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CHARACTERISTICS ASSOCIATED WITH THE EFFECTIVENESS OF
RESOURCE DEVELOPMENT PROGRAMS
AT FLORIDA COMMUNITY COLLEGES

by

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A dissertation submitted in partial fulfillment of the requirements
for the degree of Doctor of Education
in the Department of Educational Research, Technology, and Leadership
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ABSTRACT

As educational funding from traditional sources decreases and the cost of operating educational programs increases, community colleges are seeking ways to diversify funding streams and increase revenue. For many 2-year colleges, resource development, particularly the procurement of government grants and contracts, represents a viable source of revenue. The purpose of this research was (a) to establish a profile of grant development programs in Florida community colleges and (b) to identify factors associated with successful grant development. A cross-sectional survey design was used to collect information about grant development programs at the 28 publicly-supported community colleges in the state of Florida. Twenty-six colleges completed the survey.

The grant success rate, return on investment, and organizational and operational integration of institutional advancement functions of the respondent colleges were incorporated into linear mathematical models to predict grant development success. Although no statistically significant predictive relationships were determined, organizational and operational integration of institutional advancement functions can not be considered to be without some influence on a college's ability to generate grant revenue. The potential for community college efforts to yield increasing grant funding will continue to transform higher education. The study of the components and characteristics that allow for predicting successful grant acquisition is of continuing research interest and mounting practical importance to community college presidents, administrators, trustees, and resource development professionals.

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I am especially grateful for the vision of President Kent Sharples and his commitment to leadership development at Daytona Beach Community College. Through the Leadership Development Institute and the Beacon Program, he has given me and many others the opportunity and the means to aspire to new heights of professional development and educational attainment.

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CHAPTER 1

INTRODUCTION

With the advent of the 21st century, community colleges in America celebrated their first 100 years of existence. A growing number of 2-year public colleges took root as a national network during the 1950s and 1960s when community colleges experienced rapid expansion, rocketing enrollment, and seemingly unlimited support from local, state, and federal sources. However, in the mid-1980s, public funding for postsecondary education began to decline, if not in actual dollars, then as a percentage of the total budget and revenue per student (Blong & Bennett, 1991; Brinkman & Morgan, 1995; Cohen & Brawer, 1996; Dill, 1997; Gumport & Pusser, 1997; Henn, 1996; Jenkins & Glass, 1999; Loessin, 1997; McCabe, 1996; Roueche & Roueche, 1998; Van der Werf, 1999).

Community colleges, in dealing with the reality of declining public funding and with no indication that the trend would reverse itself, experienced growing pressure to diversify revenue sources. Because increases in tuition and student fees could only go so far in meeting funding shortfalls and rising budget projections, grant development and private fund raising became increasingly important to community colleges as strategies for dealing with reduced state funding (Bock & Sullins, 1987; Blong & Bennett, 1991; Glass & Jackson, 1998b; Hellweg, 1980; Jenkins & Glass, 1999; Kapraun & Heard, 1993; Kozobarich, 2000; Loessin, 1997; Penn, 1999; Stevenson, 2001; Strauss, 2001a, 2001b; Wilson, 1989).

Resource development, which collectively refers to grant development and private fund raising efforts, has resulted in substantial external revenue for some community colleges. Since 1980, the fastest growing revenue categories for community colleges have been federal, state, and local government grants and contracts, and private gifts from corporations and individuals (Canine, 1989; Hall, 2001; Hartle & Galloway, 1997). Despite its emerging importance as a way to diversify an institution's funding base, resource development is not well understood as a community college function. Information to guide community college administrators in private fund raising and grant development is limited.

Studies about resource development in community colleges have focused primarily on foundations and private fund raising (Adams, Keener, & McGee, 1994; Jackson & Keener, 2002; Duronio & Loessin, 1989, 1990; Phillippe & Eblinger, 1998; Rosso, 1991; Stevenson, 2001; Tempel, 1991). Research has been conducted about grant acquisition and management as it relates to sponsored research at 4-year, primarily undergraduate institutions including a benchmarking survey sponsored by the Society of Research Administrators International (Baker & Wohlpart, 1998; Davis & Lowry, 1995; Donaldson, 1991; Dooley, 1994; Hansen, 1989; Kirby & Waugaman, 2002; Monahan, 1992; Sterner, 1999; Sterry, 2001). However, research about grant development in the community college setting is less readily available (Jackson & Keener; Meaders, 2002; Taylor, 1987; Wade, 1990; Young, 1978).

According to Merisotis and Wolanin (2000), the development of many community colleges will be shaped by their success in grant competitions for government funds. The definitions or indicators of success that grant development researchers and

practitioners use to measure effectiveness are divergent (Brumbach & Villadsen, 2002; Hansen, 1989; Herbkersman & Hibbert-Jones, 2002; Loessin, 1997). A 1992 survey of community college grants offices in Florida asked respondents to identify the measures of success used to determine the effectiveness of their efforts. The three most frequent responses were the total dollar amounts received in the grants office, the number of grants funded related to the college plan and mission, and how involved faculty were in the grant development process (Matsoukas, 1996). Keener, Carrier, and Meaders (2002), in a more recent national survey of fund raising and grant seeking operations at public 2-year institutions, based success only on external dollars raised. Brumbach and Villadsen (2002) argued that it is more important to measure success by the impact that grant funding has on students.

Grants and private support may be the greatest potential community colleges have for increasing financial stability. To increase the capacity to effectively secure external funding, a number of researchers have attempted to identify operational and organizational factors that increase the likelihood that a community college will receive substantial revenue through grant awards (Birmingham, 2002; Brumbach & Bumphus, 1993; Brumbach & Villadsen, 2002; Daniel, 1991; Herbkersman & Hibbert-Jones, 2002; Jackson & Keener, 2002; Keener, et al., 2002; Kapraun & Heard, 1993; Loessin, 1997; Matsoukas, 1996; Meaders, 2002; Young, 1978). Despite differences of opinion regarding the best measures of effectiveness in resource development, it appears that presidential support and institutional commitment of adequate resources and staff are critical to the success of both grant writing and private fund-raising (Community College League of California, 1999; Daniel; Jackson & Keener; Jenner, 1987; Young). The

experience, personality traits, and tenure of the chief resource development officer also may impact the ability of a community college to compete with other institutions and organizations for limited resources (Brumbach & Bumphus, 1993; Jenner; Meaders, 2002; Taylor, 1987; Wattenbarger, 1976).

A review of the research indicated general agreement among researchers that long-term success requires a proactive approach that is guided by sound strategic planning, aligned with the college's vision and mission, and integrated into the planning, assessment, and budgeting process (Blong & Bennett, 1991; Brumbach & Villadsen, 2002; Glass & Jackson, 1998b; Wattenbarger, 1976; Wilson, 1989). An integrated approach that embraces resource development as a key element in institutional advancement may be the most critical factor in grant development success. An integrated approach to community college advancement activities not only strengthens resource development success but also increases overall institutional effectiveness (Birmingham, 2002).

Purpose of the Study

A successful grants development office can be a valuable resource in advancing a college's mission and strategic plan. The purpose of this research was (a) to establish a profile of grant development programs in Florida community colleges and (b) to identify factors associated with grant development success. Conclusions derived from the research findings culminated in recommendations and implications for community college leaders and resource development practitioners.

Statement of the Problem

Significant reductions in financial support at the state level along with rising student enrollment and increased demands for new programs have made it necessary for community colleges to diversify their funding bases. The problem addressed in this study was “What are the operational and organizational characteristics that community colleges use to effectively engage in grant development?”

By determining measures of effectiveness for community colleges engaged in grant development activities and identifying the organizational and operational characteristics of the most successful resource development offices in the Florida Community College System, administrators and resource development practitioners at 2-year institutions can gain valuable insight into their own effectiveness and potential for enhancing results.

Research Questions

The following research questions guided the study:

1. What are the organizational and operational characteristics of grant development offices in Florida community colleges?
2. What measures or key indicators do Florida community colleges use to determine the effectiveness of grant development efforts?
3. What is the relationship between the number of institutional advancement activities that report to the same administrator and grant success rate?
4. What is the relationship between the number of institutional advancement activities that report to the same administrator and return on investment?

5. What is the relationship between the integration of other institutional advancement activities with grant development and grant success rate?
6. What is the relationship between the integration of other institutional advancement activities with grant development and return on investment?

Definition of Terms

The following definitions of terms were used in this study.

Community college is a publicly supported institution of higher education that offers the first 2 years of a baccalaureate degree, vocational education, and adult continuing education.

Development is a continuous process to support long-term financial and physical growth of an institution (Jackson & Keener, 2002).

External funding is money or other tangible resources acquired through public or private grants and contracts or through private or corporate donations to support the mission of the college.

Fund raising refers to activities that lead to the acquisition of monetary contributions from private sources (Birmingham, 2002).

Grants refer to funds that are awarded by public government agencies based on proposals submitted to the agencies that outline how the requested funds will be used. The awarding agency retains responsibility for the funds and usually requires periodic programmatic and financial reports from the grantee (Canine, 1989).

Grant success rate is the number of grants funded divided by the number of proposals submitted by an institution (Herbkersman & Hibbert-Jones, 2002).

Indicators are the data that prove that objectives have been met or determine the degree to which they are attained (McLeod & Atwell, 1992).

Integration is the process of grouping and linking activities into a unified function in an organization (Birmingham, 2002).

Institutional advancement focuses on creating, maintaining, and enhancing the relationship of the institution with the community and with constituent groups that financially support the institution's mission (Glass & Jackson, 1998b).

Measures of effectiveness are established standards or benchmarks that set the level of achievement against which an educational activity, program, or institution is compared.

Operational integration, in the context of this study, refers to the degree of informal interaction and collaborative activity that occurs among the institutional advancement functions of an institution.

Organizational integration, in the context of this study, refers to the formal reporting structure of the institutional advancement functions of an institution.

Resource development refers to grant development and private fund raising activities initiated by community colleges to secure external funds (Glass & Jackson, 1998b).

Resource development officer (RDO) is a person who is responsible for grant development and/or private fund raising at a community college.

Return on investment for grant development is the total amount of grant revenue an institution receives during a specified time period divided by the amount of funding the institution invests in the grant procurement process.

Sponsored research is the array of activities related to the acquisition and management of grants and contracts at a university (Asp, 1993).

Methodology

This study used a cross-sectional survey design to address the research questions. Data were collected by means of a questionnaire mailed to public, 2-year community colleges in Florida. Information on the survey identified the organizational and operational characteristics of grant development offices in Florida community colleges and key measures or indicators used to determine the effectiveness of grant development efforts. Linear regression tests were used to determine the relationship between outcome and explanatory variables.

Study Population

The population for the study was the 28 public community colleges that comprise the Florida Community College System. The system was established in 1957 with the express intent of providing access to higher education within commuting distance for more than 90% of the state's residents. The system offers programs for associate of arts degrees, associate of science degrees, college credit certificates, college and vocational preparation, adult and secondary education, continuing workforce education, life long learning, and recreation and leisure. In 2002-2003, annual unduplicated student enrollment for the Florida Community College System was 795,319 (Florida Department of Education, 2004).

With the membership list of the Florida Council for Resource Development as a starting point, the chief resource development officers were identified at the 28 community colleges in the Florida system. Contact information was determined and surveys were sent to all 28 community colleges; 26 colleges (93%) completed the survey. Two-year private colleges, technical schools, or proprietary institutions were not included in the study.

Instrumentation

Data were collected using a survey developed by the researcher titled “Community College Grant Development Survey.” The survey, included as Appendix A, was based on the researcher’s knowledge and experience in the area of resource development, understanding of community colleges, and a thorough review of the literature. A task force of current and former community college resource development professionals was enlisted to assist the researcher in refining the 55-item instrument and to assess content validity. The panel of experts offered diverse points of reference and represented colleges of various size, geography, and organization.

The survey was designed to gather descriptive information about the institutional commitment of staff and resources, the organizational and operational integration of the grant development function with other institutional advancement activities, and measures of effectiveness used to evaluate grant development performance. Data were collected regarding the number of grant proposals submitted and funded during fiscal year 2003-2004, and the amount of grant revenue received from various sources. The variables were chosen based on a review of relevant literature.

Data Collection and Analysis

The survey was mailed to the chief resource development officer at each of the 28 community colleges in Florida as listed in Appendix B. The tailored design method of survey research was used to ensure a favorable response rate (Dillman, 2000). The survey had the endorsement and support of the Florida Council for Resource Development, a professional organization of resource development officers at Florida community colleges.

Responses to the survey were used to establish a profile of organizational and operational characteristics of grant development offices and to assess relationships between the degree of organizational and operational integration of institutional advancement (independent variables) and two key effectiveness measures (dependent variables) for community college resource development. Responses to the survey were compiled and analyzed to respond to the research questions.

The independent variables were (a) the number of institutional advancement activities that report to the same administrator as a measure of the organizational integration of institutional advancement, and (b) the amount of sharing and coordination among institutional advancement functions as a measure of operational integration of institutional advancement. Each of these independent variables was correlated with two measures of effectiveness.

The dependent variables or measures of effectiveness in the study were (a) success rate calculated as the ratio of grants awarded to grants submitted, and (b) return on investment calculated as the ratio of grant personnel costs to grant revenue. Linear regression tests were used to determine correlations and predictions among the variables.

Descriptive statistics and inferential analysis were used to determine if the degree of organizational and operational integration of institutional advancement influences the effectiveness of community college grants development.

The study was designed to contribute to the understanding of the variables within a community college that indicate the ability to be successful in grant procurement. Variables for the study were selected by a review of relevant literature and linked to the theories of institutional advancement and performance measurement. Data on selected variables were statistically analyzed to determine whether relationships exist that indicate effective outcomes and can be considered factors of success for grants operations. Findings were compiled and reported along with questions for additional research.

Significance of the Study

Grant development is a relatively new activity in the community college setting and little research has been done to guide practitioners or administrators who are under pressure to increase external funding. The proposed study was needed to help define “success” in grant development, identify relevant performance measures and benchmarks for institutional effectiveness, and provide guidance to community colleges regarding the most efficient and effective organizational structures and lines of authority. The future vitality of community colleges may depend on the success of their grant development activities.

The study was appropriate and timely because of the growing emphasis on the acquisition of external funds to support the community college mission, accommodate growth in enrollment, and respond to the changing nature and needs of community

college students. Grant development is more widely acknowledged than ever as an essential component of community college funding and as a key component in strategic planning development and implementation. The identification of characteristics associated with effective grant development programs will aid college administrators, trustees, and resource development professionals in strategic planning to meet institutional goals. It will provide supportive data to community college leaders in making critical decisions about allocating staff and budgetary resources to establish and maintain a grant development function that will successfully support the growth and direction of the college.

Delimitations

1. Only public community colleges in the Florida Community College System were included in the study.
2. The survey was sent only to the chief resource development officers at the 28 community colleges in the Florida system.

Limitations

1. The results of the study were generalized only to community colleges in Florida. No attempt was made to establish external validity to other populations.
2. Information and data were dependent on the accuracy of the data provided by the college representative on the survey instrument.

3. Data accuracy obtained through the survey instrument was based on the knowledge, integrity, and perceptions of the individuals at the colleges.
4. Data were analyzed based on the return rate of responses received.
5. Data were based on a one-year period, fiscal year 2003-2004. An average of several years' data may have provided different findings.

Organization of the Dissertation

The dissertation is organized into five chapters. Chapter 1 includes an introduction, the purpose of the study, a broad overview of the methodology, and the significance of the study. Chapter 2 provides a review of the literature that establishes a context for the growing role of resource development in the community college sector, synthesizes research on organizational and operational integration associated with effective grant development, and describes measures of success used to evaluate the effectiveness of grant development efforts. Chapter 3 describes the procedures and methodology including the research questions, population, data collection, and data analysis. Chapter 4 is a report of the descriptive and inferential statistics derived from survey responses with details about the data analysis procedures and results. Chapter 5 discusses the findings of the research, conclusions, implications for practitioners, and recommendations for further research.

CHAPTER 2

REVIEW OF LITERATURE

This chapter presents a review of the literature on community college resource development in four sections. The first section is an overview of community colleges in America and the funding trends that impact them. The second section is a discussion of the emerging role of resource development as a way for community colleges to diversify their funding bases. The third part of the review addresses the organizational and operational integration of grants offices with institutional advancement as it relates to the research questions of this study. The fourth and final segment reviews the measures or key indicators of effectiveness used in research on resource development and grant procurement.

Community College Funding in America

After a slow start in the early 1900s, community colleges in America experienced rapid expansion, meteoric enrollment growth, and seemingly unlimited support from local, state, and federal sources in the boom years of the 1950s and 1960s (McCabe, 1997). In approximately 50 years, on the premise of extending access to higher education at little or no cost to students who otherwise would not have such opportunities, more than 1,000 public community colleges were established across the nation (Bogart, 1994; Cohen & Brawer, 1996; de la Garza, 2000). In 1997, for the first time, more students enrolled at public community colleges than at public 4-year colleges (Education Commission on the States, 2000).

By the turn of the 21st century a national network of 1,173 public and independent community colleges was providing educational opportunity in America to 10.4 million students enrolled in credit and noncredit courses (American Association of Community Colleges, n.d.; OVAE, 2004; *Public Community Colleges and Technical Schools*, 2004). This included 44% of all undergraduates in the United States, 45% of all freshmen enrolled in college for the first time, and 58% of all women undergraduates. In 2001, the inclusive nature and open door policy of community colleges was reflected in its student profile: 46% of all black undergraduate students attended a community college; similarly, 55% of all Hispanic undergraduates, 46% of all Asian/Pacific Islander and 55% of Native American college students enrolled in a community college. Across America, the average community college student was 29 years of age and attended part-time (63%) (AACC, n.d.). Nearly all community colleges offered both credit and noncredit programs. Credit programs either led to a 2-year degree that transferred to a baccalaureate institution, or led directly to employment in an occupational or technical area.

Changes in Sources of Funds

Funding for public community colleges came from three major sources: state government, local government, and tuition and fees (Blong & Bennett, 1991; Evelyn, 2004). In 1996-97, a national profile showed that public 2-year institutions received an average of 42% of their revenue from state funds, 23% from tuition and fees, and 18% in local funds. Federal and other sources made up the remainder, with approximately 5% in federal funds exclusive of student financial aid (Cohen & Brawer, 1996; de la Garza, 2000; *Public Community Colleges*, 2004). These three revenue sources have been

consistent over the years but the breakdown or percentage of funding from each source has shifted significantly (Education Commission of the States, 2000; Kapraun & Heard, 1993; Smith, R., 1994). Nearly all community colleges have seen reductions in state and local tax appropriations and an increased dependence on tuition as a source of revenue (Cohen & Brawer; Education Commission on the States; Roueche & Roueche, 1998). Despite the fact that different states operate under vastly different funding models, some of them quite complex, state governments continue to be the largest source of public funds for community colleges (Campbell, Leverty, & Sayles, 1996). Community colleges in 26 states receive local tax revenue, usually from property taxes, as a funding source (Education Commission on the States, 2000).

Public funding for postsecondary education was readily available in the 1960s and 1970s, but began to decline noticeably in the 1980s, if not in actual dollars, then as a percentage of the total budget and in the amount of revenue received per student enrolled (Blong & Bennett, 1991; Brinkman & Morgan, 1995; Cohen & Brawer, 1996; Dill, 1997; Henn, 1996; Gumport & Pusser, 1997; Jenkins & Glass, 1999; Loessin, 1997; McCabe, 1996; Roueche & Roueche, 1998; Van der Werf, 1999). Since 1985, public support of community colleges has declined by nearly 30% with no signs of reversal in the trend (Merisotis & Wolanin, 2000; Roueche & Roueche, 2000). For some community colleges, state support has dropped from one-half to one-third of their budgets (Van der Werf). At a policy forum held in 2002 by the Education Commission of the States Center for Community College Policy, it was reported that 44 states were facing budget shortfalls and were likely to cut the budgets for community colleges. Higher education is being

asked to serve more students with fewer dollars without reducing quality (Alexander, 2000).

