ECONOMIC DEVELOPMENT FUNCTIONS OF NEW JERSEY COMMUNITY COLLEGES

by

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(ABSTRACT)

Community colleges, especially in New Jersey, have been recognized as having an important role in the human resource development area of economic development. However, neither the literature nor state policy in New Jersey include a clear definition of the specific functions community colleges should have in economic development. Furthermore, current research does not include consensus on appropriate funding sources for functions in which community colleges could be involved. The purpose of this study was to determine the priorities among 26 economic development functions of the community college as viewed by community college leaders, leaders of business and nonprofit organizations, and economic development specialists in New Jersey. These leader groups also identified how costs for these functions should be apportioned among three funding sources: the state/county; the organization;

and the participant/student. Leader group views were obtained through a mail survey using a questionnaire developed for this study. The data were analyzed using descriptive statistics, analysis of variance (ANOVA), and Spearman Correlation Coefficient.

Major findings of the study include:

1. Leader groups displayed a moderate degree of consensus concerning importance ratings and rankings of functions. The data also revealed a high degree of agreement on the selection of a primary funding source for functions.
2. Community colleges providing job training and vocational and career counseling for unemployed persons were the most highly rated functions in the study.
3. Three functions concerning community college involvement in providing training for employees of local organizations were also rated highly: tailoring credit courses for supervisory personnel; providing certificate programs; and providing basic skills training.
4. Having the community college provide credit courses and workshops for small business leaders/entrepreneurs was also selected as an important function by all leader groups.

DEDICATION

This study is dedicated to my mother,
The personal values she displayed and her belief in me served as an inspiration throughout this study.

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Chapter 1

INTRODUCTION

Community colleges in New Jersey, and throughout the country, have the opportunity to make a significant contribution to economic growth in the United States over the next decade. The literature on the role of higher education in economic development indicates that the availability of a skilled labor force is essential for the maintenance of a competitive economy (Bernstein, 1986; Birch, 1985; Cross and McCartan 1984; Cuban, 1988; Domer, 1986; Johnson, 1984; Kearns, 1988; McKeown, 1984; Stanford Research Institute, 1982; White, 1986). Human resource development, therefore, has become a high priority in general economic development planning.

On a national level, human resource development needs are characterized by two factors. First, there will continue to be a need for retraining of labor force members due to the rapid rate of change in the types of jobs available. Second, the impact of technology on the nature of work will reinforce the need for a higher level of general and technical learning skills within the labor force. The postsecondary education sector should play a critical role in meeting these educational and training needs (Birch, 1984).

There are a number of reasons that community colleges, especially those in New Jersey, are in a position to participate in the development of human resources. Historically, the role of the community college has included a focus on occupational and career education. Analysis of the literature suggests a continued emphasis on this aspect of mission over the next decade (Deegan and Tillery, 1987). In New Jersey, community colleges have been identified as the primary providers of occupational training and technological human resource development within the system of public higher education (New Jersey State Department of Higher Education, 1981). The mission of the community college has, over the years, been characterized by a high level of flexibility in meeting the needs of the institution's service area (Vaughan, 1988). This flexibility should enable New Jersey community colleges to be responsive and innovative in building partnerships with private and public sector groups to enhance human resource development. Community colleges are regarded as members of the higher education system. This association results in increased prestige for community colleges and links these institutions to the higher education community's involvement in economic development (Brock, 1987). In New Jersey, community

colleges traditionally have concentrated on teaching (human resource development) rather than research. The New Jersey Regulation for Community Colleges clearly cite teaching as the main purpose of these colleges (New Jersey State Department of Higher Education, 1981a). Demographic projections also serve to link community colleges with the economic development process. Projections indicate a decline in the traditional college age population over the next ten years. Involvement in human resource development efforts can enable community colleges to focus on alternate client groups during the period of enrollment decline (Hodgkinson, 1983). Finally, community colleges are located strategically throughout the respective states (Cohen & Brawer, 1982). In New Jersey, campuses are readily accessible to residents of all counties.

It seems clear that New Jersey community colleges should be included in the human resource development component of state-wide economic development. However, the specific functions community colleges should fulfill in meeting human resource development needs should be more clearly defined. There are a number of forces that inhibit the institution's capability to identify its specific economic development functions. New Jersey state regulations provide only broad guidelines for institutional involvement. Also, the

literature on the mission of the community college suggests that "mission ambiguity" is a continuing problem. By attempting to maintain a comprehensive mission, many community colleges are not able to develop a clear focus for the institution. This lack of stated priorities within the institution reduces the effectiveness with which a college includes goals, such as economic development, in the institutional planning and resource allocation process (Breneman & Nelson, 1981; Cohen & Brawer, 1982; Cross, 1981 & 1985; Deegan & Tillery, 1987; Kassebaum, 1987; McCabe, 1981; McClenney & McClenney, 1988; Vaughan, 1988; Woodbury, 1977; and Yarrington, 1980). Finally, current research does not reveal a comprehensive, nationally based consensus on the specific economic development functions for community colleges (Kingry, 1984; King, 1984; Linck, 1983). Consequently, evidence of broad based agreement on appropriate funding sources for these functions is also absent from the literature. Research findings suggest that increased communication and consensus building between academic leaders and business leaders are needed to more clearly identify economic development functions of the community college.

