabama

Alaska

University of Alaska Anchorage
University of Alaska Fairbanks

Arizona

Northern Arizona University
University of Arizona

Arkansas

Arkansas State University
Arkansas Tech University
Henderson State University
Southern Arkansas University
University of Arkansas @ Little Rock
University of Arkansas @ Pine Bluff

California

California Poly State Univ.- San Luis Obispo
California State Polytechnic Univ. - Pomona
California State University - Chico
California State University - Fresno
California State University - Fullerton
California State University - Hayward
California State University - Northridge
California State University - San Marcos
San Diego State University

San Francisco State University
San Jose State University
Sonoma State University
University of California - Berkeley
University of California - Davis
University of California - Los Angeles
University of California - Riverside
University of California - San Diego
University of California - San Francisco
University of California - Santa Barbara
University of California - Santa Cruz

Colorado

Colorado State University
Colorado State University - Pueblo
Fort Lewis College
Adams State College
Mesa State College
Metropolitan State College of Denver
University of Colorado @ Boulder
University of Colorado @ Colorado Springs
University of Colorado @ Denver
University of Northern Colorado

Connecticut

Central Connecticut State University
Eastern Connecticut State University
Southern Connecticut State University
Western Connecticut State University
University of Connecticut

Delaware

Delaware State University
University of Delaware

Florida

Florida Gulf Coast University
Florida International University
Florida State University
University of Central Florida

University of Florida
University of North Florida
University of South Florida
New College of Florida
University of West Florida

Georgia

Armstrong Atlantic State University
Augusta State University
Georgia College and State University
Georgia Institute of Technology
Georgia Southern University
Georgia Southwestern State University
Georgia State University
Kennesaw State University
North Georgia College & State University
State University of West Georgia
University of Georgia

Hawaii

University of Hawaii at Hilo
University of Hawaii at Manoa

Idaho

Boise State University
Lewis-Clark State College
University of Idaho

Illinois

Eastern Illinois University
Northern Illinois University
University of Illinois at Springfield
University of Illinois at Urbana - Champaign
Western Illinois University

Indiana

Ball State University
Indiana University - Bloomington
Indiana University Kokomo
Indiana University - Purdue Univ. Ft. Wayne
Indiana University - Purdue Univ. Indianapolis
Indiana University South Bend
Indiana University Southeast
Purdue University Main Campus

University of Southern Indiana

Iowa

Iowa State University
University of Iowa
University of Northern Iowa

Kansas

Emporia State University
Fort Hays State University
Kansas State University
Pittsburg State University
Wichita State University

Kentucky

Eastern Kentucky University
Morehead State University
Murray State University
Northern Kentucky University
University of Kentucky
Western Kentucky University

Louisiana

Louisiana State University – Baton Rouge
Louisiana State University in Shreveport
Louisiana Tech University
Southeastern Louisiana University
University of Louisiana at Monroe

Maine

University of Maine
University of Maine at Farmington
University of Southern Maine

Maryland

Bowie State University
Coppin State College
Frostburg State University
Morgan State University
Salisbury University
Towson University
University of Baltimore

Massachusetts

University of Massachusetts
University of Massachusetts Boston
University of Massachusetts Dartmouth
University of Massachusetts Lowell
Fitchburg State College
Framingham State College
Salem State College
Worcester State College

Michigan

Central Michigan University
Ferris State University
Grand Valley State University
Lake Superior State University
Michigan State University
Michigan Technological University
Northern Michigan University
Oakland University
Saginaw Valley State University
University of Michigan - Ann Arbor
University of Michigan - Dearborn
University of Michigan - Flint
Wayne State University
Western Michigan University

Minnesota

Bemidji State University
Minnesota State University, Mankato
Minnesota State University, Moorhead
Southwest State University
Winona State University
University of Minnesota - Duluth
University of Minnesota - Morris
University of Minnesota - Twin Cities

Mississippi

Alcorn State University
Delta State University
Jackson State University
Mississippi State University
Mississippi Valley State University

Missouri

Lincoln University
Missouri Southern State University
Missouri Western State University
Northwest Missouri State University
Southeast Missouri State University
Southwest Missouri State University
Truman State University
University of Missouri - Columbia
University of Missouri - Rolla
University of Missouri - St. Louis

Montana

Montana State University - Bozeman
Montana State University - Billings
University of Montana
University of Montana - Western