Community colleges have seen a shift in state and federal fiscal priorities toward other sectors of education and toward social services (Penn, 1999; Smith, N., 1989; Wattenbarger, 1994). Wattenbarger maintained that community colleges, in a competition for funds with universities and public schools, usually come in third. Community colleges face increasing competition, greater uncertainty, and less financial support than universities and public schools (Alfred, 1996; Brinkman & Morgan, 1995; McCabe, 1995, 1996; Dill, 1997). For-profit educational institutions, a growing segment of the postsecondary education market, also represent more competition for funding (Strauss, 2001a). Loessin (1997) cautioned that non-profit social service organizations are proliferating in America and their financial needs are expanding. These organizations are very competitive in vying for scarce resources to meet increasing societal needs.

Constraints on public funding are expected to continue, even as the overall population increases and community college enrollment grows (Roueche & Roueche, 1998). For community colleges in Florida, as for those in many states, it is state funding that has the greatest variability and vulnerability. Florida has a narrow tax base and an anti-tax electorate that limits funds available to spend on education, and postsecondary education has experienced a decline in appropriations as a proportion of the total state budget (Birmingham, 2002). An increasing reliance on performance-based funding is affecting the state's funding pattern in other ways. Community college budgets are constrained further because of a state policy that limits tuition to no more than 25-30% of the cost of instruction (Education Commission on the States, 2000).

Increasing Budgetary Pressures

Trends in community college expenditures reflect a changing educational environment influenced by varying government policies and priorities, mounting demands from consumers, and an expanding role in workforce development (Merisotis & Wolanin, 2000). Planning approaches have historically assumed that funding for current programs and new ventures would be available from incremental growth in public revenue (Lorenzo, 1994). However, numerous sources of budgetary pressure threaten the stability of community college programs including rising costs, increasing salaries, aging equipment, outdated funding formulas, volatile enrollment patterns, more nontraditional students and students requiring remediation, and a society that has high, sometimes unrealistic, expectations for community colleges (Alexander, 2000; Education Commission on the States, 2000; Kapraun & Heard, 1993; Jenkins & Glass, 1999; Miller & Seagren, 1997). Additional pressure comes from the need to provide access through distance education and stay abreast of accelerated changes in technology, both of which require huge amounts of investment in infrastructure, hardware, and software (Jackson & Glass, 2000).

Several factors further complicate the situation. Colleges have to compete for state funds along with other public agencies and other sectors of education (Cohen & Brawer, 1996). Jackson and Glass (2000) pointed out that the perception that community colleges are adequately funded by state and county government makes it more difficult for them to compete. McCabe (1997) claimed that community colleges could anticipate another period of rapid growth with enrollment forecast to increase 30% by 2022. According to the US Department of Labor, because of changing labor needs for business

and industry, more than 80% of future jobs will require at least some postsecondary education, but not a baccalaureate degree (Education Commission on the States, 2000; McCabe). Some education leaders are concerned that the ongoing attempt to increase program availability to a growing constituency will put community colleges at serious risk of reaching their operational limits (Bock & Sullins, 1987). Others are concerned that economic realities will force some institutions to reexamine their mission and adjust their role within the context of growing resource limitations (Bogart, 1994; Campbell & Leverty, 1999; Lorenzo, 1994).

Because of their success and popularity, community colleges are unable to fund the quantity and quality of programs that are being demanded of them (Clements, 1996). According to R. Smith (1994), “Facilities are in place and the demand for instruction continues, but the financial condition of these institutions has never been worse” (p. 354). Responses to increasing cost pressures have included cutting course sections, positions, programs, and personnel; imposing tighter budget controls and decreasing funds available for professional development and travel; delaying or deferring maintenance and renovations; and delaying acquisition or replacement of technology (Alfred, 1996; Education Commission of the States, 2002; Henn, 1996; Honeyman & Bruhn, 1996; Kapraun & Heard, 1993).

The future will bring even greater revenue constraints for higher education (Alfred, 1996; Blong & Bennett, 1991; Campbell, et al., 1996; Kapraun & Heard, 1993; McCabe, 1996). According to Brinkman and Morgan (1995):

The economic and financial future for higher education would seem to be a difficult one. . . . Given moderate economic growth assumptions, available revenues are unlikely to keep pace with current missions, activity levels, and cost

increases. . . . Choices between quality and access, and between quality and program breadth, will be pervasive and ongoing. (p. 16)

Participants at the 1999 Community College Futures Assembly noted their top overall issue of concern as funding; the top issue among planning, governance, and finance personnel was resource development (Campbell & Leverty, 1999). A survey of community college and higher education systems leaders on the subject of community college funding revealed that the most serious issue facing community colleges across the nation was the dual challenge of increasing state and local financial support and improving funding methods. Other concerns were funding for workforce and economic development activities, an increasing dependence on tuition and fees to fill in the funding gap, the increasing costs of technology, and projections for significant enrollment growth (Education Commission of the States, 2000). Kapraun and Heard (1993) summarized the situation in the following statement:

The extent to which individual community college leaders understand these financial problems and develop appropriate responses will, in large part, determine their institution's ability to maintain the quality of its existing programs, expand into promising new educational areas, and continue an open door policy that ensures the college's services are available to everyone who has an interest. (p. 1)

Fiscal Response to Declining Resources

For most institutions of higher education, the prevailing fiscal strategy is a search for new approaches to reducing costs, enhancing productivity, and obtaining additional sources of revenue (Brinkman & Morgan, 1995; Miller & Seagren, 1997). Community colleges, in dealing with the reality of declining public funding support, are experiencing growing pressure to diversify their revenue base (Adams, Keener, & McGee, 1994;

Cohen & Brawer, 1996; Evelyn, 2004; Kapraun & Heard, 1993; National Institute of Education, n. d.; Reeve & Ballard, 1993; Strauss, 2001a, 2001b). Although individual revenue solutions will vary among institutions, Brinkman and Morgan were pessimistic about the options. State tax funds for higher education will continue to decline because of pressing societal needs and intense competition from health care organizations, prisons, crime prevention programs and k-12 education, and funding will become more dispersed with increasing competition. In 2003, community college tuition nationally rose 11.5% in an attempt to offset reductions in state appropriations (Evelyn). Many community colleges were charging little or no tuition when the first budget cuts were felt 20 years ago, and the recent increases have by no means filled the gap (Alexander, 2000; Phillippe & Patton, 2000). Raising tuition and fees has certain political limits. Excessive increases in tuition limit access to education for individuals who most need it and adversely affect the large majority of students (Penn, 1999; Roueche & Roueche, 1998). Local support can be increased through tax referendums requesting additional levies, but this is difficult to do during tight economic times (Evelyn; Kapraun & Heard).

As funding patterns change, organizational structure and management activities also may need to change. Birmingham (2002) surveyed four community colleges on their reaction to changes in proportional funding of college operations by the state government. The four case studies documented the advancement and management approaches the colleges took from 1996 to 2000 as they attempted to realign fiscal strategy with special attention to evidence of system integration. The purpose of the research was to test the theoretical framework of an integrated income acquisition and management continuum model. Birmingham conducted semi-structured interviews with

33 administrators, performed on-site observations, and reviewed institutional documents to discover eight best practices in the approaches used by the four colleges:

1. Senior administrators used systems thinking to plan and create strategies for income acquisition and management.
2. Senior administrators created, used, and respected informal governance structures and formal and informal councils to implement and sustain desired changes.
3. Senior administrators encouraged innovation and ideas among departments and work units as a way to get the commitment of operational units.
4. Administrators attempted to benchmark the performance of their units with other community colleges.
5. Senior management valued academic quality priorities over cost containment priorities.
6. The president and administrators gave top-level support for resource development and fund raising initiatives.
7. The colleges created partnerships and collaborations for contract training and grant administration.
8. The colleges used public funding to leverage private dollars.

After reviewing the literature and assessing the financial threats and opportunities, Kapraun and Heard (1993) revealed the most promising areas for revenue growth for community colleges as (a) foundations, (b) non-cash donations, (c) auxiliary enterprises, (d) grant projects, (e) contract training, and (f) investment strategies. Community colleges could achieve marginal revenue growth from endowment and private giving, contract education (the delivery of specific training to business firms and other organizations), and revenues from sales and services, auxiliary enterprises, and other fee-based operations, but not all revenues are interchangeable. Each revenue source imposes its own criteria and constraints for acquisition and use of funds (Brinkman & Morgan, 1997). Of these

alternative funding sources, this researcher intends to address in depth the potential for community colleges to acquire alternative funding through grant projects. Research and literature regarding the current status of grant development at the community college level and the organizational and operational integration of institutional advancement activities associated with effective grant development will be reviewed.

The Emerging Role of Resource Development

Resource development involves the investigation and acquisition of funds from a diverse population of constituents. Because traditional resources can only go so far in meeting current funding shortfalls and rising budget projections, grant development and private fund raising, known collectively as resource development, have become increasingly important to community colleges as a primary strategy for dealing with reduced funding (Bock & Sullins, 1987; Blong & Bennett, 1991; Glass & Jackson, 1998b; Hellweg, 1980; Jenkins & Glass, 1999; Kapraun & Heard, 1993; Kozobarich, 2000; Loessin, 1997; Penn, 1999; Stevenson, 2001; Strauss, 2001a, 2001b; Wilson, 1989).

According to Tucker (1993), resource development is the acquisition of new funding sources for an organization. When used in the context of the community college setting, resource development refers specifically to grant development and private fund-raising initiatives (Glass & Jackson, 1998b). The definition was expanded by Jackson and Keener (2002) who described resource development as a continuous process and a long-term commitment toward financial and physical growth that has a direct link to the college's overall mission and strategic plan. Grant development activities and fund

raising both are part of a broader effort called institutional advancement (Worth, 1993). The terms “resource development”, “fund raising”, and “institutional advancement” often are used interchangeably (Glass & Jackson). To ensure a thorough review of the literature and accurately reflect the historical and evolving nature of community college resource development, this researcher has examined research studies about all three. Because foundation funding is closely linked to grants funding and because there has been considerably more research and data collection associated with foundation funding, some discussion of foundations is inevitable.

External fund raising at community colleges began as a result of the 1965 Higher Education Act and the federal funding opportunities that followed (Schuyler, 1997). According to a national survey conducted in 2000 by the Council for Resource Development, the Association of Community College Trustees, and the University of Florida, College of Education, approximately 69% of community colleges in the United States had committed staff and funding to support grant development offices. Almost two-thirds (62%) of these offices were established in the 1980s and 1990s in an effort to establish new funding streams (Keener, et al., 2002). New grants offices continue to open as part of the ongoing trend to offset reduced funding with external revenue procurement (Merisotis & Wolanin, 2000).

In 1987, 53% of public community colleges had established foundations to facilitate private fund-raising. A 1997 survey showed that 88% had active foundations while another 4% were planning to establish a foundation (de la Garza, 2000). As a 501(c)(3) charitable organization, the foundation has separate articles of incorporation, by-laws, and board of directors from the college. An active community college

foundation can generate funds, raise friends, enhance the image of the college, and increase its visibility in the community (Glass & Jackson, 1998a).

As a community college function, resource development is not well understood. Research about resource development, grant funding, and institutional advancement at the community college is in its infancy and has not kept pace with the rapid acceleration of activity (Brittingham & Pezzullo, 1990; Grace, 1993; Hagerman, 1978; Jackson & Keener, 2002; Matsoukas, 1996; Miller, 1994). Limited information is available to guide community college administrators in an area of emerging importance. Much of the research has been institution-specific and limited in its general applicability (Grace & Leslie, 1990). Most studies about resource development in community colleges have focused primarily on foundations and private fund raising rather than grant development (Adams, et al., 1994; Jackson & Keener; Duronio & Loessin, 1989, 1990; Phillippe & Eblinger, 1998; Rosso, 1991; Stevenson, 2001; Temple, 1991). Research on grant development alone has been directed most often toward universities and the grant acquisition and management activities that comprise university-related sponsored research (Baker & Wohlpart, 1998; Davis & Lowry, 1995; Donaldson, 1991; Dooley, 1994; Hansen, 1989; Kirby & Waugaman, 2002; Monahan, 1992; Sterner, 1999; Sterry, 2001). Research about grant development in the community college setting is much less readily available (Jackson & Keener; Meaders, 2002; Taylor, 1987; Wade, 1990; Young, 1978). Matsoukas (1996) asserted that additional research on the grant-seeking process would be helpful to community colleges wanting to become more successful in the competition for grants.

Most public 2-year institutions initiated resource development, not as a way to pay for day-to-day operating costs, but as a way to acquire discretionary income to support new ideas and new endeavors. External funds were once considered extra to an institution's basic mission and used primarily for new programs, program enhancements, and physical improvements (Loessin, 1997). It was considered risky to depend on grants and donations to support routine college programs and activities (Brumbach & Villadsen, 2002). Hagerman (1978) defined resource development as a means to provide external funding for needs that cannot be accommodated within the normal budgeting process or resources necessary to upgrade the educational programs and services beyond the normal budget. At some point, these monies switched from providing an extra margin to being essential to survival. To accommodate this change in the community college environment, Glass and Jackson (1998a) and others, indicated a need for resource development to be institutionalized as a long-term core function and to be integrated with institutional planning, academic planning, and marketing activities.

Resource development, according to Jenkins and Glass (1999), is used by some community colleges to support vitality, innovation, and excellence, while some have to rely on it for survival. It is an entire process that begins with the identification of a potential funding source, and moves to contact with the source, preparation of a proposal or application, and ongoing monitoring of projects including reports to the funding source (Keener, 1989). Grant revenue has become a commonplace resource for community colleges to the extent that it is considered essential for continued program development (Wade, 1990).

Supporting the College Mission

Brumbach and Villadsen (2002) stated that “college goals always should drive the pursuit of external funding” (p. 80) and the role of resource development is “. . . to visualize the future in concrete terms and find resources to support that vision” (p. 83). Linking resource development to the mission of the college and integrating it with the overall planning process ensure that external funding efforts support the college mission and priorities and improve the ability of resource development to respond to both internal and external trends and issues (Brumbach, 2001; Daniel, 1991; Glass & Jackson, 1998a, 1998b; Loessin, 1997; Matsoukas, 1996). Providing leadership in developing the institutional long-range plan is a major role of the resource development office (Groff, 1985).

A complex of activities, collectively referred to as institutional advancement, must be integrated and coordinated if either private fund raising or grant development is to have a positive impact on a college. These activities include public relations, alumni, contracts and grants, fund raising, legislative relations, marketing, media relations, and publications (Kozobarich, 2000; Smith, N., 1989; Worth, 1993). Cooperative planning and collegial consensus among the advancement functions are imperative to successful resource development (Brumbach & Bumphus, 1993). An institutional advancement team can be instrumental in facilitating a strategic vision, a planning process that identifies resource needs, internal and external communication processes, and broad-based participation in enhancing and improving college programs (Clements, 1996; Groff, 1985). The function of institutional advancement is to “enable the individual college or

university to do well in a competitive environment and assist the whole sector of higher education to compete effectively for available resources” (Worth, p.4).

The resource development function supports institutional advancement by identifying potential funding opportunities and letting college administrators know what it takes to get the funds (Blong & Bennett, 1991; Herbkersman & Hibbert-Jones, 2002). It is important that proposals to funding sources not be for random college purposes but evolve from the institution’s overall direction or strategy to advance its students, programs, and facilities. College programs should guide development initiatives, rather than development opportunities determining college activities (Keener, Ryan, & Smith, 1991; Smith, N., 1989). Grant development and fund raising are implementation activities for the strategic planning process and the funds that are raised should be used to increase the capacity of the college to serve the needs of its constituents.

Sources and Uses of Funds

In *The Science and Art of Community College Proposal Writing*, Brumbach (2001) identified three major sources of external funds: government agencies, corporations and foundations, and private donors. The first two categories provide funds to community colleges through grants and contracts that are usually competitive with some type of application form or request for proposal, a deadline date, and a formal review process. The third category, individuals or private donors, is what is commonly targeted by fund-raising appeals initiated by college foundations. Since 1980 the fastest growing revenue categories for community colleges have been federal, state, and local government grants and contracts, and private gifts from corporations and individuals. In

fact, as a share of total revenues, these categories grew from 2% in 1980 to 20% in 1996, a tenfold increase in less than 2 decades.

Many higher education institutions are supplementing their budgets by establishing their own foundations to receive tax-deductible contributions from alumni and other donors (NIE, 2003). By 1987, 53% of the community colleges in the nation had established foundations (Glass & Jackson, 1998b). By 2000, 93% had foundations (Keener, et al., 2002). These foundations are independent legal entities under Section 501(c)(3) of the Internal Revenue Code. Most foundations focused initially on conducting capital campaigns but have since expanded their missions to include annual fund drives, planned and deferred giving, special events, internal giving programs, phonathons, mailings, business partnerships, and grants acquisition (Bock & Sullins, 1987; Catanzaro & Miller, 1994; Kapraun & Heard, 1993; Schuyler, 1997).

Although they have access to the same sources for external funds as 4-year universities, community college foundations tend to be less successful (Glass & Jackson, 1998b). Private gifts represent approximately 12.5% of the budget for upper division colleges and university, compared to 2.6% of community college budgets (Holmes, 2004). Data for 2-year institutions is limited but, compared to 4-year universities, community colleges derive more private support from companies and less from alumni. In 2003, corporate support represented 36% and alumni donations represented 5% of charitable giving to community colleges (Kaplan, 2004). Community colleges find it difficult to develop and maintain alumni support because potential donors perceive public 2-year institutions to be adequately funded through state and local tax revenues (Catanzaro & Miller, 1994).

For community colleges, private-sector fund raising has had only a modest financial impact. Revenue from private sources – gifts, bequests, and grants from foundations – accounts for only 1.1% of public community college revenue nationally and is not usually expended on routine operations, but instead is used for student scholarships, special purpose buildings, and enhancement activities such as funding of faculty and staff development (Campbell, et al., 1996; Cohen & Brawer, 1996; de la Garza, 2000). The money raised through foundations has been used primarily to supplement college operating budgets, but community colleges are beginning to build endowments (Van der Werf, 1999). For many years, 2-year colleges received only about 2% of the private financial support given to higher education (Catanzaro & Miller, 1994; Smith, N., 1993). Although data are limited for community college foundations, a survey conducted by the Council for Aid to Education in 2002 and 2003 indicated an increase in giving with 5% of gifts to undergraduate education going to community colleges (Holmes, 2004).

Grants, on the other hand, are viewed as a more viable option for significant support for community colleges, and grants funding is enhancing institutional effectiveness in community colleges across the nation (Clements, 1996). In the early and mid-1970s an increasing number of community colleges began to supplement state funding with federal grant funding (Wilson, 1989). At that time, a survey of more than 1,100 2-year colleges revealed that 64% of the institutions engaged in some form of grant development but only half of them had a full-time position dedicated to the effort (McCain, 1975). By 2000, approximately 69% of community colleges had committed

full-time staff to establish resource development offices with most of them having been established in the 1980s and 1990s.

A survey conducted by Keener et al. (2002) provided information about “organizational structure, office staffing, budget allocations, external revenue sources and methods, and evaluation measures” (p. 10) related to grants offices. The survey was mailed to 968 public 2-year community colleges in the United States and territories; 380 surveys were returned for a response rate of 39% (Meaders, 2002). For all respondents to the survey, the total amount of external funding generated by community college grants offices in 1998-1999 was nearly \$1.2 billion, an average of \$4 million per institution (Keener, et al.).

Public sector grants may be awarded as block grants, categorical grants, formula grants, or discretionary funds. Federal support for academic institutions through grants has increased over the last 30 years and remains the largest single source of external funding (McCain, 1975; OVAE, 2004). There are approximately 1,300 government granting programs that award \$80 to \$90 billion annually (Bauer, 2001). Federal funds are chiefly allocated for special projects and special categories of training; however, the diversity and focus of community colleges puts them in a prime position for receiving federal funds (Hall, 2001). Federal grants are available, for instance, to aid in the recruitment of minority students and to provide education in specific technical disciplines. The bulk of federal funds is earmarked for specific purposes and cannot be used for general operating and educational expenses (de la Garza, 2000).

Many community colleges that actively seek and receive federal funds initially received grants through the US Department of Education under programs established by

the Higher Education Act of 1965 (Canine, 1989; Hall, 2001; *Public Community Colleges*, 2004). A substantial amount of funds flow also through the National Science Foundation; the National Institutes of Health; National Endowments for the Humanities and the Arts; and the US Departments of Housing and Urban Development, Health and Human Services, Justice, Commerce, and Labor (Evelyn, 2004; Hall; Hartle & Galloway, 1997; Meaders, Carrier & Keenan, 2003). Information on the extent that community colleges receive federal funding through these programs is limited because some funds are provided directly to the institution and others are provided to states that subsequently determine what entities receive the funds (*Public Community Colleges*). Also, community colleges may receive funds as sub-grantees or partners in grants or contracts that have other institutions or entities as the grant recipient. The Office of Vocational and Adult Education (2004) reported that approximately \$1.5 billion in federal grants was awarded to community colleges in fiscal year 2002; about 9.2% of total grants to colleges and universities. Canine and Daniel (1985) agreed that, despite a growing acceptance of community colleges as a viable contender for federal financial support, large research universities continue to receive a disproportionate share of federal grant funds.

Community colleges are eligible for a number of state-level grant programs that are funded from federal sources. These “flow-through” grants include Carl D. Perkins Vocational and Technical Education Act funding, Small Business Administration grants to operate Small Business Development Centers, and National Endowments for the Arts and the Humanities support for state arts and humanities committees (*Public Community Colleges*, 2004). The broad mission of the community college can include programs and services to special populations such as people with disabilities, displaced homemakers,

pregnant teens, incarcerated youth, and others. These efforts often are eligible for grant funding through state human services agencies (Canine, 1989).

Local grant funding consists primarily of flow-through grants to local workforce development boards for job training programs under Title I of the Workforce Investment Act including WIA Youth, Adult Education, and Dislocated Worker programs (*Public Community Colleges*, 2004). Other local funding opportunities derive from contract training and partnerships with local employers. Funding can be increased substantially by partnering with other institutions to implement programs and projects that maximize resources and have mutual value (Haire & Dodson-Pennington, 2002).

As federal funding in many program areas has declined, more corporate and foundation grants are being pursued by higher education (Asp, 1993; Smith, M., 1993). Corporations and foundations tend to give grants to programs and activities that advance their own interests such as education and training of potential employees, activities that enhance their image or improve employee morale, or programs that help them meet a social responsibility. Foundations generally support proposals from institutions in their own state or region that have a reputation for academic excellence, good fiscal management, and an established relationship with them (Pezzullo & Brittingham, 1993). Their interests may be broadly stated or quite narrow. They may make grants or donations for unrestricted funds, special projects, endowments, or as challenge grants that require matching funds. Fewer than 10% of the applications to private foundations receive funding (Smith, M.). The key to acquiring corporate and foundation support is to propose a program or project that establishes a mutually beneficial partnership (Godfrey, 1993). In 2002, The Foundation Center's Statistical Information Service reported that

education institutions received 37.1% (\$5.9 billion) of the total dollar value of grants awarded by private foundations (\$15.9 billion). Junior/community colleges received \$68.9 million, 5% of the gifts to undergraduate education and .4% of the total grants awarded by private foundations (FC Stats, 2004).

Resource development efforts by some community colleges are resulting in substantial external revenue. Funding from grants is used to support research, teaching/training, and community service projects that provide enormous benefits to students. For example, externally funded grants are frequently used to establish community service programs, develop courses and curricula, provide opportunities for professional development of faculty, extend college opportunities to underserved populations, provide scholarships, acquire state-of-the-art equipment and technology, or pilot test new approaches to teaching and learning (Brumbach & Bumphus, 1993; Hellweg, 1980; Sterry, 2001). The community college mission puts 2-year public colleges in a prime position for government grants because federal and state appropriations are frequently designated for programs that help disadvantaged populations (Hall, 2001). The key is finding the right funding source and writing a successful proposal (Reeve & Ballard, 1993).

According to Merisotis and Wolanin (2000), the development of many community colleges will be shaped by their success in grant competitions for government funds. However, some negative consequences have been associated with grants. Grant funds are sometimes referred to as “soft monies” because they do not last forever and cannot be depended on for long-term use. When contracts or grants end or are discontinued, the institution may not have the funds to continue a program and grant-

funded personnel may have to be dismissed. The reporting and record keeping requirements associated with government grants may be onerous to some colleges (Wade, 1990). Another disturbing trend, especially with federal grants, is the increasing expectation that an institution receiving a grant will contribute a larger share of institutional funds toward the cost of the research or project (Brinkman & Morgan, 1995). Baker and Wohlpart (1998) warned that budget pressures at the federal level will lead to a more competitive environment in the future for federal grant monies. The number of grant applications submitted each year has increased dramatically and competition is intense at all levels. The pursuit of grants and contracts has, in effect, created a situation in which community colleges compete with all the other community colleges, thousands of 4-year colleges and universities, and countless not-for-profit organizations for scarce resources (Blong & Bennett, 1991; Jackson & Glass, 2000; Snyder, 1993). Community college leaders are concerned about a proposed change to the Higher Education Act being considered by Congress that will make thousands of for-profit schools eligible to receive billions of dollars in federal funds currently provided for non-profit colleges. The American Association of Community Colleges is opposed to this move to create a single definition of institution of higher education because it would shrink federal support available to public colleges and universities (Baime, 2004).

In direct competition with 4-year universities, community colleges lag behind for three primary reasons. First, the image and identity of community colleges does not include highly visible research programs. Second, a nontraditional student body of commuter students and working adults enrolled as part-time students does not build a reliable and loyal alumni base. Finally, resource development is a relatively new

endeavor for 2-year colleges and their efforts are less sophisticated and operate with fewer staff, less technical support, and smaller financial commitments than their 4-year counterparts (Smith, N., 1993).

Resource Development Profile

A successful grants development office can be a valuable resource in advancing a college's mission and strategic plan (Daniel, 1985). A strong institutional commitment recognizes the need to assign resources and staff to support the program and is manifested in the budget, physical facilities, and personnel allocated to the effort (Brumbach & Bumphus, 1993; Daniel, 1991; Jackson & Keener, 2002; Jenner, 1987; Smith, N., 1989; Young, 1978). To be successful, a grants office needs both tangible and intangible resources. Tangible resources include salaries and benefits for a grants administrator and other staff, computer hardware and software for preparing proposals, a travel budget for meeting with program officers in funding agencies, and professional development funds to attend conferences, seminars, and professional meetings. Intangible resources are the support and commitment of the president and other chief administrators; collaborative relationships with finance, personnel, and purchasing offices; cooperation in the proposal review and sign-off process; and access to data (Ferguson, 1994).

The grants officer at the college should be considered a professional and part of the advancement team (Wattenbarger, 1976). Resource development officers (RDOs) influence college goals and directions and have an unusually high number of stakeholders. In large community colleges, they may be considered middle managers but their roles require more leadership skills and involve more risk and complexity than for

middle managers in many other fields (Streharsky, 1997). In many cases, the resource development officer has other assigned duties, some related to resource development and some not.

Jenner (1987) found, in a survey of California community colleges, that the characteristics of the RDO were a primary factor associated with the success of resource development programs. Clarity of institutional image and commitment to the institution on the part of the RDO were heralded by Duronio and Loessin (1989, 1990) as two essential elements for attaining effective outcomes in resource development. Meaders (2002) conducted a national survey of community college resource development offices and found that the tenure of the RDO at the college was positively related to the amount of grant revenue received.

If resource development offices are understaffed, it makes it difficult for colleges to take advantage of the grant opportunities available to them (Brumbach & Villadsen, 2002; Matsoukas, 1996). A survey of Florida community colleges in the mid-1970s found that colleges that had a full-time resource development officer with an adequate support staff received more funding than colleges without a full-time position (Young, 1978). However, in many cases, resource development is assigned to one individual with little or no support staff. A national survey conducted by Matsoukas (1996) determined that the typical community college grants office was staffed by one full-time person and a part-time assistant. The survey results of Keener et al. (2002) 8 years later showed that in 253 grants offices, the number of full-time professional positions ranged from one to five. Another survey of California community colleges in 1998-1999 indicated that the number

one factor restricting the ability of many colleges to be successful grant recipients was insufficient staff (Community College League of California, 1999).

There are two general approaches to the operation of a resource development office: reactive and proactive. A reactive approach lacks planning and gives little, if any, thought to whether an institution really needs the specific program for which funding is sought. This can waste valuable time and effort while neglecting the major purpose, goals, and objectives of the institution. Often projects are not based on the needs of students or the community served by the institution (Wilson, 1989). The proactive method is characterized by good planning and places major emphasis on institutional mission, goals, and objectives. It encourages an institution to focus time, energy, and resources on identifying challenges and developing creative solutions. A proactive approach allows an institution to fully use and build on its strengths and leads to better long-term success than a reactive approach (Blong & Bennett, 1991; Ferguson, 1994; Haire & Dodson-Pennington, 2002; Loessin & Duronio, 1993; Tempel, 1991).

Glass and Jackson (1998b) described the process of resource development in the following way. It should begin with a plan that identifies resources needed to accomplish the institution's objectives; proceed through an exploration of possible funding sources; and culminate in the submission of a grant application or a private solicitation. A high-quality proposal is critical to funding success (Canine, 1989). Hagerman (1978) found that "risk taking and the ability to recognize fundable ideas are central to an institution which consistently will be successful in its development efforts" (p. 106). Since faculty and staff are the primary source of ideas and, ultimately, are the ones to carry out the

project, their involvement in the process is key (Rowh, 1985; Hansen, 1989; Loessin, 1997).

Pre-award activities focus on researching funding sources, designing and developing projects and proposals, writing and editing proposals and reports, and transmitting proposals to funding agencies (Bauer, 2001; Herbkersman, 2001; Herbkersman & Hibbert-Jones, 2002; Matsoukas, 1996). For some colleges it also includes matching funding opportunities to institutional objectives, informing faculty about grant opportunities, coordinating internal collaborative projects and external partnerships, providing grant writing workshops, developing and disseminating policies and procedures related to the acquisition of grants, and sharing information about funding opportunities and funding successes (Hall, 2001; Hellweg, 1980; Suchorski, 2004). The grants office also assists in developing proposal budgets (Reeve & Ballard, 1993). Facilitating a team approach to proposal development results in strong proposals and well-managed projects and helps stretch the capabilities of the resource development staff (Brumbach & Bumphus, 1993; Herbkersman & Hibbert-Jones, 2003).

Some colleges include post-award services among the functions of a resource development grants office. Post-award activities provide assistance to project directors after the funds have been received. The resource development professional communicates and negotiates with the funding agency and any partners on the project; monitors projects and their budgets; retains grant records; applies for continuations, extensions and budget amendments as needed; and provides ongoing support and guidance (Ferguson, 1994; Herbkersman & Hibbert-Jones, 2002). Performance of the organization on funded projects, including the management of resources and the college's ability and willingness

to continue the program once funding ends, increases an institution's long-term credibility for external funding (Brumbach & Villadsen, 2002; Kapraun & Heard, 1993; Suchorski, 2004).

Maintaining an excellent working relationship and a supportive atmosphere between the pre- and post-award areas facilitates communication and coordination in grant-related activities (Donaldson, 1991; Sterry, 2001). Kirby (1996) advocated a systems view of the grant application, review, award, and administration process that would encourage continuous process improvement.

Characteristics Associated with Effective Grant Development

Since the 1970s, several surveys have been conducted of community colleges to identify and analyze variables that might affect success in securing grants and private funds. In 1978, a survey of Florida community colleges conducted by Young (1978) determined that the philosophical and administrative commitment of the chief executive officer to an institutionalized resource development process was the single most important variable in funding success. Duronio and Loessin (1989) came to a similar conclusion after carrying out intensive case studies of institutions with successful fund raising programs. They reviewed fund raising practices and policies in 10 dissimilar institutions and analyzed fund-raising outcomes over a 5-year period. They found that presidential leadership and a clear institutional image were consistent characteristics among educational institutions with effective resource development models.

Phillippe and Eblinger (1998) in conjunction with the American Association of Community Colleges conducted a survey in 1997 to determine the extent to which 2-year

colleges had established foundations and to identify factors associated with fund raising success. The survey was sent to 1,241 public and independent community colleges with a response rate of 51% (631 colleges). The researchers found that the most critical factor was institutional commitment in the form of a separate development office with at least one person primarily responsible for fund raising, a separate operating budget, and a strategic plan. After reviewing the research that had been done on successful fund raising programs, Loessin and Duronio (1993) agreed with Tempel (1991) that wise use of human, financial, and material resources can improve fund raising potential, but having strong leadership and institutional commitment can make the greatest difference. They concluded that success is generally the result of deliberate, sustained efforts to capitalize on the strengths and unrealized potential of an institution.

According to Keener, et al. (1991), the two key elements for successful resource development are the accessibility and involvement of the president and an integrated institutional advancement function that includes marketing, development, planning, and research. Other researchers and practitioners have added to the research on characteristics that lead to successful outcomes with similar findings (Birmingham, 2002; Brumbach & Bumphus, 1993; Brumbach & Villadsen, 2002; Daniel, 1991; Herbkersman & Hibbert-Jones, 2002; Jackson & Keener, 2002; Kapraun & Heard, 1993; Loessin, 1997; Matsoukas, 1996).

Institutional advancement focuses on creating, maintaining, and enhancing the relationships of the institution with the community and with constituent groups that financially support the institution's mission (Glass & Jackson, 1998b). In Birmingham's (2002) research on integrated systems of income acquisition and management, she

described 10 community college functions or activities that advance the institution: (a) institutional research, (b) marketing, (c) government relations, (d) community affairs, (e) corporate relations, (f) media relations, (g) alumni affairs, (h) foundation, (i) publications, and (j) resource development. Integrating a college's advancement activities reinforces the link between development and institutional planning and improves the response of administrators to conflicting needs and expectations (Brumbach & Villadsen, 2002; Glass & Jackson).

N. Smith (1989) and Ryan (1989) both reported that, despite the clear relationship between planning and resource development, most community colleges had yet to create an advancement division. According to Birmingham, the resource development function should work closely with key activities associated with institutional advancement, and the more integrated the activities are, the more effective resource development will be. This study will use the 10 institutional advancement activities identified by Birmingham as a framework for describing the organizational and operational integration of grant development activities. Organizational integration refers to the number of institutional advancement activities that report to the same administrator; operational integration refers to the degree of cooperation and collaboration among institutional advancement activities.

Organizational Integration

For the purposes of this study, the organizational integration of a community college is represented by the formal, hierarchical reporting structure of the institution and determined by the number of institutional advancement functions that report to a single

administrator. Placement of the resource development activity within the overall organizational structure of a community college is influenced by the size of the college, its geographic location, and its market (Smith, N., 1989). Two major models have been identified for the placement of institutional advancement within an institution: the line model and the staff model. Each of these may be either centralized or decentralized (Bauer, 2001; Brumbach & Villadsen, 2002). The terms line and staff refer to the placement of the advancement officer in the organizational chart; centralization and decentralization describe whether functions are gathered under one area or dispersed throughout the organization.

In the line model, the resource development office is equal to other areas of college administration such as academic affairs, the business office, or student services, and is integral to the operation of the college. Advancement is part of the mainstream of college operations and is fully supported in its efforts by other areas of the college. The resource development office in the line model has access to information and has the opportunity to develop synergistic relationships among institutional components. In the staff model, the president of the college is considered the chief advancement officer and the development office functions as an arm of the president's office (Brumbach & Bumphus, 1993). Matsoukas (1996) and N. Smith (1989) explained that the line model generally serves the community college mission best because it views advancement as an integral part of the college. Glass and Jackson (1989b) and Ferguson (1994) determined that having a direct reporting relationship to the president allows resource development officers (RDOs) to be informed about strategic issues and priorities and participate in setting college priorities. "The multiplicity of responsibilities and the need for integration

with other college initiatives and priorities is an excellent reason for the resource development officer to be positioned at the president's cabinet level" (Brumbach & Bumphus, p. 17).

Hagerman (1978) conducted a national survey to identify the organizational characteristics associated with successful resource development in community colleges with a sample size of 437 resource development officers and a response rate of 34%. He found that 77% of resource development officers reported directly to the chief administrative officer of the institution. RDOs that had clear communication channels with all segments of the college, were aware of institutional goals, and were part of ongoing programming and planning for the institution reported feeling more successful in their development efforts than RDOs that did not have similar channels of communication. Another survey, conducted in 1991, was sent to a random stratified sample of 135 presidents (25%) of single-campus community colleges listed as members of the American Association of Community Colleges to identify variations in community college organizational structure over time and among institutions of different sizes (Underwood & Hammons, 1999). The study had an 87.4% response rate and revealed that the activities of development/fund raising and grants were organized most often to report directly to the president as a staff function.

Organizationally, resource development officers should have access to both information and decision-makers at the highest levels of the organization. A centralized model integrates the 10 institutional advancement activities under a single vice president or supervisor who reports to the president. A central office makes decisions regarding fund raising policy, approves priorities and coordinates assignments (Worth, 1993). This

allows for interaction of the chief advancement officer with other chief officers including the president and provides for greater efficiency and more coordination and control over resource development activities (Jenner, 1987; Keener, et al., 1991). Centralization is supposed to eliminate duplication, minimize rivalry and competition between campuses, and enhance grantsmanship and program coordination (Cohen & Brawer, 1996).

Wattenbarger (1976) noted that an integrated resource development program does more than just get more money for the institution; it defines, popularizes, and implements institutional goals and objectives. Glass and Jackson (1998b) pointed out that centralization in community colleges often occurs for the simple reason that one person performs multiple duties. On the other hand, according to Alfred (1996), centralized decision making does little to encourage risk or “maverick ideas” (p. 219) that generate strategies for tapping into new markets.

A decentralized model disperses the 10 advancement activities among different departments and supervisors (Brumbach & Villadsen, 2002; Glass & Jackson, 1998b). In a decentralized model, four or more advancement administrators may report to the president, each one having considerable autonomy in setting fund-raising policies and priorities (Smith, N., 1989; Worth, 1993). Birmingham (2002) noted that some public 2-year higher education institutions use a variety of disparate and uncoordinated methods to acquire funding from the state legislature, private foundations, individual donors, and government funding agencies. To function well, decentralized advancement administrators must be aware of their individual responsibility to and impact on the larger system. There has been a recent move at the university level to decentralize advancement activities in an effort to get faculty more involved in the grants process (Bauer, 2001;

Glass & Jackson). Four-year institutions favoring the decentralized model may hire a development officer for each academic unit (Kozobarich, 2000). To determine the best staffing pattern, an institution should focus staff where there is likely to be the greatest potential return on investment (Phair & King, 1998).

Operational Integration

For the purposes of this study, the operational integration of resource development refers to the degree of information sharing, cooperation, and collaboration that occurs among institutional advancement activities within an institution. The other institutional advancement functions, as defined by Birmingham (2002), are institutional research, marketing, government relations, community affairs, corporate relations, media relations, publications, foundation fund raising, and alumni affairs. The degree of integration is determined by the number of other advancement functions with which the resource development office shares strategic information and collaborates on key initiatives.

Brumbach and Bumphus (1993) claimed that the integration of these activities can positively impact college excellence and effectiveness. A proper mix of institutional advancement functions moves the college consistently and effectively toward meeting its institutional goals and purposes (Daniel, 1985). Dill (1997) noted that the importance of collaboration among differentiated units is intensified as competition and uncertainty increase. Complex hierarchies often found in higher education organizational structures limit the amount and frequency of information that can occur between college units.

According to Dill, effective integration requires lateral and reciprocal communication patterns and the capacity to form informal groups around shared interests or problems.

Institutional advancement deals with external constituencies and attempts to influence their relationship to the institution in beneficial ways (Grace & Leslie, 1990). Developing an institutional climate for resource development is key to effective integration. This requires the emergence of a management team that will engage in true strategic and operational planning based on internal and external environmental scanning. A strong link to the institutional research function and reliable and valid data is essential for this level of planning to occur (Daniel, 1985, 1991).

Fund raising and resource development, according to Keener, et al. (1991), are dependent on a positive institutional image projected by the college. They noted that many institutions have begun to place marketing and development together in the organization to enable them to benefit from the expertise of each other and multiply the effectiveness of both staffs.