Nebraska

Peru State College
University of Nebraska at Kearney
University of Nebraska at Lincoln
University of Nebraska at Omaha

New Jersey

College of New Jersey
Kean University
New Jersey City University
New Jersey Institute of Technology
Ramapo College of New Jersey
Rowan University
Rutgers University Camden
Rutgers University New Brunswick
William Paterson University

New Mexico

University of New Mexico

New York

CUNY – Brooklyn College
CUNY – Queens College
SUNY - Binghamton

SUNY – Buffalo
SUNY - Stony Brook
SUNY College at Brockport
SUNY College at Buffalo
SUNY College at Cortland
SUNY College at Freedonia
SUNY College at Geneseo
SUNY College at Oneonta
SUNY College at Oswego
SUNY College at Plattsburgh
SUNY Purchase College

North Carolina

Appalachian State University
North Carolina A&T State University
North Carolina State University
University of North Carolina at Chapel Hill
University of North Carolina at Charlotte
University of North Carolina at Greensboro
University of North Carolina at Pembroke

North Dakota

University of North Dakota
Dickinson State University
Mayville State University
North Dakota State University
Valley City State University

Ohio

Bowling Green State University
Central State University
Kent State University
Miami University
Ohio State University
Ohio University
Shawnee State University
University of Akron
University of Cincinnati
University of Toledo
Youngstown State University

Oklahoma

Cameron University
East Central University
Langston University

Northeastern State University
Northwestern Oklahoma State University
Oklahoma State University
Southeastern Oklahoma State University
University of Central Oklahoma
University of Oklahoma

Oregon

Eastern Oregon University
Oregon State University
Portland State University
Southern Oregon University
University of Oregon
Western Oregon University

Pennsylvania

Lincoln University
Bloomsburg University of Pennsylvania
California University of Pennsylvania
Clarion University of Pennsylvania
Edinboro University of Pennsylvania
Indiana University of Pennsylvania
Kutztown University Of Pennsylvania
Lock Haven University of Pennsylvania
Mansfield University of Pennsylvania
Millersville University of Pennsylvania
Shippensburg University of Pennsylvania
Slippery Rock University of Pennsylvania
West Chester University of Pennsylvania
Penn State University Park
Penn State Erie
Penn State Harrisburg
University of Pittsburgh
University of Pittsburgh at Greensburg
University of Pittsburgh at Johnstown

Rhode Island

Rhode Island College
University of Rhode Island

South Carolina

The Citadel
Clemson University
Coastal Carolina University
College of Charleston

University of South Carolina - Columbia
University of South Carolina - Aiken
University of South Carolina - Spartanburg

South Dakota

University of South Dakota
Black Hills State University
Dakota State University
Northern State University
South Dakota State University

Tennessee

East Tennessee State University
Middle Tennessee State University
Tennessee Technological University
University of Memphis
University of Tennessee, Knoxville
University of Tennessee at Chattanooga
University of Tennessee at Martin

Texas

Midwestern State University
Stephen F. Austin State University
Prairie View A&M University
Sul Ross State University
Tarleton State University
Texas A&M University
Texas A&M University - Commerce
Texas A&M University - Galveston
Texas A&M University - Kingsville
Texas A&M University - Texarkana
Texas Southern University
Texas Tech University
Angelo State University
Lamar University
Sam Houston State University
Texas State University - San Marcos
Texas Woman's University
University of Houston - Clear Lake
University of North Texas
University of Texas at Arlington
University of Texas at Austin
University of Texas at Dallas
University of Texas at El Paso
University of Texas at San Antonio
University of Texas at Tyler

University of Texas - Permian Basin
West Texas A&M University

Utah

University of Utah
Southern Utah University
Utah State University

Vermont

University Of Vermont
Johnson State College

Virginia

Christopher Newport University
College of William and Mary
George Mason University
James Madison University
Longwood University
Mary Washington College
Norfolk State University
Old Dominion University
Radford University
University of Virginia
University of Virginia's College at Wise
Virginia Commonwealth University
Virginia Tech
Virginia State University

Washington

Central Washington University
Evergreen State College
University of Washington - Seattle
Washington State University
Western Washington University

West Virginia

Bluefield State College
Concord College
Marshall University
Shepherd College
West Virginia State College
West Virginia Institute of Technology

(APPENDIX D Continued)