Government relations can support resource development efforts by working with federal agencies to influence grant legislation and appropriation, secure funds, and lobby to support or oppose various laws related to higher education (Grace & Leslie, 1990). A watchful eye on legislation and regulations increases awareness of state and national opportunities, priorities, and trends, and increases funding opportunities (Brumbach & Bumphus, 1993; Keener, 1989). It requires continuous monitoring of legislative activity and committee reports, funding agency mandates, governmental rules and regulations, proposal review protocol, and trends in society (Groff, 1985).

Community affairs and corporate relations activities build, maintain, and enhance relationships with key constituents (Hall, 2002). Community colleges pride themselves on their strong relationships with their communities and often collaborate with local companies to provide courses and training in areas of need. These collaborations help build relationships and partnerships between college and company leaders that are mutually beneficial. Resource development operations can leverage partnerships to increase possibilities for both private and public funding to achieve larger college goals (Brumbach & Villadsen, 2002).

Communication is a tool for building relationships. Community colleges must capitalize on their unique assets if they are to maximize their potential for acquiring public and private funds (Smith, N., 1993). Demonstrating an institution's value to the community requires a well-developed communications and marketing plan. A good public relations program is essential to successful development efforts and good publicity is an outcome of development success. If media relations and publications are separated from resource development, the benefits of aligning these functions are minimized (Smith, N., 1989).

Foundation and grant development must work together to create a clear policy statement and associated procedures. The boundary between grants handled by the resource development office and grants that come under the foundation's purview has become less distinct. To prevent confusion in soliciting, administering, and reporting grants, the two offices should review their own and each other's policies.

Alumni are a different type of resource for community colleges than they are for 4-year colleges and universities. At the 2-year institution, alumni affairs generally focus

on building acceptance for the institution. Alumni are seen as potential volunteers, advocates, supporters, and beneficiaries of college services (Smith, N., 1993). Ideally, they will respond with gifts and donations, but “friend-raising” is far more important than fund raising.

Resource development should not be seen as a separate and distinct unit of the college that strives to secure external funds for random college purposes. Instead, it should be an integral factor in the total management and advancement of the institution (Keener, 1989). According to Worth (1993), “It is essential for the development officer to understand that he or she is a member of a professional institutional advancement team and that the institution’s success depends upon coordination and integration of the various advancement specialties” (p. 1).

Measuring Resource Development Success

The accountability movement emerged on the national higher education agenda in the early 1980s because of a loss of confidence in higher education brought on by widespread increases in public college spending and growing concern over the quality of education and teaching and the academic competence of college graduates (Alexander, 2000; Davis & Lowry, 1995; Hudgins & Mahaffey, 1997). Accountability and institutional effectiveness have been integrated into the national higher education agenda; incorporated into the accreditation process by all six regional accrediting bodies, and mandated by most states (AACC, 1997). Institutions of higher education are under pressure to become more accountable, more efficient, and more productive in using public resources (Alexander). They no longer receive priority funding from the state but

now have to demonstrate return on investment. The concept of institutional effectiveness and its implementation are still evolving, but El-Khawas (1997), Harbour (2003), and Hudgins (1995) agreed that it provides community colleges an exceptional opportunity to demonstrate their value.

The increased focus on accountability has resulted in a heightened awareness of the need for assessment and evaluation. To address this need, community college administrators are requiring more sophisticated information about institutional characteristics and performance, as well as about changing community needs. At the same time, state agencies are increasing pressure on community colleges to furnish information about institutional performance, productivity, and outcomes to guide resource allocation decisions (Alfred, 1994; Hudgins & Mahaffey, 1997). Performance indicators for community colleges are vastly different than those for other sectors of post secondary education such as 4-year institutions and, given institutional differences in size, location, funding, and campus culture, are not generalizable from one institution to another (Dill, 1997; Hudgins & Mahaffey; Strauss, 2001b). Administrators need to identify legitimate factors that can be measured easily, that relate to institutional goals, and that have some practical utility (AACC, 1994). Because community colleges have multiple missions, no single outcome measure will capture an institution's complexities (Cohen & Brawer, 1996; Wharton, 1997). Too few indicators may leave out important objectives from the review; too many indicators may trivialize major priorities and be counterproductive (Burke & Modaressi, 2000). It is important that policy makers limit measures to a few critical questions and administrators use the information to make institutional improvements (Harbour, 1997; Lingfelter, 2003).

To measure performance and use the information to improve productivity, an institution will need to establish initial baselines for performance indicators, set goals based on current levels of productivity, develop strategies for attaining the goals, and then track the progress. The level of productivity or performance of other colleges with similar characteristics can be used as a comparison or benchmark to increase accountability (El-Khawas, 1997; Harbour, 1997; Hurley, 2002). Harbour suggested that a group of performance indicators be selected to measure productivity, quality, timeliness, resource utilization, and costs. El-Khawas implied that performance measures can be used to promote the adoption of good educational practice. Cistone and Bashford (2002) and Lingenfelter (2003) preferred that performance measurement have an internal focus with institutional improvement as the goal. Collecting specific and relevant performance-related information and distributing it to the right people in the organization can improve and optimize performance at all levels. Ewall (1997) pointed out that a determination of a program's relevance to the institution's overall mission and goals should be made before any comparisons are done so that a low performance assessment is not the sole factor determining whether a program continues or not.

Diminishing resources and demands for greater accountability make it increasingly important that institutional advancement administrators be able to prove a direct connection between funding for their office and success in resource development (Grace & Leslie, 1990). A survey of 4-year college and university pre-award research offices conducted by Davis and Lowry (1995) indicated a trend toward utilizing evaluation as a measurement tool. At the time, most grants office evaluation efforts were conducted on an ad hoc basis, but there was evidence that the practice was occurring with

increasing frequency. Community colleges also have reported increasing efforts to improve quality, although pockets of resistance still exist (Cohen, 1994). Colleges must share their success with others and report their results so that both internal and external constituents will understand, value, and support their efforts (Rouche, Roueche, & Ely, 2001). It is important that quantitative measures of accountability not overshadow the qualitative aspects that relate to service to the students and the community (Kanter, 1999). The college administration and board should remember that results as well as costs must be counted in determining overall productivity and that the results of resource development take time to develop – in some cases, 3 to 5 years (Jenner, 1987). With sufficient time, programs that are adequately staffed and budgeted and integrated with other institutional functions, will achieve results.

To determine effectiveness in institutional advancement, educational institutions are encouraged to use measurable results, benchmark productivity, and quantify results (Phair & King, 1998). Performance measurement uses quantitative and qualitative indicators to track the achievements of an organization. It entails a different process and objective than an evaluation and is primarily concerned with summary data that indicate how well an organization is using its resources. Bauer (2001) recommended evaluating a grants office first to establish a baseline for services, staff, and budget, then to develop a vision and build a plan for monitoring and evaluating measurement indicators. To ensure relevancy, the dimensions that are measured should be chosen because they are important, not just because they are easy to measure (Cunningham & Ricks, 2004). Snyder (1993) recommended that community college presidents clearly communicate their expectations of the resource development office, setting an annual goal for the staff

expressed in dollar amounts. Brittingham and Pezzullo (1990) recommended monitoring income by source and program and the percentage of the total institutional budget spent on advancement. They found that increased spending on fund raising generally resulted in more funds raised but, because so many factors associated with successful fund raising are not under the control of the development office, preferred that performance measures be used for internal comparisons rather than cross-institutional comparisons.

There is a growing interest in measurable outcomes, but much of the research that has been done to measure performance in resource development at community colleges has focused on private fund raising rather than on grant awards. Several studies have attempted to identify common factors associated with successful resource development but nearly all of them used a slightly different definition or measure of “success” (Hagerman, 1978). After completing a national study on organizational and other characteristics associated with resource development success, Hagerman acknowledged the need for further study on ways to measure successful resource development. Grace (1993) analyzed trends in fund raising research and expressed a need for researchers and practitioners to develop and use consistent vocabulary. Inconsistencies in reporting and evaluating fund raising make it difficult to relate research to practice. Canine (1989) encouraged practitioners to formulate their own institutional definitions of success.

There is considerable disagreement over what to measure and how to measure it. Hagerman (1978) considered two success measures in his research on community college resource development. The first was the mean number of dollars of external funding obtained per full-time equivalent student enrolled. The second was a self-satisfaction score regarding the success of external funds in meeting the needs of the institution and

the extent to which students and faculty benefited. In a study of California community college resource development programs, Jenner (1987) used the ratio of income generated to cost of operation as the primary measure of success. Duronio and Loessin (1989) defined success as the relationship between resources and outcomes. Miller (1994) agreed that the ratio of dollars received to the costs incurred is an essential measure but cautioned against overlooking other less tangible benefits to the college. In 1992 a survey of community college grants offices asked respondents to identify the measures of success they used to determine the effectiveness of their efforts. The three most frequent responses were the total dollar amounts received in the grants office, the number of grants funded related to the college plan and mission, and how involved faculty were in the grant development process (Matsoukas, 1996). Keener et al. (2002), in a national survey of fund raising and grant seeking operations at public 2-year institutions based operational effectiveness on the amount of external dollars received.

Although there is a tendency to measure success based on the dollars raised, Ferguson (1994) argued that this view does not provide a “full and accurate – or even fair – assessment” (p. 81). Hansen (1989) also considered this approach to be flawed because too many variables outside the control of the institution impact funding. He suggested looking at the percentage of faculty submitting grant proposals and the percentage of faculty receiving grant awards based on the total full-time equivalent number of faculty. Evaluating funding amounts and success rates by sources of funds (federal, state, and local/other) also provides valuable information about where to focus improvement efforts. Finally, he encouraged institutions to look at the percentage of institutional revenues generated through grants to get a clearer understanding of the

impact of grants to the institution and whether internal resources are being used effectively. Ferguson (1994) and Bauer (2001) recommended incorporating some assessment activities such as focus groups or client satisfaction surveys to provide feedback on procedural and qualitative factors to help analyze processes and strengthen the grants office.

Brumbach and Villadsen (2002) held that it is more important to measure the impact that funding has on students. At a presentation at a 2004 regional meeting of the Council for Resource Development, Suchorski (2004) concurred, saying “It’s not just about getting the money. It’s about getting the money and resources to do the right thing. It’s not about how many proposals you write. It’s about how many projects get funded and their impact on our students.”

Benchmarking is the discipline of searching out and learning from best practices elsewhere. The aim is to get people to see creative, more effective ways of doing their work (Marchese, 1997). Loessin (1997) recommended that colleges measure the success of their development efforts through peer-group benchmarking. This involves identifying other institutions that share similar size and characteristics and comparing income streams over a period of years. Miller (1994) said, “The effectiveness of development efforts, how well it is done, and at what cost, has not been measured in a standardized manner, so comparisons are difficult” (p. 363). Ewall (1997) believed it is best to look at average income over a period of time rather than concentrate on one year, where there may be unusual circumstances or naturally occurring statistical variation. He also recommended looking at the amount of revenue attained in various categories of funding

to determine where a development program is weak or strong compared to similar institutions.

Benchmarks used at Sinclair Community College are based on a 3-year average of the following four key performance indicators: (a) total grant funding, (b) funding success, (c) percentage of proposals that support the college's strategic initiatives, and (d) return on investment (Herbkersman, 2001). Funding success is defined as the "number of grants funded divided by the number of proposals submitted" and return on investment is the "total annual grant funding awarded divided by the Grants Development Office annual operating budget" (Herbkersman & Hibbert-Jones, 2002, p. 10). Return on investment highlights the value an institution receives from the way in which the institution's resources are deployed. The costs of developing grant proposals can be quite high, so the awarded amount should be assessed in terms of institutional resources used (Bauer, 2001; Hall, 2001).

A national benchmarking and best practices study on grant activities at colleges and universities was jointly undertaken by the Society of Research Administrators International, the National Association of College and University Business Officers, and KPMG Higher Education Consulting. The purpose of the study was to provide participating institutions with a basis for quantitative and systemic analysis of their institutional sponsored research operations and activities. Two rounds of data collection (FY 1998 and FY 2000) were conducted using a nationwide sample of academic and non-profit institutions that accounted for over 40% of the US academic research expenditures (Kirby & Waugaman, 2002; Sterry, 2001). The study focused on 14 measures or metrics that fell into three major categories: (a) sustaining or enhancing grants activity and

funding, (b) containing the costs and improving the efficiency of grants administration, and (c) improving administrative services to faculty.

In the first category, sustaining or enhancing grant activity and funding, there were five measures:

1. Number of proposals submitted per total faculty (full-time equivalent)
2. Percentage of faculty working as active principal investigators
3. Grant dollars per total faculty (full-time equivalent)
4. Growth in grant funding over 5 years
5. Number of new awards as a percentage of number of proposals submitted

The second category, containing the costs and improving the efficiency of grants administration, focused on three measures or metrics:

1. Number of proposals submitted per grants staff (full-time equivalent)
2. Number of grants staff per \$10 million funding
3. Grant development costs as a percent of dollar amount awarded

For the third category, improving administrative services to faculty, there was only one measure: the number of funded principal investigators per grants office staff. Results of the 1998 survey seemed to indicate that larger institutions were more cost effective and had higher numbers of proposals funded per grants office employee or operating dollar (Kirby & Waugaman, 2002).

Measuring success allows an institution to evaluate its strengths and weaknesses and develop strategies for enhancing effectiveness. Hagerman (1978) found that institutions that had no established criteria for evaluating resource development were less successful than colleges that routinely evaluated their efforts. They obtained fewer dollars

per student and were less satisfied with their development efforts. Whatever framework is adopted, it is important that performance data measure what they are intended to measure, be readily understandable by members of the college community, that the methods for recording and reporting the data are consistent and systematic, and that data can be gathered at minimal expense (Cistone & Bashford, 2002; Cohen, 1994; Hudgins & Mahaffey, 1997). To be of greatest value, the assessment process should be part of the institutional culture and evaluation should be an expected part of the operation (Davis & Lowry, 1995). Achieving higher levels of institutional effectiveness requires strong leadership and a concerted effort to implement the changes that measurement indicates are needed (Wharton, 1997).

The literature revealed that a number of different operational definitions of success have been used in qualitative and quantitative studies of educational fund raising. According to Hagerman (1978), "It is only when external funding is received for projects that fall within a college's goals and objectives that resource development can be considered truly successful" (p. 114). Glass and Jackson (1998b) said, "To be successful, the resource development function should be aligned with the college's vision and mission; integrated into the mainstream of college planning and management; and encompass or have access to institutional research, strategic planning functions, and databases" (p. 735). Resource development should be seen as a long-term endeavor; it should provide a clear link between planning and research; and it should only focus on funding opportunities that are consistent with the mission and goals of the college (Blong & Bennett, 1991; Brumbach & Villadsen, 2002; Wilson, 1989).

Based on findings in the literature, ongoing discussions among resource development professionals throughout the country, and the recommendation of a panel of experts representing Florida community colleges, this study will focus on two measures of effectiveness: grant success rate and return on investment. Grant success rate is determined by dividing the number of grant proposals funded by the number of grant proposals submitted. Return on investment is determined by dividing the total amount of grant funding an institution receives by the amount budgeted for resource development staff and operations. These measures are being adopted by resource development officers in community colleges as consistent measures for resource development performance. By using these measures, this study may reinforce their acceptance and encourage community colleges to benchmark outcomes and identify best practices that can benefit others.

Summary

The economic uncertainty associated with decreasing financial resources, rising student enrollment, changing demographics with an increasingly nontraditional student body, and increased demands for new programs are making it necessary for community colleges to diversify their funding base (Alfred, 1996). Since 1980, state support has dropped from one-half to one-third of community college budgets. Support from federal and local sources has not increased. Real resources are declining and competitive forces are emerging (Brinkman & Morgan, 1997).

Resource development, along with strategic and operational planning, can provide the framework an institution needs to explore external funding sources (Blong & Bennett,

1991). An effective grants development office, staffed with motivated and trained professionals, can raise millions of dollars in federal, state, and local grants (Herbkersman & Hibbert-Jones, 2002). These funds can be used for the development of programs, the acquisition of equipment, and for the education and training of various populations (Merisotis & Wolanin, 2000).

A review of the literature revealed several attempts to identify factors associated with successful grant development in community colleges (Birmingham, 2002; Hagerman, 1978; Matsoukas, 1996; Meaders, 2002; Wade, 1990; Young, 1978). Young and Hagerman concluded that success was related to the support of the institution and particularly the chief administrative officer. Wade and Matsoukas found that integrating grant development with the college planning process increased resource development success. More recently, Meaders indicated that the experience and tenure of the chief development officer could influence the amount of grant-generated revenue an institution could expect to receive. Birmingham recommended that a community college integrate all or most of its institutional advancement activities into an income acquisition system as a way to achieve greater success.

The literature indicated a general disagreement among researchers as to the definition of success as it related to grants development. Brumbach and Villadsen (2002) argued that success should relate to the impact that funding has on students but did not provide a clear means for determining the impact. Meaders (2002) and Young (1978) used the amount of funding generated as a measure of success. Hagerman (1978) looked at the amount of external funding received per full-time equivalent student. Others,

including Jenner (1987), Duronio and Loessin (1989), and Miller (1994), took the cost of operation into account and considered return on investment as a measure of success.

A successful grants development office can be a valuable resource in advancing a college's mission and strategic plan. In a review of relevant literature, advice from practitioners was plentiful and broad-based. Success requires a strong commitment from college leadership and an environment that actively supports and encourages project development (Herbkersman & Hibbert-Jones, 2002). To increase the capacity to effectively secure external funding, community colleges should emphasize relationships, partnerships, and collaborative ventures (Jackson & Keener, 2002). Institutions should implement institutional development programs that are fully integrated with the life of the institution and that exhibit "consistent, intense, and comprehensive activity" (Loessin, 1997, p. 317).

Gaining improved financial support is so critical that it has become an educational priority. It will require changes in the organization and the roles of the president, administrators, and staff so that resource development is in the mainstream of college activity (McCabe, 1996). Grants and private support may be the greatest potential community colleges have for increasing financial stability (Daniel, 1991). This study will attempt to identify factors of success that enhance the capabilities of community colleges to obtain grant funding to support the mission and goals of the institution. It will consider whether the level of organizational and operational integration of institutional advancement activities at an institution has an impact on grant funding. Measures of effectiveness used in the study will include success rate and return on investment.

CHAPTER 3

METHODOLOGY

The primary purpose of this study was to identify institutional variables which show statistically significant association with successful resource development efforts. This chapter defines the research methodology including the research purpose, problem, and design. The study population, research instrument, and data collection methods are described followed by an explanation of the methodology for data analysis.

Introduction

Significant reductions in financial support at the state level along with rising student enrollment and increased demands for new programs have made it necessary for community colleges to expand their funding bases through externally funded grants. A successful grants development office can be a valuable resource in advancing a college's mission and strategic plan during times of financial constraint or rapid growth. The purpose of this study was to establish a profile of grant development activities among Florida public community colleges and identify organizational and operational characteristics associated with successful grant development.

The study was conducted to determine whether differences existed among grant success rate and the integration and alignment of institutional advancement functions and whether differences existed among return on investment in grant development and the integration and alignment of institutional advancement functions. The application of an institutional advancement model provided a holistic view of resource development and

the relations between the outcome variables and explanatory variables. Conclusions derived from the research findings culminated in recommendations and implications for community college leaders and resource development practitioners.

Statement of the Problem

The problem addressed in the study was “What are the organizational and operational characteristics that community colleges use to effectively engage in grant development?” By determining measures of effectiveness for community colleges engaged in grant development activities and identifying the organizational and operational characteristics of the most successful resource development offices in the Florida Community College System, administrators and resource development practitioners at 2-year institutions can gain valuable insight into their own effectiveness and potential for enhancing results.

Research Questions

This researcher focused on the study of two independent variables that may be indicators of success related to grant-generated revenue in public community colleges and chose the variables based on a review of relevant literature. The independent variables were (a) organizational reporting structure of institutional advancement functions within the institution as they relate to the grant development function; and (b) the operational integration of institutional advancement functions within the institution as they relate to the grant development function. Each independent variable was correlated with two measures of effectiveness.

The dependent variables, or measures of effectiveness, in the study were (a) success rate calculated as the ratio of grants awarded to grants submitted, and (b) return on investment calculated as the ratio of grant personnel costs to grant revenue. Six research questions were developed for the selected variables. The questions are clearly linked to the literature review and reveal the phenomena to be examined in this study. They reflect the study's major issues and conceptual structure. The following research questions were raised:

1. What are the organizational and operational characteristics of grant development offices in Florida community colleges?
2. What measures or key indicators do Florida community colleges use to determine the effectiveness of grant development efforts?
3. What is the relationship between the number of institutional advancement activities that report to the same administrator and grant success rate?
4. What is the relationship between the number of institutional advancement activities that report to the same administrator and return on investment?
5. What is the relationship between the integration of other institutional advancement activities with grant development and grant success rate?
6. What is the relationship between the integration of other institutional advancement activities with grant development and return on investment?

Organizational integration is determined by the number of institutional advancement activities that report to the same administrator to whom the grants office reports, and operational integration is determined by the level of coordination among other institutional advancement activities and grant activities. It was hypothesized that

having a greater number of institutional activities report to the same administrator will result in greater success in grant development activities and a higher return on investment. A second hypothesis is that having a higher degree of integration among institutional advancement activities will result in greater success in grant development and a higher return on investment.

The two dependent variables, success rate and return on investment, were selected for the study based on the idea that successful grant development could not be defined simply in terms of the amount of funds received. Success rate was based on a working definition designed to measure the degree to which an institution had been successful in obtaining funds when they had been sought. The measure was the ratio between the number of applications which resulted in funding and the total number of applications submitted during a fiscal year. Return on investment was based on a working definition designed to determine the value of grants received in relation to the college's financial commitment to grant development. The measure for return on investment was the ratio between the dollar amount of funding received during a fiscal year and the budgetary value of personnel assigned to grants development by the college.

Population

The population for the study was the 28 public community colleges that comprise the Florida Community College System. The system was established in 1957 with the express intent of providing access to higher education within commuting distance for more than 90% of the state's residents. The system offers programs for associate of arts degrees, associate of science degrees, college credit certificates, college and vocational

preparation, adult and secondary education, continuing workforce education, life long learning, and recreation and leisure. In 2002-2003, annual unduplicated student enrollment for the Florida Community College System was 795,319. Diversity among community colleges in Florida is reinforced by an uneven distribution of students. The largest, Miami Dade College, served 126,491 students in 2002-2003 while the smallest, Florida Keys Community College, had an annual unduplicated student headcount of 3,257 (Florida Department of Education, 2004).

Data were collected by means of a questionnaire mailed to public, 2-year community colleges in Florida. Information on the survey identified the organizational and operational characteristics of grants development offices in Florida community colleges and key measures of performance used to determine the effectiveness of grants development efforts. A copy of the questionnaire entitled “Community College Grant Development Survey” is included as Appendix A. Data derived from the survey were used to address the research questions. Linear regression tests were conducted on the data to determine the relationship between outcome and explanatory variables.

The questionnaire was designed to be completed by the chief resource development officer of each institution. The survey had the endorsement and support of the Florida Council for Resource Development, a professional organization of resource development officers at Florida community colleges created to promote the activities of community college staff engaged in grant procurement, fund-raising, and alumni activities. The Council provided its membership list to be used as a starting point in determining the name and title of the individual at each institution who is primarily responsible for grants. Telephone calls were made to confirm the contact information. A

list of the identified grant development officers is included as Appendix B. The questionnaire was sent to all 28 community college grant development officers with a 93% response rate. Two-year private colleges, technical schools, and proprietary institutions were excluded from the study.

Instrumentation

The researcher's knowledge and experience in the area of resource development, understanding of community colleges, and thorough review of the literature were the basis for the design and development of the "Community College Grant Development Survey". A panel of reviewers comprised of community college resource development professionals was enlisted to assist the researcher in refining the 55-item instrument and provide content validity. The panel of experts offered diverse points of reference and represented colleges of various size, geography, and organization.

The survey was designed to gather descriptive information about the institutional commitment of staff and resources, the organizational and operational characteristics of the grant development function, and measures of effectiveness used to evaluate grant development performance. Data were collected regarding the number of grant proposals submitted and funded during fiscal year 2003-2004 and the amount of grant revenue received from various sources. The variables were chosen based on a review of relevant literature and the review of a previously administered survey (Meaders, 2002).

Instrument Validity

To ensure clarity, accuracy, and relevancy of the survey instrument, it was submitted to a panel of reviewers comprised of five resource development professionals. The panel represented a cross-section of Florida community colleges by size, location, and institutional investment in resource development. One rural, one suburban, and three urban colleges were included; annual full time equivalent enrollment ranged from 3,399 students at the eighth smallest of the 28 institutions to 16,614 at the second largest community college in the state. Four of the five colleges represented by the review panel had a formally established grants office; one did not. Full time staff assigned to grants development ranged from 0 to 8 positions. At the time of the study, each panelist was serving as the primary grants officer for his or her institution.

In July 2004, members of the review panel received a draft of the questionnaire and were asked to complete the survey and provide comments and suggestions regarding the content, clarity, and general organization. Their revisions were incorporated into a second draft that was sent to them in August 2004. A final survey was developed based on the responses received from the panel of highly respected reviewers. The survey and associated research protocol were submitted to the University of Central Florida Institutional Review Board; approval to proceed with the study was received by the researcher in early September 2004. A copy of the letter of approval is included as Appendix C.

The survey was constructed in 5 sections and contained 55 items in 5 pages. Several questions required the respondents to fill in blanks with numbers, titles, or dollar amounts. On other questions, respondents were asked to select one or more items from

multiple choices. The relationships of survey items to study constructs and research questions are shown in Table 1.

Sections I, II, and III (survey items 1 – 23) addressed Research Question 1: What are the organizational and operational characteristics of grant development offices in Florida community colleges? Items 1 - 9 gathered information about organizational and operational characteristics included in the study to establish a profile of grant development for the Florida Community College System. Items 10 – 23 identified the activities that are the responsibility of the grants function at each institution. These items were used to describe institutional characteristics but were not used for statistical analyses.

Table 1

Relationship of Study Construct to Survey Item to Research Question

Section	Construct	Survey Item(s)	Research Question
I	Grant development operational characteristics	1 through 4, 9	1, 4, 5, 6
II	Grant development organizational characteristics	5 through 8	1, 3, 4, 6
III	Grant development functions	10 through 23	1
IV	Grant development outcomes	24 through 31	1, 3, 4, 5, 6
V	Grant development effectiveness measures	32 through 55	1, 2

In Section IV, survey items 24 and 25 were used to determine grant success rate and addressed Research Question 3: What is the relationship between the number of institutional advancement activities that report to the same administrator and grant

success rate? and Research Question 5: What is the relationship between the operational integration of other institutional advancement functions with grant development and grant success rate?

Item 4 in Section I and item 31 in Section IV were used to determine return on investment and addressed Research Question 4: What is the relationship between the number of institutional advancement activities that report to the same administrator and return on investment? and Research Question 6: What is the relationship between the operational integration of other institutional advancement functions with grant development and return on investment? Section V, survey items 32 – 55, addressed Research Question 2: What measures or key indicators do Florida community colleges use to determine the effectiveness of grant development efforts?

For this study, data from all sections of the survey were used for analysis. Incompleteness, inaccuracies, or discrepancies in the data were addressed in the final analysis by noting issues or trends appearing in the literature review and not evident from the data. Conversely, trends or issues appearing in the data and not reported in the literature review were noted. This form of confirmation enhanced the findings (Jackson & Glass, 2000).

Data Collection

In September 2004 a letter was sent to the chief resource development officers at the 28 Florida community colleges, informing them of the survey and describing the purpose of the questionnaire. A week later, the survey was mailed accompanied by a cover letter and a self-addressed, stamped envelope in which to return the completed

questionnaire. The cover letter from the researcher provided further explanation of the value of the study to the respondent, instructions for completing the survey, and an informed consent disclaimer. The letter specified who to contact if questions arose and requested that the completed survey be returned by the October deadline date. It also suggested that the survey be directed to another more appropriate individual if necessary. The original letter and the survey were printed on letterhead with the identification logo of the Florida Council for Resource Development to convey professional credence to the survey and the study.

A code was assigned to each survey to track responses. If a response had not been received within a week, an e-mail was sent reminding the individual to respond. A fourth contact, sent 3 weeks after the survey was mailed, explained how the respondent could get a replacement survey if the original survey had been misplaced and was sent only to those individuals who had not returned a questionnaire. A fifth e-mail contact was sent to 10 colleges that had not returned the survey a month past the time that the original survey was mailed. A copy of the survey was attached electronically and individuals were asked to return the survey by mail, facsimile, or e-mail. Appendix D contains copies of the five elements of contact correspondence.

After the fifth contact, six colleges were contacted individually by e-mail or telephone to encourage completion of the survey with the end result that only two colleges were deemed non-responsive. The two colleges that did not return a survey do not have a formal grants office or any staff assigned to grants development.

As surveys were received, the researcher assigned a code to each and entered the responses into a database using SPSS software. Access to the survey data was limited to the researcher to maintain anonymity.

Data Analysis

Responses to the survey were used to establish a profile of organizational and operational characteristics of grant development and to assess relationships between two key organizational and operational factors (independent variables) and two key effectiveness measures (dependent variables) for community college resource development. Responses to the survey were compiled and analyzed to respond to the following research questions:

1. What are the organizational and operational characteristics of grant development offices in Florida community colleges?
2. What measures or key indicators do Florida community colleges use to determine the effectiveness of grant development efforts?
3. What is the relationship between the number of institutional advancement activities that report to the same administrator and grant success rate?
4. What is the relationship between the number of institutional advancement activities that report to the same administrator and return on investment?
5. What is the relationship between the integration of other institutional advancement activities with grant development and grant success rate?
6. What is the relationship between the integration of other institutional advancement activities with grant development and return on investment?

Descriptive statistics and inferential analysis were used to identify factors that influence the effectiveness of community college grants development. Correlation analysis was used to determine the strength of associations between variables; linear regression tests were conducted to establish the associations. The intent was not to determine a cause-and-effect relationship but to launch a preliminary investigational step in an area that has not been systematically or thoroughly researched. The linear regression and correlation analyses were run on the respondent data set using SPSS 11.0 system for analyzing data. Findings were compiled and reported along with questions for additional research.

Descriptive statistics of frequency, measures of central tendency, and measures of dispersion were calculated for the target population and included existence of a grants office, number of employees assigned to grant development, reporting relationship to the president, advancement functions in the same reporting line as the grants function, advancement functions that coordinate activities with the grants function, grant applications submitted and funded, and grants revenue. The linear regression analysis included the regression equation, standard error, partial correlations, standardized coefficients, the regression and residual sums of squares, and the F ratios. The assumptions of linear regression (linearity, homogeneity, independence, and normality) were tested. Because there are multiple regression models, a Bonferroni adjustment was made for inflated Type I error. The Type I error rate (alpha) was based on alpha divided by the number of linear regression models, or $.05/4$, and equals $.0125$.

The research hypotheses for the linear regression were designed to show statistically significant and positive relations in the independent variable that lead to

anticipated or predictable outcomes in the dependent variable. The regression formulas were

$$Y_1 = \beta_0 + \beta_1 X_1 + \varepsilon$$

$$Y_1 = \beta_0 + \beta_1 X_2 + \varepsilon$$

$$Y_2 = \beta_0 + \beta_1 X_1 + \varepsilon$$

$$Y_2 = \beta_0 + \beta_1 X_2 + \varepsilon$$

When the variables were put into the regression model, the following formulas resulted:

$$\text{Success rate} = \beta_0 (\text{constant}) + \beta_1 * (\text{organizational integration}) + \varepsilon (\text{error})$$

$$\text{Success rate} = \beta_0 (\text{constant}) + \beta_1 * (\text{operational integration}) + \varepsilon (\text{error})$$

$$\text{Return on investment} = \beta_0 (\text{constant}) + \beta_1 * (\text{organizational integration}) + \varepsilon (\text{error})$$

$$\text{Return on investment} = \beta_0 (\text{constant}) + \beta_1 * (\text{operational integration}) + \varepsilon (\text{error})$$

The proposed regression models compared the relation between the outcome variables and the explanatory variables. It was anticipated that the linear regression models would result in statistically significant measures of relations among the variables and would indicate a good model fit. The research hypotheses were as follows:

1. There should be a statistically significant relation between the number of institutional advancement functions that report to the same administrator as the grant function and the grant success of the institution.
2. There should be a statistically significant relation between the number of institutional advancement functions that report to the same administrator as the grant function and the return on investment in grant activities.

3. There should be a statistically significant relation between the number of institutional advancement functions that integrate activities with the grant function and the grant success of the institution.
4. There should be a statistically significant relation between the number of institutional advancement functions that integrate activities with the grant function and the return on investment in grant activities.

Summary

Resource development is new in the community college setting and little research has been done to guide practitioners or administrators who are under pressure to increase external funding. The proposed study was needed to help define success in resource development, identify relevant performance measures and benchmarks for institutional effectiveness, and provide guidance to community colleges regarding the most efficient and effective organizational structures and lines of authority.

The study was designed to contribute to the understanding of the variables within a community college that indicate the ability to be successful in grant procurement. The population for the study was limited to the 28 public community colleges in the Florida Community College System. A survey instrument was mailed to the chief resource development officer at each institution. Responses were received from 26 of the 28 colleges and were used to provide data to address six research questions. Variables for the study were selected by a review of relevant literature and linked to the theories of institutional advancement, effectiveness, and performance measurement. Descriptive statistics of means, percentages, standard deviations, and frequencies were derived from

the data. Linear regression analysis and simple correlation analysis were conducted with SPSS 11.0 to determine whether relationships exist that indicate effective outcomes and whether those relationships can be used to describe characteristics of success for grants operations. Results of the analysis of data are presented in Chapter 4 and a summary of the study, conclusions, and recommendations are presented in Chapter 5.

CHAPTER 4

ANALYSIS OF DATA

This study was prompted by the need to maximize the effectiveness of grant development efforts to increase and diversify community college revenue to offset overall decreases in funding from traditional sources. The research was an attempt to determine whether the alignment, integration, and coordination of the grant development function with other institutional advancement functions at a community college has any relationship to the ability of the college to acquire grant revenue from external sources.

The purposes of the research were to (a) establish a profile of community college grant development within the Florida community college system, (b) determine if placement of a grants office in the organizational structure of a community college is related to the effectiveness of grant development, and (c) determine if the level of operational coordination that occurs among the grants function and other institutional advancement activities is related to grant development effectiveness. The research variables were selected for analysis after a review of the relevant literature. Data were collected by means of a survey mailed to the primary resource development officers at the 28 public community colleges in Florida. Twenty-six of the 28 surveys were returned.

The survey was designed to collect the data needed to measure two independent variables that reflected the organizational integration of institutional advancement functions and the operational integration of institutional advancement activities. It also was used to obtain the data necessary to quantify grant development success and

institutional return on investment, the two dependent variables in the study. The purposes of this chapter are the presentation and analysis of the data.

Profile of Grant Development in Florida Community Colleges

The 28 community colleges included in the Florida community college system vary considerably in size, organization, and activity. Descriptive statistics and frequencies were determined for a number of institutional characteristics in an attempt to establish a profile of grant development and respond to the following research question: What are the organizational and operational characteristics of grant development offices in Florida community colleges? The results are discussed in the following paragraphs.

Organizational Characteristics

Organizational characteristics considered by the survey included the formal existence of a grants office, the assignment of staff to grant activities, budget allocations, the title of the primary grants officer and his/her relationship to the president, and the reporting structure of the grants function in relation to other institutional advancement functions. Responses to the survey revealed that 23 of the 26 (88.5%) community colleges in Florida had a formally established and staffed grants office at the time of the survey. Four of these grants offices were part of their institution's foundation office.

The survey requested information about the number of individuals who were employed in the grant development effort. Of the 26 respondents, 23 had assigned staff to specific grant development responsibilities. More than half (13 of 23 or 56.5%) had a full-time administrator. The full-time equivalent grant staff at individual institutions

ranged from 0 to 8. The median was 1 administrator; 1 mid-level professional usually referred to as a grants coordinator, writer, or specialist; and 1 clerical staff. The mean response to this inquiry was 2.54 employees with a 0.61 full-time equivalent administrator, 1.26 professional employees, and 0.78 clerical staff. No college reported the assignment of a faculty person, either part-time or full-time, to the grants function. The responses indicated that in many instances the individual primarily responsible for grant development had other responsibilities and that the clerical staff often had other duties and assignments. In total, during fiscal year 2003-2004, Florida community colleges employed 61 people for grant development. Table 2 provides additional detail.

Table 2
Staffing Patterns for Grant Development Offices in Florida Community Colleges

Staff	Minimum	Maximum	Sum	<i>M</i>	<i>SD</i>
Administrators	0	1	14	0.61	0.48
Professional	0	4	29	1.26	1.18
Clerical	0	4	18	0.78	0.88
Faculty	0	0	0	0	0
Total Staff	0	8	61	2.65	1.89

n = 23

A question on the survey about the annual operating budget for grant development elicited interesting responses. Only 18 of the 26 colleges indicated the level at which the grant development function was budgeted. The mean budget level for grant development among these 18 respondents was \$117,780. The median amount invested in grants office

operations was \$102,663, with a range of \$2,950 to \$350,000. In many cases, respondents indicated that the annual budget for grant development was rolled into the departmental budget of an administrator with multiple duties and the amount for the grant function could not be determined. Because of the tendency to cluster grant development budgets with other functions and some institutional budgeting anomalies noted by individuals completing the questionnaire, the responses to this survey item were of limited value.

The survey was designed to be completed by the person at each institution primarily responsible for grant development activities. To gain an understanding of the location of grant responsibility within the college's organizational structure, the respondents to the survey were asked to indicate their title, the title of the person to whom they reported, and the number of levels between them and the president. The titles of individuals in the position referred to in this study as the primary grants officer included 2 vice presidents, 2 assistant/associate vice presidents, 1 assistant/associate dean, 11 directors, 6 coordinators, and 4 managers. Half (13) of the 26 primary grants officers reported to vice presidents who reported to the president, while 3 (11.5%) reported directly to the president of the college. Only one individual was more than two positions removed from the president.

Organizational Integration

Organizational integration was based on the number of institutional advancement functions in the same reporting line as the grants function. The survey listed nine other community college advancement functions (alumni affairs, community affairs, corporate relations, fund raising/foundation, government affairs, institutional research, marketing,

media relations, and publications) and asked which of those functions reported to the same administrator as the grants function and which ones reported to a different administrator. Table 3 provides the statistical frequencies for organizational integration of institutional advancement functions in Florida community colleges with the functions listed in descending order based on the degree of organizational integration. When a college responded “not applicable”, it indicated that the institutional advancement function was not a formally recognized activity at that institution.

Table 3

Frequency and Percentage of Organizational Integration of Institutional Advancement (IA) Functions with Grant Development among Florida Community Colleges

IA Function	Same Administrator		Different Administrator		Not Applicable	
	No.	%	No.	%	No.	%
Media Relations	9	33.3	14	58.3	2	8.3
Community Affairs	8	30.8	13	50.0	5	19.2
Corporate Relations	8	30.8	13	50.0	5	19.2
Fund raising/Foundation	8	30.8	18	69.2	0	0
Institutional Research	8	30.8	18	69.2	0	0
Marketing	8	30.8	17	65.4	1	3.8
Publications	8	30.8	17	65.4	1	3.8
Alumni Affairs	7	26.9	16	61.5	3	11.5
Government Relations	5	19.2	15	57.7	6	23.1
<i>N</i> = 26						

According to the survey responses reported in Table 3, the media relations function was organizationally aligned with the grants office at 9 (33.3%) community colleges, more than any other institutional advancement function. In at least 8 (30.8%) community colleges, the following functions reported to the same administrator as the grants function: community affairs, corporate relations, fund raising/foundation, institutional research, and publications. Seven (26.9%) institutions indicated that alumni affairs reported to the same administrator as the grants function but only 5 primary grants officers (19.2%) reported to the same administrator as government relations.