<u>Wisconsin</u>

University of Wisconsin – Eau Claire
University of Wisconsin – Green Bay
University of Wisconsin - Milwaukee
University of Wisconsin – Plattesville
University of Wisconsin – River Falls
University of Wisconsin – Superior
University of Wisconsin – Whitewater

<u>Wyoming</u>

University of Wyoming

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EDUCATION:

Ph.D. in Educational Leadership and Policy Studies, Virginia Tech, 2004
Dissertation Title - *Use of the CAS Standards by Career Services Directors at Four-Year Public Colleges and Universities.*

M. Ed., James Madison University, 1978. Counselor Education.

B. A., Virginia Military Institute, 1974. History.

ADDITIONAL TRAINING:

National Association of Colleges and Employers Management Leadership Institute at the University of Minnesota, July 1991

PROFESSIONAL EXPERIENCE:

Administration

1991 - Present   **Director of Career Services at the Virginia Military Institute (VMI), Lexington, VA**

1983 -1991   **Associate Director of Cadet Affairs and Career Development Officer at the Virginia Military Institute**

1980 – 83   **Director of Guidance at Natural Bridge High School, Natural Bridge, VA**

1974 - 80   **Assistant Director of Cadet Affairs at the Virginia Military Institute**

Teaching

- Adjunct instructor in the VMI Psychology/Philosophy Department. Teach multiple sections of a senior-level Leadership Studies course. (1998 –Present)
- Instructor in College Orientation Workshop program at VMI since its inception. College Orientation Workshop is a privately funded program targeting at-risk minority males who are rising juniors and seniors in high school. Teach segments on learning and study skills as well as career exploration. (1986 – Present)

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Consulting

- Consultant with employers on college relations and recruiting issues
- Consultant with colleges on issues such as merging services and implementing new program structures

PROFESSIONAL HONORS AND AWARDS:

- Presidential Service Award, Eastern Association of Colleges and Employers (EACE) - 2003
- Leadership Recognition, EACE – 2000, 2001, 2002, 2004
- Distinguished Service Award, Virginia Association of Colleges and Employers (VACE) - 1995
- Outstanding Service Award, Middle Atlantic Association of Colleges and Employers (MAACE) - 1993
- Leadership Award, VACE - 1992
- Special Achievement Award, VACE - 1989
- Outstanding Volunteer Award, MAACE – 1988

PROFESSIONAL ASSOCIATION LEADERSHIP AND MEMBERSHIP ACTIVITIES:

- Member, National Association of Colleges and Employers (NACE) Principles for Professional Conduct Committee
- Member, NACE Assessment Publications Review Task Force
- NACE Representative to the Council For the Advancement of Standards in Higher Education (CAS) Guided Assessment Tools Project Advisory Board
- Former Chairman, NACE Leadership Development Team
- Former President, Eastern Association of Colleges and Employers
- Former member, Presidents' Roundtable representing the six regional and national Associations of Colleges and Employers
- Former Treasurer and Executive Board Member, Eastern Association of Colleges and Employers
- Former Research Committee Chairman, National Student Employment Association
- Former President, Virginia Association of Colleges and Employers
- Former Chairman, Professional On-site Consulting, Membership, and Finance Committees of the Middle Atlantic Association of Colleges and Employers (MAACE)
- Southeastern Association of Colleges and Employers (SACE)
- Midwest Association of Colleges and Employers
- American College Personnel Association
- Virginia College Personnel Association
- National Academic Advising Association
- American Educational Research Association
- Southeastern Student Employment Association

SELECTED PROFESSIONAL AND EDUCATIONAL PRESENTATIONS

- "Professional Standards In Career Services: Do They Really Matter?" – EACE, 2004
- "Assessing Career Services" - NACE, 2003
- "What You Always Wanted to Know About being a Career Center Director" - SACE, 2002
- "Agent or Reagent: Understanding the Chemistry of Change in the Management of Career Services " - VACE and SACE, 2001
- "New Work Habits in a Rapidly Changing Environment" - Western VA Chapter of the Society of Human Resource Managers, 1999
- "Cooperative Relationships in an Adverse Economy" – MAACE, 1992
- "Management Leadership Development: An Investment for the Future" - VACE, 1991
- "Innovative Programs in Alumni Placement Programs" - SACE, 1989
- "Build it and They Will Come: Developing and Maintaining a Viable Alumni Mentoring Network" – SACE, 1988