Table 4

Frequency and Percentage of Florida Community Colleges that Organizationally Integrate Institutional Advancement (IA) Functions with Grant Development

IA Functions	No.	%	Cum. %
0 functions integrated with grants	4	15.4	15.4
1 function integrated with grants	7	26.9	42.3
2 functions integrated with grants	2	7.7	50.0
3 functions integrated with grants	4	15.4	65.4
4 functions integrated with grants	3	11.5	76.9
5 functions integrated with grants	3	11.5	88.5
6 functions integrated with grants	2	7.7	96.2
7 functions integrated with grants	1	3.8	100.0
<i>N</i> = 26			

Table 4 provides the aggregated data related to the level of organizational integration in institutional advancement at the respondent colleges. Overall,

organizational integration ranged from 0 to 7 functions reporting to a single administrator, with 4 colleges indicating no integration at all of the grants function with other institutional advancement functions. On the average, community colleges aligned 2.65 other institutional advancement functions under the same administrator responsible for grant development. The median was 2.5, indicating a tendency for Florida community colleges to organizationally decentralize the 10 institutional advancement functions. The level of organizational integration at each college was used as the key independent variable in a linear regression analysis to determine the relationship between organizational reporting structure and the effectiveness of grant development. The results of the analysis are discussed later in this chapter.

Operational Characteristics

To obtain an understanding of the responsibilities assigned to the grant development officers, the respondents were asked to indicate whether they had full responsibility, shared responsibility, or no responsibility for 14 activities commonly associated with grant development. The activities are categorized as pre-award, as identified in Table 5, or post-award, as identified in Table 6. Only 1 college out of 26 (3.8%) reported having full responsibility for all 9 pre-award activities and all 5 post-award activities. All other colleges indicated some level of shared responsibility for grant activities. The mean number of pre-award activities for which the grants office had full responsibility was 4 with a standard deviation of 2.59 and a median of 4.5. Responses for pre-award activities are summarized in Table 5.

Table 5

Frequency and Percentage of Florida Community Colleges Responsible for Grant Pre-Award Activities

Activity	Full Responsibility		Shared Responsibility		No Responsibility	
	No.	%	No.	%	No.	%
Funding research	18	69.2	8	30.8	0	0
Proposal transmission	18	69.2	8	30.8	0	0
Proposal editing	16	61.5	10	38.5	0	0
Project design	13	50.0	13	50.0	0	0
Private grant development	11	42.3	13	50.0	2	7.7
Proposal writing	10	38.5	16	61.5	0	0
Statistical research	9	34.6	15	57.7	2	7.7
Budget preparation	8	30.8	18	69.2	0	0
Partnership development	6	23.1	18	69.2	2	7.7

N = 26

Post-award activities, sometimes referred to as the grants management function, occur after an institution receives notice of a grant award. Three of the 26 respondents (11.5%) indicated no responsibility at all for post-award activities while 22 (84.6%) reported shared responsibility for one or more activities. The mean number of post-award activities for which the grants office had full responsibility was 0.65 with a standard deviation of 1.41. Responses for post-award responsibilities are summarized in Table 6.

Table 6

Frequency and Percentage of Florida Community Colleges Responsible for Grant Post-Award Activities

Activity	Full Responsibility		Shared Responsibility		No Responsibility	
	No.	%	No.	%	No.	%
Negotiation	5	20.8	11	45.8	8	33.3
Compliance monitoring	4	16.7	13	54.2	7	29.2
Amendments/extensions	4	16.7	16	66.7	4	16.7
Grants accounting	2	8.3	8	33.3	14	58.3
Reports/deliverables	2	8.3	13	54.2	9	37.5

N = 26

Operational Integration

Operational integration was based on the number of institutional advancement functions that coordinate key activities with grants development. The survey listed the nine other advancement functions and, for each function, asked if it (a) had key activities that were interdependent with grants development and shared strategic management information, (b) coordinated some activities with grants development, (c) existed but did not coordinate with grants development, or (d) was not a key activity at the college.

According to survey responses, operational integration occurred most often with fund raising activities initiated by the college foundations and with institutional research activities. The functions that generated the least amount of operational integration were alumni affairs and marketing. The results are summarized in Table 7 with institutional activities listed in descending order based on level of integration with grants activities.

Overall, operational integration ranged from 1 to 9 institutional advancement functions coordinating activities with grants development, with 3 institutions reporting some level of integration with all 9 functions. On the average, 5 of the other institutional advancement functions were coordinated with grant activities. The median was 4, indicating a tendency for Florida community colleges to operationally integrate institutional advancement regardless of organizational and administrative reporting structure. Table 8 summarizes the statistical frequencies associated with operational integration of institutional advancement functions among the respondents.

Table 7

Frequency and Percentage of Operational Integration of Institutional Advancement (IA) Functions with Grant Development among Florida Community Colleges

IA Function	Key IA activities are coordinated or interdependent		Does not coordinate IA functions with grants activities		Not a key IA function at the college	
	No.	%	No.	%	No.	%
Fund raising/Foundation	23	88.5	3	11.5	0	0
Institutional Research	21	80.8	4	15.4	1	3.8
Corporate Relations	15	57.7	7	26.9	4	15.4
Government Relations	14	53.8	9	34.6	3	11.5
Media Relations	12	46.1	13	50.0	1	3.8
Community Affairs	11	42.2	13	50.0	2	7.7
Publications	11	42.2	14	53.8	1	3.8
Marketing	9	34.6	17	65.4	0	0
Alumni Affairs	5	19.2	14	53.8	7	26.9

N = 26

The data reported by each college indicating the number of institutional advancement functions that coordinated or integrated activities with grant development were used as a key independent variable in a regression analysis to determine the relationship between operational coordination of institutional advancement functions and the effectiveness of grant development. The results of the analysis are discussed later in this chapter.

Table 8

Frequency and Percentage of Florida Community Colleges that Operationally Integrate Institutional Advancement (IA) Functions with Grant Development

Operational Integration of IA Functions	No.	%	Cum. %
1 function integrated with grants	2	7.7	7.7
2 functions integrated with grants	3	11.5	19.2
3 functions integrated with grants	7	26.9	46.2
4 functions integrated with grants	2	7.7	53.8
5 functions integrated with grants	2	7.7	61.5
6 functions integrated with grants	3	11.5	73.1
7 functions integrated with grants	2	7.7	80.8
8 functions integrated with grants	2	7.7	88.5
9 functions integrated with grants	3	11.5	100.0

N = 26

Grant Development Effectiveness

For the purpose of this research, grant development effectiveness was measured in two ways: success rate and return on investment. Two research questions related to success rate: (a) What is the relationship between the number of institutional advancement activities that report to the same administrator and grant success rate? and (b) What is the relationship between the integration of other institutional advancement activities with grant development and grant success rate? To calculate success rate for each institution, the number of funded grant proposals was divided by the total number of grant proposals submitted, less any proposals still pending.

The survey requested information on the number of proposals submitted in fiscal year 2003-2004 that were funded, declined, or pending. Of the 25 respondents reporting data on grant submissions, the median number of grants submitted for fiscal year 2003-2004 was 26 with a mean of 37 ($SD = 38$). The range included one institution that submitted only 2 grants and another institution that submitted 135. Twenty-one colleges (84%) submitted 55 or fewer grants. The 25 community colleges responding to these survey items generated 936 grant submissions.

Survey responses indicated that 25 colleges were awarded 615 of the grant submissions for which a determination had been made at the time of the survey, yielding an overall statewide success rate of 72% [grants funded/(grants submitted – grants pending)]. The average number of funded proposals was 25 with a median of 14 funded proposals. Descriptive statistics on grants submitted, funded, declined, and pending are provided in Table 9 along with calculations of grant success rate.

Table 9

Grant Submissions and Awards for Florida Community Colleges, FY 2003-2004

Grant Activity	Minimum	Maximum	Sum	<i>Mdn</i>	<i>M</i>	<i>SD</i>
Grants submitted	2	135	936	26	37	38
Grants funded	1	96	615	14	25	24
Grants declined	0	60	229	6	9	13
Grants pending	0	40	92	0	4	9
Success Rate	45.45	100		74	72	16

n = 25

Two research questions required a calculation of return on investment as a measure of grant development effectiveness: (a) What is the relationship between the number of institutional advancement activities that report to the same administrator and return on investment? and (b) What is the relationship between the integration of other institutional advancement activities with grant development and return on investment? To determine return on investment, the annual grant revenue was divided by the institutional investment in grant staffing. State-wide average salaries provided by the Florida Community College System were used to equalize salary differences across institutions and approximate the institutional investment in grant development. To calculate institutional investment, the average salaries were multiplied by the respective number of administrators, professionals, and clerical employees assigned to grant development for the institution and then summed. This number, divided into the annual grant revenue

received by the institution, generated a return on investment that quantified grant dollars generated per dollar invested.

Descriptive statistics on grant revenue and institutional investment are provided in Table 10 along with the rate of return. With 20 institutions supplying the appropriate information on the survey, the mean institutional investment was \$112,478 with a standard deviation of \$72,570 and a median of \$83,285. The range of investment was reported as a low of \$25,148 and a high of \$278,094. All told, the 20 community colleges invested \$2,249,560 in grant development personnel in fiscal year 2003-2004.

To provide the data needed to calculate return on investment, the survey requested that respondents indicate the amount of grant revenue received by the institution in fiscal year 2003-2004, not including Pell grants or other federal financial aid to students. Grant revenue was categorized as federal, state, local, corporate/foundation, and other. Twenty-three community colleges completed the survey items regarding grant revenue.

Combined, these institutions generated more than \$147 million for Florida community colleges in 2003-2004. The minimum received by an institution was \$60,000 and the maximum was \$33,686,721. The mean was \$6,417,304 with a standard deviation of \$9,095,652 and a median of \$2,835,531. The large difference between the mean and the median indicated that a small number of colleges generated an extreme amount compared to the rest. Further analysis of the frequency data revealed that 3 of the 23 colleges (13%) accounted for \$83,066,856 in grant revenue, or 56% of the total amount generated.

The data in the paragraphs above were used to determine return on investment for 20 institutions. Descriptive statistics indicated that for each dollar invested in grant development, community colleges generated an average return of \$78.84 ($SD = \126.78).

There was considerable range in return on investment with a minimum return of \$1.04 per dollar invested to a maximum \$554.30 return on the dollar. The median return on investment for the 20 colleges for which data were available was \$34.47. Table 10 summarizes the descriptive statistics related to revenue generated, institutional investment, and return on investment.

Table 10

Grant Revenue, Institutional Investment, and Return on Investment for Grant Development in Florida Community Colleges

	<i>n</i>	Minimum	Maximum	Sum	<i>M</i>	<i>SD</i>
Grant revenue	23	\$60,000	\$33,686,721	\$147,597,995	\$6,417,304	\$9,095,652
Institutional investment	20	\$25,148	\$278,094	\$2,249,560	\$112,478	\$72,570
Return on investment	20	\$1	\$554	\$66	\$79	\$127

The two measures of effectiveness used in this research study, success rate and return on investment, measure different aspects of performance. Success rate is a reflection of the quality of the product while return on investment measures the efficiency of the process. Using data collected from the survey, the community colleges that provided the appropriate information were ranked based on their success rate and on their return on investment. Two of the five community colleges with the highest success rate scored in the bottom five with regard to return on investment. Conversely, two of the institutions with a high return on investment, reported low success rates. Only one community college ranked in the top five on both success rate and return on investment.

That institution had a larger than average grants staff, submitted the largest number of grant proposals, and received the greatest amount of grant revenue. The level of organizational and operational integration of institutional advancement functions indicated that the institution was formally linked with only one other function but had a higher than average amount of informal coordination of key institutional advancement activities.

Finally, the survey asked for information about the criteria by which grants performance is evaluated by each college and the measures of effectiveness that are reported to internal and external stakeholders. A list of 12 measures of effectiveness was generated by the researcher based on a review of the literature and recommendations of a panel of experts comprised of grant development practitioners. The final list, as it appears in Table 11, was included in the survey in an attempt to answer the following research question: What measures or key indicators do Florida community colleges use to determine the effectiveness of grant development efforts? The data collected on the survey were used to rank the measures of effectiveness in terms of their importance to the respondents. The data is summarized in Table 11.

The respondents then were asked to report which of the 12 measures of effectiveness they report to either the college administration, board of trustees, faculty and staff, or community. A close look at the information summarized in Table 12 shows that the measures of effectiveness that are reported to internal and external stakeholders are not necessarily the same measures of effectiveness that grant development officers deem most important.

Table 11

Measures of Effectiveness for Grant Development Performance in Florida Community Colleges

Measures	Very important		Important		Somewhat important		Not important	
	No.	%	No.	%	No.	%	No.	%
Percent of grants that support strategic goals	21	80.8	4	15.4	0	0	1	3.8
Total dollars awarded	17	65.4	8	30.8	1	3.8	0	0
Number of grants awarded	17	65.4	5	19.2	3	11.5	1	3.8
Achievement of grant objectives	16	61.5	7	26.9	2	7.7	1	3.8
Percent of grants awarded	12	46.2	8	30.8	3	11.5	3	11.5
Number of students served	11	42.3	5	19.2	9	34.6	1	3.8
Number of grants submitted	8	30.8	10	38.5	6	23.1	2	7.7
Percent of grant revenue increase over prior year	7	26.9	11	42.3	8	30.8	0	0
Return on investment	7	26.9	10	38.5	6	23.1	3	11.5
Percent of grant funds to institutional budget	5	19.2	8	30.8	9	34.6	4	15.4
Number of faculty involved	4	15.4	11	42.3	10	38.5	0	0
Indirect/administrative costs received	3	11.5	9	34.6	9	34.6	5	19.2

N = 26

Table 12

Measures of Effectiveness for Grant Development Performance Reported by Florida Community Colleges

Measures	Report		Do not report	
	No.	%	No.	%
Number of grants awarded	24	96	1	4
Number of grants submitted	24	96	1	4
Total dollars awarded	23	92	2	8
Percent of grants awarded	20	80	5	20
Percent of grant revenue increase over prior year	17	68	8	32
Achievement of grant objectives	16	64	9	36
Indirect/administrative costs received	16	64	9	36
Percent of grants that support strategic goals	15	60	10	40
Percent of grant funds to institutional budget	15	60	10	40
Number of faculty involved	13	52	12	48
Number of students served	11	44	14	56
Return on investment	11	44	14	56

n = 25

The information presented in this section of Chapter 4 has been useful for establishing a profile of grant development offices in Florida community colleges and in identifying the key indicators that Florida community colleges use to measure or benchmark their effectiveness. The data also were used to determine whether organizational integration was related to grant success or return on investment and

whether operational integration was related to grant success or return on investment.

Associations among these variables are analyzed in the following section.

Factors Associated with Grant Development Effectiveness

Responses to the survey were used to assess the degree of association between two key organizational and operational factors (independent variables) and two key effectiveness measures (dependent variables) for community college grant development.

Linear regression analyses were conducted to respond to the following four research questions:

1. What is the relationship between the number of institutional advancement activities that report to the same administrator and grant success rate?
2. What is the relationship between the number of institutional advancement activities that report to the same administrator and return on investment?
3. What is the relationship between the integration of other institutional advancement activities with grant development and grant success rate?
4. What is the relationship between the integration of other institutional advancement activities with grant development and return on investment?

A simple linear regression analysis was conducted to examine the degree of association between organizational integration of institutional advancement functions and grant development success for fiscal year 2003-2004. Organizational integration (the independent variable) was defined as the number of institutional advancement activities that report to the same administrator as the grants activity. Success rate (the dependent variable) was defined as the ratio of grant proposals funded to grant proposals submitted

(less any pending proposals). Simple linear regression assumptions were tested and met. A scatterplot of studentized residuals to predicted values indicated that the linear regression assumptions of linearity and homogeneity were met. A Q-Q plot indicated the residuals were normally distributed and, although a histogram indicated a bimodal distribution, the mean of the residuals was 0. Skewness and kurtosis statistics also indicated normality as did non significant Kolmogorov-Smirnov and Shapiro Wilks tests ($p > .05$). A .05 significance level was used. The results of the regression analysis were not statistically significant, $F(1, 23) = 1.50, p = .23$, and had an R^2 of .06 with an adjusted R^2 of .02. Organizational integration as defined by this research study could not be used to predict grant success rate.

A second linear regression analysis was conducted to determine if organizational integration could be used to predict return on investment. Return on investment was determined by the budgetary commitment of the institution for grant development personnel using state-wide average salaries for administrators, professionals, and career employees. Tests on simple linear regression assumptions were met for independence, homogeneity, and normality with some indication of bimodality on the histogram of studentized residuals. With the dependent variable as return on investment, the regression equation results indicated $F(1, 18) = .80, p = .38$, and an R^2 of .04 with an adjusted R^2 of -.01. The Bonferroni method was used to adjust for the increased possibility of a family-wise Type I error. There was not a statistically significant association between organizational integration and return on investment at the adjusted alpha level of .0125. Summary statistics for the linear regression analyses are provided in Tables 13 and 14.

Table 13

Summary Statistics for Linear Regression on Organizational Integration and Grant Development Success Rate for Florida Community Colleges

Variables	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	R^2
Intercept (Constant)	76.97	5.28		14.58	.00	
Success rate	-1.88	1.54	-.25	-1.22	.23	.06

n = 25

Table 14

Summary Statistics for Linear Regression on Organizational Integration and Grant Development Return on Investment for Florida Community Colleges

Variables	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	R^2
Intercept (Constant)	116.24	50.52		2.30	.03	
Return on investment	-12.46	13.90	-.21	-.90	.38	.04

n = 20

Additional statistical analyses based on linear regression attempted to relate operational integration of institutional advancement to either success rate or return on investment. As the independent variable, operational integration was determined by survey responses to questions about the number of other institutional advancement functions that coordinated key activities with grant activities. In both cases, tests on simple linear regression assumptions were met for independence, homogeneity, and normality with some indication of bimodality on the histogram of studentized residuals. Again, the Bonferroni method was used to adjust for the possibility of a Type I error. Analysis of the data revealed that no statistical significance can be associated between

operational integration and either of the dependent variables. For grant development success rate, $F(1, 23) = .47, p = .50$, with an R^2 of .02. For return on investment, $F(1, 18) = .10, p = .75$, with an R^2 of .01. Both cases used a Bonferroni adjustment for determination of statistical significance at the .0125 level. Summary statistics for the linear regression analyses are provided in Table 15 and Table 16.

Table 15

Summary Statistics for Linear Regression on Operational Integration and Grant Development Success Rate for Florida Community Colleges

Variables	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	R^2
Intercept (Constant)	75.78	6.68		11.34	.00	
Success rate	-.86	1.27	-.14	-0.68	.50	.02

n = 25

Table 16

Summary Statistics for Linear Regression on Operational Integration and Grant Development Return on Investment for Florida Community Colleges

Variables	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	R^2
Intercept (Constant)	96.47	61.94		1.56	.14	
Return on investment	-3.63	11.28	-.08	-.32	.75	.01

n = 20

Linear regressions for all four research questions revealed no statistically significant results. There was not enough evidence to reject the null hypotheses that there are no relationships between the independent and dependent variables.

Summary

Descriptive statistics on data obtained from survey respondents were used to describe grant development activities at Florida community colleges. It was found that 88.5% of the 26 community colleges that responded to the survey out of a population of 28 had established a grants office with 56.5% of the institutions assigning grant development responsibility to an administrator on a full-time basis. The average staff size included a part-time administrator (.61 FTE), at least one professional level staff member (1.26 FTE), and a part-time clerical person (.78 FTE). Resource development operating budgets were frequently combined with other departmental budgets and were not easily distinguished. The typical primary grant development officer at a Florida community college had the title of director (42.3%) and reported to a position that was one removed from the president (84.6%). On the average, 3 other institutional advancement functions reported to the same administrator as the grants officer. On the other hand, community colleges coordinated the key activities of 4 other institutional advancement functions with grant development activities, indicating a tendency to operationally integrate institutional advancement functions regardless of organizational and administrative reporting structure.

The number of grants submitted by community colleges varied considerably as did the success rate of funded proposals. Overall, 25 community colleges submitted 936 grant proposals in fiscal year 2003-2004 and received funding for 615 of those proposals. Not including the 92 proposals that were pending at the time of the survey, the colleges' combined success rate was 72%. More than \$147 million was received in grant revenue, ranging from \$60,000 at one college to \$33,686,721 at another.

The top six measures of effectiveness identified by the survey respondents as very important in evaluating performance were ranked as follows: (a) percent of grants that support strategic goals, (b) number of grants awarded, (c) total dollars awarded, (d) achievement of grant objectives, (e) percent of grants awarded, and (f) number of students served. The top six measures of effectiveness that survey respondents routinely report to internal and/or external stakeholders were ranked as (a) number of grants awarded, (b) number of grants submitted, (c) total dollars awarded, (d) percent of grants awarded, (e) percent of grant revenue increase over prior year, and (f) achievement of grant objectives. There appears to be some disparity between what measures are considered to be important and what measures are reported.

Four simple linear regressions were conducted to determine whether there was a predictive relationship between organizational integration and success rate, organizational integration and return on investment, operational integration and success rate, and operational integration and return on investment. There were no statistically significant relationships found in any of the regressions and the results failed to support rejection of the null hypotheses.

CHAPTER 5

DISCUSSION OF FINDINGS AND RECOMMENDATIONS

This study was designed to collect information about the characteristics of grant development programs at the 28 publicly-supported community colleges in the state of Florida. Relationships between the institutional advancement activities and organizational structures of the 26 respondent colleges and their success in receiving grant funding were explored and comparisons among institutions were made. Principal components of grant success rate, return on investment, and the organizational and operational integration of institutional advancement functions were identified and incorporated into linear mathematical models to predict grant development success. Chapter 5 discusses the results of the study, makes suggestions for using the data, and recommends further directions of study.

Introduction

As educational funding from traditional sources decreases and the cost of operating educational programs increases, community colleges are seeking new funding streams to increase revenue. Resource development, the acquisition of funding through private fund-raising and grant development, has evolved into a viable source of funds for many 2-year colleges. Although specifically designated programs or offices that are assigned the responsibility of facilitating the development and submission of grant applications are a relatively new addition to the structure of a community college (Keener, et al., 2002), government grants and contracts are the fastest growing revenue

source for 2-year institutions (Merisotis & Wolanin, 2000). A highly successful resource development program not only brings in large sums of money but, as part of an overarching institutional advancement effort, can help develop positive public relations for a college and increase community interaction and support (Jenner, 1987).

Limited information on fund raising in general and grant development in particular has drawn attention to a need for survey and research data that will provide a better understanding of the status of external funding efforts in community colleges. A broader call for research to add to the body of knowledge related to the various functions that comprise institutional advancement has been heard from several prominent research teams including Grace and Leslie (1990), Brittingham and Pezzullo (1990), and Loessin and Duronio (1993). Potential outcomes of such research include information for practitioners and greater financial health for institutions. Studies to determine optimal organization and management models for community college resource development would benefit the nearly 1,200 community colleges in the United States in a number of ways. Research on organizational models could assist those colleges who are establishing or expanding resource development programs. Studies to devise a method for determining potential success of community college resource development could be used to assess quality and effectiveness of existing programs.

This research study grew out of a discussion among members of the Florida Council for Resource Development regarding the need for a model for determining potential success of community college resource development that could, when matched against actual program activity, serve as a valuable evaluation tool. The Florida Council for Resource Development is a professional networking group for grant development

officers and foundation directors at the 28 Florida community colleges. The purposes of this research study were to (a) determine the current profile and status of grant development programs in Florida community colleges and (b) identify factors associated with grant development success. The variables selected for analysis from a review of the relevant literature included two independent variables related to the operational and organizational characteristics that community colleges use to effectively engage in grant development and two dependent variables identified as measures of effectiveness: grant success rate and return on investment.

The following research questions were raised:

1. What are the organizational and operational characteristics of grant development offices in Florida community colleges?
2. What measures or key indicators do Florida community colleges use to determine the effectiveness of grant development efforts?
3. What is the relationship between the number of institutional advancement activities that report to the same administrator and grant success rate?
4. What is the relationship between the number of institutional advancement activities that report to the same administrator and return on investment?
5. What is the relationship between the integration of other institutional advancement activities with grant development and grant success rate?
6. What is the relationship between the integration of other institutional advancement activities with grant development and return on investment?

Discussion of Findings

A cross-sectional survey sent to the primary resource development officer at each institution in the Florida Community College System was used to collect data to respond to the research questions. The statewide system includes 28 institutions serving more than 880,000 students (annual unduplicated headcount) at 52 campuses and 173 off-campus sites. Funding is derived primarily from the state's general revenue fund, lottery money, and student fees. Although the size, location, and structure of community colleges vary greatly throughout the state, all of Florida's community colleges supplement state funding with some grant revenue from external sources. Twenty-six (93%) of the 28 institutions completed the survey.

In response to the first research question, results of the survey were compiled to provide a synopsis of current grant development programs in Florida community colleges. Data from the survey indicated that 88.5% of the respondents had a unit or office specifically assigned the responsibility of facilitating grant proposal development and submission. The two institutions that did not complete a survey instrument are known to the researcher not to have separate grants offices or specifically assigned personnel. If these two institutions are factored into the data, 23 of 28 community colleges (82%) had grants offices at the time of the survey. The large percentage of Florida institutions with grants offices indicates their responsiveness to the growing need to increase external funding at the institutional level to offset increasing demands on funding for higher education at the state level.

Nearly 30 years prior to this study, a national survey of 1,100 community colleges was conducted to determine current trends in obtaining outside financial support. That

descriptive study, with a 78% response rate, indicated that 64% of community colleges engaged in resource development and about 50% of them had established grants offices (McCain, 1975). More recently, a national survey of 1,100 institutions, with a response rate of 34%, reported that 78% of community colleges had a grants office (Keener, et al., 2002; Meaders, et al., 2003). Although the more recent national study included inferential analysis, data related to grants office staffing was used for descriptive purposes only.

Resource allocation of staff and budget is a clear indication of institutional commitment for resource development. Institutions that devote sufficient staff time to grant development, including a full-time resource development officer, tend to be the most successful in acquiring grant funding (Hagerman, 1978; Jenner, 1987; Young, 1978). Grant development offices in Florida, according to survey respondents, were typically staffed with an administrator; at least one full-time professional, most often referred to as a grant coordinator, specialist or writer; and a part-time clerical assistant. Slightly more than half (56.5%) had a full-time resource development officer at the administrative level. Most administrators assigned to the grants office reported to a vice president and many of them had other assigned responsibilities in addition to grants. When activities were clustered under a single administrator, operating budgets designated for grants activities were more difficult to distinguish and quantify. The practice of assigning multiple responsibilities to resource development staff and the wide variation in reported operating budgets may have been a reflection of an institutional lack of commitment, or it may be simply that institutional resources were limited (the very reason that brought about the need for grants in the first place).

The importance of resource development to the health and vitality of community colleges across the nation is reflected in the increasing numbers of staff assigned to the grant development function. The percentages of 2-year colleges assigning staff to grant development increased only slightly during the late 1970s and the 1980s, from 50% in 1975 to 58% in 1992, but took a significant leap in the 1990s with a reported 81% of community colleges having at least one full-time professional staff assigned to grant development (Keener, et al., 2002; Matsoukas, 1996; McCain, 1975; Meaders, et al., 2002). The survey results of this study revealed that 88.5% of the respondents had assigned personnel to the grants function. The average reported staff size was 2.4 full time equivalent employees, a 60% increase over the average 1.5 full time equivalent staff for grants offices reported in a 1992 national survey of community college grants offices (Matsoukas, 1996). The range in number of grants staff, 0 to 8, had also increased when compared to previous research studies. Although more staff does not necessarily increase the percentage of proposals that get funded (success rate), the data produced by this study did indicate that colleges with more staff allocated to grant development submitted more grant proposals and generated more grant dollars overall. The fact that no resource development responsibilities were formally assigned to faculty may be due to the lack of emphasis on research at the community college level. The preponderance of grant revenue received by community colleges is used for academic and financial support to students, or operational support for educational programs and services.

In this study, formal and informal organizational structures were examined as a measure of the strength of the working relationships among the 10 institutional advancement functions: (a) institutional research, (b) marketing, (c) government

relations, (d) community affairs, (e) corporate relations, (f) media relations, (g) alumni affairs, (h) foundation, (i) publications, and (j) resource development. The data indicated a tendency for Florida community colleges to organizationally decentralize grants from the other institutional advancement functions in terms of formal organizational reporting structure with half of the colleges reporting an alignment of 2 or fewer functions. There was no clear rationale or preference for the formal reporting structure of institutional advancement. The grants function was as likely to be aligned with any one of the functions as with another. A flatter organizational structure may reflect the need for colleges to identify and respond to changing markets and diversified target audiences.

A higher level of operational integration indicated that more informal coordination among institutional advancement activities was taking place than the prevailing organizational structures would indicate. The informal operational alignment indicated a clear preference for coordinating grant development with activities associated with fund raising/foundation and institutional research. This may be the result of an increasing need to acquire grant funds to help finance key college initiatives and a way to ensure consistent representation of institutional image when communicating with both public and private external funding sources.

Research studies on grant success in 2-year colleges have indicated that grants offices that have clearly articulated performance objectives and formally evaluate their performance on a regular basis tend to be more effective in grant acquisition (Hagerman, 1978; Young, 1978). In response to the second research question, the survey identified the measures of success that grant development officers considered most important in establishing grant development effectiveness and those measures that were reported to

either internal or external constituents. The dichotomy between the measures that survey respondents rated “very important” or “important” and the measures that they routinely reported to stakeholders was revealing. Grant development officers did not want to have their performance judged strictly on quantitative measures such as number of grants submitted and total dollars awarded. They felt it was far more important to expend their efforts on those grant activities that would support the strategic goals of the institution. Although the post-award implementation and management of the grants was largely out of their control, they wanted in some way to have the achievement of grant objectives and the number of students served to be incorporated into their performance measures. Despite this strong proclivity to think of grants as a means for progressing the college toward a greater good, grant development officers tended to report on measures that were easiest to document and most likely to be understood by a broad audience.

The last four research questions were included in this study in response to higher education research cited in Chapter 2 that suggested a connection between effective development efforts and alignment of institutional advancement functions, including a qualitative research study that identified greater integration of advancement activities as a way to increase income from targeted revenue streams (Birmingham, 2002). Empirical evidence was not found to support integration of advancement activities as a statistically significant predictor of grant success. The findings did not provide evidence of a strong relationship between formal organizational structure of institutional advancement and funding success, nor between organizational reporting structure and return on investment. Similarly, the findings did not indicate a predictive link between the operational integration of institutional advancement activities and funding success or return on

investment. On the other hand, it must be clearly understood that the findings of the study did not refute the research previously cited and the results should not be taken to suggest that there is no relationship at all. Organizational integration of institutional advancement with the grant development function and operational integration of institutional advancement with the grant development function were not determined to be a statistically significant or predictive factor associated with institutional effectiveness in grant development but can not be considered to be without some influence on a college's ability to generate grant revenue. Whether through formal organizational structure or informal operational function, the importance of communication channels that enable the grants office staff to be aware of institutional goals, communicate with other segments of the institution, and be part of the planning process cannot be overlooked or discounted (Hagerman, 1978; Matsoukas, 1996).

Implications for Policy or Practice

Resource development provides a means for community colleges to diversify funding, create or expand programs, and promote and achieve the college mission. Grant funding can have a positive impact on curriculum, student support services, faculty development, facilities, equipment, and technology (Matsoukas, 1996). Many factors must be present and integrated into the college structure for resource development efforts to be successful and provide substantial grant revenues. In this study, the average grant revenue per institution based on fiscal year 2003-2004 information was \$6,417,304 compared to the average grant revenue per institution of \$4,145,035 reported by Meaders (2002) and based on fiscal year 1998-1999 data. Survey results supported several

research studies that found federal funding to be the largest source of grant funds for community colleges (Keener, et al., 2002; McCain, 1975; Young, 1978). Florida community colleges reported that federal grants for fiscal year 2003-2004 comprised 53.4% of the total grant revenue received, state funds accounted for 36.4% of grant revenue, and local, corporate, foundation, and other private sources accounted for slightly more than 9%.

More research is needed to try to isolate those factors that can predict or influence success in grant development for community colleges. This study applied a linear regression model to key variables suggested by previous researchers as important to success in an attempt to gain an understanding of the optimal environment for grant development. Unfortunately, the true impact of a single variable may be impossible to determine when several elements are at work. The apparent lack of relationship revealed by the study may actually mask a more powerful influence as part of a complex and interrelated system (Meaders, 2002). Other factors that may affect success were outside the scope of this study. For example, grant development success may be influenced by the institution's history in obtaining funding, the quality of grant proposals submitted, and the tenure and experience of the primary grants officer (Hagerman, 1978; Matsoukas, 1996; Meaders, 2002). Although important, these factors were not examined as part of this study and will not be discussed here. It also was assumed for the purposes of this study that any effects caused by political and economic considerations external to the institution were equally distributed across the population surveyed.

A clearly defined model for grant success has not emerged from previous research, nor have specific factors associated with success been identified by this study.

The factors under consideration, success rate and return on investment, produced divergent results. Institutions that reported a high success rate did not necessarily have a high return on investment, and institutions that indicated a high return on investment, were sometimes among the lowest in terms of success rate. For success rate, there appeared to be an advantage to represent a large institution and have a larger than average grants staff. Colleges that reported a high return on investment often had smaller than average grant staffs but produced more proposals per staff. Institutions with low student enrollment appeared to be at a disadvantage for both success rate and return on investment. Smaller institutions may have established their grants offices more recently, have less seasoned staff, and less experience coordinating institutional advancement activities. Information on the length of time each grants office had been in operation was not included in the survey but has been shown by other researchers to have an impact on success (Meaders, 2002).

What is more immediately important to practitioners is that this study established a profile of data on resource development efforts in Florida community colleges. The profile indicated that resource development efforts are yielding significant contributions to community college funding streams: an average of \$6.4 million per college. Statewide, this amounted to \$147.6 million of additional support for community college programs and services in fiscal year 2003-2004. College leaders must do all they can to maximize the potential of their institutions to acquire grant funding. College presidents, administrators, and trustees must consider expenditures on grant development personnel to be an investment with considerable revenue-generating potential. Several research studies lend evidence to the argument that the institutions that are most effective at

acquiring grant revenue are the ones that invest institutional resources in sufficient staff and provide adequate amounts of operating funds to support grant development activities (Hagerman, 1978; Jenner, 1987; McCain, 1975; Young, 1978).

Although there appears to be no single most efficient or effective grant development organizational or operational structure, grant development should be understood to be a key element in the overall institutional advancement effort and in the management system of the college. While 81% of the survey respondents indicated that their institution's grant development unit was incorporated into either the advancement or institutional effectiveness arm of the college, three of the grants offices were part of the student services function, one was in the administrative services area, and one was in economic and workforce development, making it more difficult to define an integrated team. It is important that community colleges establish organizational structures and strategic management systems that allocate resources based on an integrated institutional advancement plan and fully support the revenue generating goals of the college. Community college leaders should seek out best practices and theories that highlight institutional strategies for gaining competitive advantage in resource development regardless of organization or structure.

Community colleges need to develop and maintain a long-standing commitment to the use of data and information for making decisions, improving performance, and ensuring accountability. Greater consistency in reporting and definitions and the use of more precise language is essential to addressing the needs of decision-makers (Cohen & Brawer, 1996). The results of the grant development survey can be used by community colleges to establish common definitions, identify benchmark institutions, and determine

appropriate measures of success that can be adopted statewide. The survey provides a baseline for identifying trends and issues for improving grant funding and resource procurement. Making this data widely accessible to those who need it and sharing information through professional organizations such as the Council for Resource Development and its regional and state affiliates can lead decision makers to a clearer understanding of the relative need to build capacity and competency for developing grants. Using the data to benchmark performance with other community colleges can help administrators determine if they are staying abreast of best practices. Institutions that have not invested resources into the establishment of an adequately staffed grants office might consider using the data to make a case for increasing the institution's capacity for grant development.

Establishing institutional priorities for grant development can help focus time and resources on areas related to achieving the college mission (Meaders, 2002). Evaluation of the grant development effort is recommended for colleges that want to increase their success. However, neither success rate nor return on investment resulted in statistically significant relationships with the independent variables in the study. Based on the input from resource development officers regarding the evaluation criteria that they considered most important, it is suggested that a more appropriate measure might be the ability to meet institutional needs with external sources of funds. To do this, a college should be selective in submitting grant proposals for funding and seek outside funding only for projects which meet the needs of the institution and are consistent with already established goals, objectives, and strategic priorities. Resource development officers who completed the survey agreed that it is only when grant-funded projects help meet the

college's goals and objectives that resource development can be considered truly successful.

Public community colleges must compete effectively for grants from public and private sources if they are to meet the needs of their students. This study and the measures of effectiveness that survey respondents indicated as "very important" and "important" can be used as a starting point for developing a performance measurement model that will enable community colleges to assume responsibility for grant development effectiveness. The model can be used to develop a statewide management information system for uniform reporting among the 28 institutions in the Florida Community College System. Data provided by all the colleges in the state could then be cross-tabulated for the benefit of planners and decision makers at individual institutions and used to generate reports on core measures (Cohen & Brawer, 1996). The performance model can be used to document the impact of resource development on the state community college system, identify best practices that can assist colleges with low performing resource development offices to improve their effectiveness, or help colleges without grants offices determine which concept to adopt to best meet the needs of their institution.

The study was appropriate and timely because of the growing emphasis on the acquisition of external funds to support the community college mission, growth in enrollment, and the changing nature and needs of community college students. Once thought of as a haven for non-traditional students, community colleges are seeing a shift toward increasing enrollment of the traditional, first-time-in-college, full-time student. An analysis of student characteristics reported by the Florida Department of Education

indicated that the total statewide community college student population increased 12.8% between 1998-1999 and 2003-2004. Within that population increase were several significant demographic shifts that show a changing profile of students. The number of first-time-in-college students increased 33%. The fastest growing age categories were those for students less than 25, increasing overall by 25% during the 5-year period. The number of full-time students increased by 23%, whereas part-time students increased only 1%; the number of female students increased 15%, nearly twice the rate of males. Community colleges must be alert to changes in student demographics and make appropriate strategic shifts and programmatic changes if they are to continue to meet the needs of their students. Grant funding provides additional monies that enable colleges to begin new programs, offer additional services, and expand both physical facilities and virtual capabilities.

Resource development is more widely acknowledged than ever as an essential component of community college funding and as a key component in strategic planning, development, and implementation. Further efforts to identify factors associated with successful resource development programs will aid college administrators, trustees, and development professionals in strategic planning to meet institutional goals. It will provide supportive data to community college leaders in making critical decisions about allocating staff and budgetary resources to develop a resource development function that will successfully support the growth and direction of the college.

Recommendations for Future Studies

The emerging importance and increasing sophistication of resource development in community colleges increases the need for further research. Some of the recommendations for further study evolving from this research may be able to be answered through more detailed analysis of the existing data. Other questions will require the gathering of new data.

The study tried to isolate the organizational and operational characteristics of the respondents' grant development efforts and quantify effectiveness based on success and return on investment. The entire data set included other information that could be related to effectiveness in grant development and used for additional analyses. Further study is recommended to identify and clarify key elements and measures of grant development effectiveness. The differences among survey respondents in the measures they routinely use and report to constituents indicates a lack of consensus as to a logical definition of success. Identifying a set of acceptable measures for determining grant development success that could be widely adopted by community colleges would contribute significantly to an overall understanding of resource development in 2-year institutions.

For institutions surveyed, the data suggested that the ability to acquire grant funding from external sources may be related to the financial and staff resources provided for grant development programs. It is important that college leaders recognize their responsibility to understand the resource development function and provide the elements of support that are needed for effective grant development and that they view the commitment of institutional support as an investment, not an expense (Merisotis & Wolanin, 2000). To expand this understanding, further study is recommended on the cost

of procuring grant revenue. Little is known about the true cost of grant development and the factors that affect return on investment. The practice of clustering responsibilities and unit budgets under a single administrator makes it difficult to isolate the amount of institutional funds expended on grant development. Past research has shown that the institutions that have more money invested in grant development operations tend to have a higher rate of success in grant procurement. More research is needed to help college administrators determine how much staff and budget is appropriate for a specific institution to commit to grant development and if there is a point of diminishing return on that investment.

Further study is recommended on the integration of institutional advancement functions and activities. It might prove interesting to examine in more detail why the integration of grant development with other institutional advancement activities is supported by the literature and previous research but the variables used in the study to measure that integration did not show a statistically significant relationship with success or return on investment. Additional work is needed to develop measurement techniques which would enable a researcher to assess the interrelationships among the institutional advancement functions to determine if there are some functions which have a greater association with success than others and determine if there are multiple interrelationships in which a combination of functions has statistical significance. Alternatively, applying different statistical procedures to the data might produce results that indicate stronger relationships between or among variables.

Refinement of the Grant Development Survey might be warranted to increase construct validity. Some survey items might have been subject to misinterpretation and

could be clarified through more consistent language or defined terminology. The wide range of responses regarding operating budget suggested a misunderstanding by some of the respondents of the nature and intent of the question. More exact explanations and specific budget categories could be used in future surveys to obtain reliable and relevant responses. The survey instrument could be revised to include definitions for use by the respondents.

Institutional characteristics alone may not explain adequately why some institutions raise more money than other similar colleges (Loessin & Duronio, 1993). The addition of an interview component might contribute further to an understanding of the organizational dynamics which stimulate successful grant development. The most successful community college resource development offices, those with the highest success rates and highest returns on investment, could be the subject of qualitative interviews and comparative case studies designed to reveal best practices and characteristics that contribute to their effectiveness. Qualitative interviews with community colleges with low success rates and low returns on investment would be another source of revealing information about factors associated with grant success.

Finally, one of the major shortcomings of this study needs to be addressed. The study was limited to the 28 community colleges in the state of Florida and can not be generalized to a larger population. A study of similar nature conducted on a larger scale, preferably nationwide, might be more useful for addressing measures of success in other geographic areas. The extent to which survey results produce comparable results in similar contexts increases reliability. Replication of the study with a more widely

disseminated survey and a larger population and sample size that produced similar findings would increase the ability to make predictions.

Findings from this study provided evidence that grant development efforts of Florida community colleges are resulting in substantial external revenue for enhancing programs, facilities, and student access. Follow up surveys could be used to study the grant development efforts of Florida community colleges over a period of time. A statewide survey could be conducted at 5-year intervals to allow for trend analysis and profile comparisons.

The ability to be successful in gaining external funding has become critical to the health and vitality of community colleges across the nation. Growing numbers of resource development professionals agree that grant success is the result of many factors and community colleges vary tremendously in their capacity for development success. As 2-year colleges learn to use their strengths to maximize institutional resources for grant development, the potential for community college efforts to yield increasing grant funding will continue to transform higher education. The study of the components and characteristics that allow for predicting successful grant acquisition is of continuing research interest and mounting practical importance to community college presidents, administrators, trustees, and resource development professionals.

APPENDIX A

COMMUNITY COLLEGE GRANT DEVELOPMENT SURVEY

COMMUNITY COLLEGE GRANT DEVELOPMENT SURVEY

Introduction

The Florida Council for Resource Development and the University of Central Florida College of Education are surveying the state of Florida's 28 community colleges to obtain current information about community college grant development. **Your college's participation is critical to this project.** The survey results will enhance the efforts of two-year colleges by identifying factors associated with effective grant development and will provide an accurate picture of community college grant activity in the state.

Instructions

The survey should be completed by the individual at your college who is primarily responsible for external funding through grant development. If you are not the appropriate person to complete the survey, please forward it to the individual who is.

Please note that all numerical or monetary information that is requested should be based on academic year 2003-2004.

If you have questions, please contact Nancy Morgan by e-mail at morgann@dbcc.edu or by phone at (386) 506-4579.

Please return the survey by Friday, October 8, 2004.

Mail to Nancy Morgan, Resource Development, Daytona Beach Community College, Daytona Beach, FL 32120-2811.

In keeping with the university's informed consent process, we wish to make you aware of your rights and the conditions of this research study: Specifically, there is no risk to you as a participant in this study. Your participation is voluntary, and there is no penalty for not participating. It will take approximately 15 minutes to complete the entire survey. You do not have to answer any question you do not wish to answer, and you have the right to withdraw from the study at any time without consequences. Your identity will be confidential to the extent provided by law, and your individual or college name will not be associated with or used in any report of the survey results. There is no compensation for your participation in this study; a token of thanks has been included with the survey instrument that you may keep whether you choose to participate or not. The benefit to participating will be the knowledge you gain about your college as a result of answering the survey questions. If you have any questions about the research procedures you may contact Nancy Morgan at Daytona Beach Community College, 1200 W. International Speedway Blvd, Daytona Beach, FL 32120-2811 or (386)506-4579. Any questions or concerns about research participants' rights may be directed to the University of Central Florida Institutional Review Board, Office of Research, 12443 Research Parkway, Suite 207, Orlando, FL 32826 or (407) 823-2901.



Florida Council for Resource Development

Community College Grant Development Survey

This questionnaire should be completed by the person *primarily* responsible for grants at your institution. **Instructions:** Please answer the following questions to the best of your knowledge.

START HERE

1. Does your community college have a grants office? Place an 'x' in the appropriate box.

- No → Skip to item 4
- Yes

2. If yes, is the grants office separate from the Foundation office?

- No
- Yes

3. If yes, how many persons are assigned to the grants operation?

Number of full-time personnel: _____ Administrators
 _____ Professional staff
 _____ Clerical staff
 _____ Faculty

Number of part-time personnel: _____ Administrators
 _____ Professional staff
 _____ Clerical staff
 _____ Faculty

4. What was the annual operating budget (personnel and other expenses) allocated for grant development for July 1, 2003 – June 30, 2004? If exact numbers are not readily available, please estimate.

\$ _____ FY 2003-2004 Annual Operating Budget for grant development

5. As the person primarily responsible for grants, what is your title?

6. What is the title of the person to whom you report?

7. What is your reporting relationship to the President? Place an 'x' in the box that best represents your institution.

- I report directly to the president
- I report to a position that reports to the president (one removed)
- I report to a position two or more removed from the president.

CONTINUE ON THE NEXT PAGE

CONTINUE HERE

8. Which of the following advancement functions are in the same reporting line as the grants function, i.e. report to the same administrator? Place an 'x' in the appropriate box for each function.

	Same Administrator	Different Administrator	Not Applicable
Alumni Affairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community Affairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate Relations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fundraising/Foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Government Relations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional Research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Marketing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Media Relations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Publications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. What is the relationship between the grants function and the following advancement functions? For each one, place an 'x' in the box that best represents your institution.

	Not a key activity at my college	Function exists but does not coordinate with grants development	Function coordinates some activities with grants development	Key activities are inter-dependent and share strategic management information
Alumni Affairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Community Affairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate Relations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fundraising/Foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Government Relations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional Research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Marketing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Media Relations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Publications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONTINUE ON THE NEXT PAGE

CONTINUE HERE

For items 10-23, indicate whether you have full, partial, or no responsibility for the grant development activity listed? Place an 'x' in the appropriate box.

	Full Responsibility	Shared Responsibility	No Responsibility
Pre-award:			
10. Budget preparation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Consortia/partnership development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Corporate/foundation grant development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Grant project design and development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Grant proposal editing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Grant proposal writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Research on funding sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Statistical research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Transmission of proposals to funding agency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Post-award:			
19. Negotiation with funding agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Fiscal management (grants accounting)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Compliance monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Program/budget amendments and extensions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Grant management (reports and deliverables)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Indicate the number of grant applications or proposals your institution submitted in FY 2003-2004. _____ Number of grant applications/proposals submitted			
25. Indicate the outcomes for the grant applications or proposals submitted by your institution in FY 2003-2004. _____ Number of grant applications/proposals funded _____ Number of grant applications/proposals declined _____ Number of grant applications/proposals pending			
For items 26 - 31, indicate grant revenue for FY 2003-2004. Do not include Pell grants or financial aid. If exact figures are not readily available, please estimate.			
26. Federal government (including Federal pass-through funds)		\$ _____	
27. State government		\$ _____	
28. Local government		\$ _____	
29. Corporations and Foundations		\$ _____	
30. Other _____		\$ _____	
31. Total grant revenue		\$ _____	

CONTINUE ON THE NEXT PAGE

CONTINUE HERE

For items 32 - 43, circle the number under the response that best indicates the importance to you of the following factors in evaluating your institution's grants performance:

	Not Applicable	Not Important	Somewhat Important	Important	Very Important
32. Total dollars awarded	1	2	3	4	5
33. Total number of grants submitted	1	2	3	4	5
34. Total number of grants awarded	1	2	3	4	5
35. Percent of grants awarded	1	2	3	4	5
36. Percent of grant funds to institutional budget	1	2	3	4	5
37. Percent of grant revenue increase over prior year	1	2	3	4	5
38. Percent of grants that support strategic goals	1	2	3	4	5
39. Number of students served	1	2	3	4	5
40. Number of faculty involved	1	2	3	4	5
41. Return on investment (ratio of costs to revenue)	1	2	3	4	5
42. Achievement of grant objectives	1	2	3	4	5
43. Indirect/administrative costs received	1	2	3	4	5

For items 44 – 55, circle the numbers under the responses that indicate what performance indicators or measures of effectiveness you report and to whom (circle all that apply):

	Do not Report	President and/or Administrators	Board of Trustees	College faculty and Staff	General Public/Community
44. Total dollars awarded	1	2	3	4	5
45. Total number of grants submitted	1	2	3	4	5
46. Total number of grants awarded	1	2	3	4	5
47. Percent of grants awarded	1	2	3	4	5
48. Percent of grant funds to institutional budget	1	2	3	4	5
49. Percent of grant revenue increase over prior year	1	2	3	4	5

CONTINUE ON THE NEXT PAGE

CONTINUE HERE

	Do not Report	President and/or Administrators	Board of Trustees	College faculty and Staff	General Public/Community
50. Percent of grants that support strategic goals	1	2	3	4	5
51. Number of students served	1	2	3	4	5
52. Number of faculty involved	1	2	3	4	5
53. Return on investment (ratio of costs to revenue)	1	2	3	4	5
54. Achievement of grant objectives	1	2	3	4	5
55. Indirect/administrative costs received	1	2	3	4	5

***** Thank you for your time in completing this questionnaire. *****

Please share any additional comments you have in the box below.

Please return this questionnaire to
 Nancy B. Morgan, Director of Resource Development
 Daytona Beach Community College
 1200 W. International Speedway Blvd., Daytona Beach, FL 32120-2811
 Phone: (386) 506-4579 Fax: (386) 506-4483 E-mail: morgann@dbcc.edu

APPENDIX B

COMMUNITY COLLEGE GRANT DEVELOPMENT OFFICERS

COMMUNITY COLLEGE GRANT DEVELOPMENT OFFICERS

Brevard Community College
Director of Development
1519 Clearlake Road
Cocoa, FL 32922
Telephone: (321) 632-1111

Central Florida Comm College
Director of Development
3001 SW College Rd, POB 1388
Ocala, FL 34478-1388
Telephone: (352) 237-2111

Daytona Beach Comm College
Dir of Resource Development
P.O. Box 2811
Daytona Beach, FL 32120-2811
Telephone: (386) 506-8131

Florida CC at Jacksonville
Dir Resource Development
501 W. State Street Room 264
Jacksonville, FL 32202
Telephone: (904) 632-3000

Gulf Coast CC
Dir of Instit Advancement
5230 West Highway 98
Panama City, FL 32401
Telephone: (850) 769-1551

Indian River Community College
Grants Development Spec
3209 Virginia Avenue
Fort Pierce, FL 34981
Telephone: (772) 462-4700

Broward Community College
Dir of Res Development
1000 Coconut Creek Blvd.
Coconut Creek, FL 33066
Telephone: (954) 201-7400

Chipola Junior College
Dir of Institutional Eff & Pla
3094 Indian Circle
Marianna, FL 32446
Telephone: (850) 526-2761

Edison Community College
District VP, Inst. Advancement
P.O. Box 60210
Fort Myers, FL 33906-6210
Telephone: (239) 489-9300

Florida Keys Community College
Foundation Exec. Director
Chief Business Officer
5901 College Road
Key West, FL 33040
Telephone: (305) 296-9081

Hillsborough Community College
Manager for Grants Development
39 Columbia Drive
Tampa, FL 33606
Telephone: (813) 253-7000

Lake City Community College
Rt. 19 Box 1030
Lake City, FL 32025-8703
Telephone: (386) 752-1822

Lake-Sumter Comm. College
Dir of Workforce Development/
Special Grants
9501 Highway 441
Leesburg, FL 34788
Telephone: (352) 787-3747

Manatee Community College
Director of Resource Development
5840 26th Street West
Bradenton, FL 34207
Telephone: (941) 752-5201

Miami-Dade College
Director of Institutional Initiatives
300 NE 2nd Ave., Rm 1301
Miami, FL 33132
Telephone: (305) 237-3316

North Florida Comm. College
Dir. NFCC Foundation
1000 Turner Davis Drive
Madison, FL 32340
Telephone: (850) 973-1600

Okaloosa-Walton Comm. College
Executive Director - Fndn
100 College Boulevard
Niceville, FL 32578
Telephone: (850) 678-5111

Palm Beach Comm. College
Grants Coordinator
4200 Congress Ave. MS #50
Lake Worth, FL 33461
Telephone: (561) 868-3501

Pasco-Hernando Comm College
Acting Exec. Dir, Foundations
10230 Ridge Road
New Port Richey, FL 34654
Telephone: (727) 847-2727

Pensacola Junior College
Grants Coordinator
1000 College Blvd.
Pensacola, FL 32504
Telephone: (850) 484-1000

Polk Community College
Comptroller
999 Avenue H., N.E.
Winter Haven, FL 33881
Telephone: (863) 297-1000

Santa Fe Community College
Asst. V.P. for Development
3000 NW 83rd Street
Gainesville, FL 32606
Telephone: (352) 395-5000

Seminole Community College
Grants Coordinator
100 Weldon Boulevard
Sanford, FL 32773-6199
Telephone: (407) 328-4722

South Florida CC
Grant Development Coord
13 East Main Street
Avon Park, FL 33825-3942
Telephone: (863) 453-6661

St. John's River Community College
Dean of Adult Education
5001 St. Johns Ave
Palatka, FL 32177
Telephone: (386) 312-4200

St. Petersburg College
Grants Coordinator
P. O. Box 13489
St. Petersburg, FL 33733
Telephone: (727) 341-3600

Tallahassee Community College
444 Appleyard Dr.
Tallahassee, FL 32304
Telephone: (850) 201-6200

Valencia Community College
Asst. to the VP, Res Dlv.
P.O. Box 3028
Orlando, FL 32802
Telephone: (407) 299-5000

APPENDIX C

INSTITUTIONAL REVIEW BOARD LETTER OF APPROVAL



Office of Research

September 9, 2004

Nancy Morgan
110 Surf Street
New Smyrna Beach, FL 32169

Dear Mrs. Morgan:

With reference to your protocol entitled, "Factors Associated with Success of Resource Development Programs at Florida Community Colleges," I am enclosing for your records the approved, expedited document of the UCFIRB Form you had submitted to our office.

Please be advised that this approval is given for one year. Should there be any addendums or administrative changes to the already approved protocol, they must also be submitted to the Board. Changes should not be initiated until written IRB approval is received. Adverse events should be reported to the IRB as they occur. Further, should there be a need to extend this protocol, a renewal form must be submitted for approval at least one month prior to the anniversary date of the most recent approval and is the responsibility of the investigator (UCF).

Should you have any questions, please do not hesitate to call me at 407-823-2901.

Please accept our best wishes for the success of your endeavors.

Cordially,

Barbara Ward

Barbara Ward, CIM
IRB Coordinator

Copies: IRB office
Dr. William Bozeman; Educational Research, Technology and Leadership, Room 222N

APPENDIX D

FIVE CONTACTS WITH SURVEY RECIPIENTS

Contact #1 - First Mailing



Florida Council for Resource Development

Daytona Beach Community College
1200 W. International Speedway Blvd.
Daytona Beach, FL 32120-2811
(386) 506-4579
Fax: (386) 506-3096

Date

Name

Title

Community College

Address

Address

Dear _____:

In a few days you will receive a brief questionnaire for an important research project being conducted by the Florida Council for Resource Development. It concerns the commitment and success of Florida community colleges in acquiring external funding through grants.

I wanted to let you know ahead of time that the survey will be coming to you in the mail. The study is an exciting one that will provide a more complete view of community college grant development. It is part of a larger effort to determine how we can measure the impact grants have on our colleges and communities.

The time you take to respond to the survey will be greatly appreciated. Of course we plan to share the results with everyone who participates. Thank you for helping to make this project one that will benefit us all.

Sincerely,

Nancy B. Morgan

P.S. I will be enclosing a small token of appreciation with the questionnaire as a way of saying thanks.

Contact #2 - Second Mailing



Florida Council for Resource Development

Date

Name

Title

Community College

Address

Dear _____:

I need your input for a study being conducted by the Florida Council for Resource Development. FCRD is developing a model for measuring success in acquiring external funding through grants. We are surveying all 28 community colleges in Florida so that our research is as complete and accurate as possible. As the person at your institution primarily responsible for grant development activities, your participation in this study is critical.

The enclosed survey will provide supportive data to community college leaders making critical decisions about allocating staff and budget to develop the resource development function. It will help identify factors associated with effective grants development and establish a framework for measuring and benchmarking the success of our efforts to acquire grants. We plan to share the results with all participants as well as at upcoming Council for Resource Development conferences (state, regional, and national).

Your answers are completely confidential and will be released only as summaries in which no individual institution's responses can be identified. Because every response counts, you can really help us by taking the time to complete the questionnaire. If you are not the appropriate person to complete it, please pass it on to someone who can. If for any reason your institution prefers not to participate in this study, please let me know by returning the blank questionnaire in the enclosed stamped envelope.

If you have any questions or comments about this study, please call me at (386) 506-4579 or contact me by e-mail at morgann@dbcc.edu.

Sincerely,

Nancy B. Morgan

P.S. We have enclosed a small token of appreciation as a way of saying thanks for your help.

Contact #3 - First E-Mail

Last week a questionnaire seeking input about grants development at your college was mailed to you. If you have already completed and returned the questionnaire, thank you very much. If not, please take the time to fill it out today. I will greatly appreciate it; your response is important.

If you did not receive a questionnaire, or if it was misplaced, please call, (386) 506-4579, or e-mail, morgann@dbcc.edu, and I will get another one in the mail to you today. Thank you for your response.

Nancy B. Morgan

Contact #4 - Second E-Mail

About three weeks ago, I sent a questionnaire to you that asked about grants development activities at your college. To the best of my knowledge, I have not received your response.

Input from colleges that have already responded is helping us get a better picture of the overall impact that grant funding to community colleges is having in Florida. Respondents have described their success in acquiring grants and have shared the way they measure their success. I am writing again because of the importance of your response to the accuracy and completeness of our research. We are counting on a 100 percent response so that the results will be truly meaningful. We will share the results with all the participants as well as the larger community of grant professionals.

A few people have indicated that the questionnaire was sent to the wrong person at their college. If that is the case, please pass the information on to the right person and let me know who that is by phone, (386) 506-4579, or email, morgann@dbcc.edu, so that I can correct the mailing list.

Protecting confidentiality is important. A questionnaire identification number is printed on the back cover of the survey so that individual names or institutions can not be connected to the results. I hope that you will fill out and return the questionnaire soon, but if you decide not to answer it, please return the blank questionnaire in the enclosed stamped envelope. Thank you for helping to make our research project a success.

Nancy B. Morgan

P.S. If you have any questions or comments, please feel free to contact me.

Contact #5 - Third E-Mail

Over the last month we have sent you several mailings about an important research study being conducted by the Florida Council for Resource Development.

Its purpose is to create a profile of grants offices in Florida community colleges and provide a framework for measuring success in acquiring external funding through grants.

We have been asked to present the results of our research at the next FCRD conference. We must complete our research soon in order to prepare for that event. We are sending this final contact by priority mail because your response is critical to the overall usefulness of the study. Hearing from all 28 community colleges assures us that the results are complete.

If for any reason your institution prefers not to participate in this study, please let us know by returning the blank questionnaire with a note indicating so. This would be very helpful.

Finally, we appreciate your willingness to help in our effort to identify best practices for measuring the impact that grants have on our colleges and communities. Thank you very much.

Sincerely,

Nancy B. Morgan

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