From the above discussion, it appears that there are numerous forces leading community colleges in New Jersey to become more actively involved in local or regional

economic development efforts. There are, however, a number of factors which inhibit institutional capability to identify specific economic development functions. Among the inhibiting factors is the need for more extensive communication and consensus building among community college leaders and leaders of area business and nonprofit organizations. This study investigated the views of leaders of business and nonprofit organizations, community college leaders, and economic development professionals in New Jersey concerning the specific economic development functions for the state's community colleges.

Problem Statement

State agencies in New Jersey have increasingly identified the community college as an important component in regional economic development programs (New Jersey State Department of Higher Education, 1981 & 1981a). Business leaders, academic leaders, and economic development professionals are becoming increasingly aware of the importance of human resource development efforts to the effectiveness of organizations (Bernstein, 1986; Birch, 1984 & 1985; Cross and McCartan 1984; Cuban, 1988; Domer, 1986; Johnson, 1984; Kearns; 1988; McKeown, 1984; Stanford Research Institute, 1982; White, 1986). Community college leaders are viewing economic development as an important direction for institutional involvement in

consideration of reduced numbers of traditional college age students over the next ten years (Hodgkinson, 1983). However, the research indicates that there is lack of agreement on the specific economic development functions for the community college (Kingry, 1984; King, 1984; and Linck, 1983). Research findings suggest that increased communication and consensus building among academic leaders and community college leaders are needed to identify these functions.

Purpose Statement

The purpose of the study was to determine the priorities for New Jersey community college involvement among 26 economic development functions as viewed by leaders of business and nonprofit organizations, community college leaders, and economic development specialists within the state. The study also sought to analyze the views of these leader groups concerning the most appropriate sources for funding for each of the functions.

Research Questions

1. Which of the 26 economic development functions are most important as viewed by leaders of business and nonprofit organizations, community college leaders, and economic development specialists?

2. For each economic development function, what are the differences in ratings of importance among the three leader groups?
3. For each economic development function, what is the primary funding source selected by each leader group?
4. For each economic development function, what is the frequency of agreement in selection of a primary funding source among the three leader groups?

Limitations

This study included only community college leaders, leaders of business and nonprofit organizations, and economic development professionals in New Jersey. Furthermore, only members of the respective groups in June, 1987 were included in the study. Since the samples are representative of the population of these leader groups in New Jersey, the results of the study can be generalized within the state. Application of the study results to other states would be based on the inference that leader groups in those locations are similar in nature to groups in this study. This project provided insights into only two facets of community involvement in economic development: an analysis of which functions were most important as viewed by key leader groups; and, an analysis of which sources should provide funding for these functions according to the same leader groups.

Consequently, this study should not be construed as a comprehensive examination of all factors influencing community college involvement in economic development.

Need for the Study

There is a need for community college leaders to become more aware of the views of leaders of area business and nonprofit organizations and economic development professionals concerning the specific economic development functions for New Jersey community colleges. The literature suggests that this awareness can be developed though increased communications and consensus building among these three leader groups. If identification of specific economic development functions can be achieved, community colleges can be more effective and efficient in meeting the human resource development needs of their service district. Regarding business expansion and retention decisions, a noted economic development specialist indicated that business leaders consider the human resource development issue to be the most significant and the first to be resolved. The availability of viable training facilities is an increasingly important factor in decisions concerning business location and expansion decisions (McKeown, 1984). Thomas Kean, governor of New Jersey, in an address as chairperson of the Education Commission of the States, strongly

reinforced the need for community college involvement in economic development (Kean, 1986). Kean stressed the importance of establishing partnerships between community colleges and the business and economic development sectors to meet regional human resource development needs. Successful partnerships are based on effective communication and consensus building among the respective leader groups. This study will provide insights for community college leaders, leaders of business and nonprofit organizations, economic development specialists, legislators, and educational policymakers that can be used in planning for a more efficient and effective role for New Jersey community colleges in economic development.

Chapter 2

REVIEW OF THE LITERATURE

Economic Development: A Conceptual Framework

Economic development has been defined as, "the systematic, organized promotion of economic growth and business activity. Promoting such growth and activity is currently the goal of a great majority of states because, if successful, these efforts will result in the creation of new jobs, more disposable income, less dependence on welfare, and an overall higher standard of living" (Liston and Ward, 1984, p.23). The description provided by Liston and Ward will serve as the operational definition of economic development for the purpose of this study. Economic development is usually coordinated at the state level with strategies targeted at specific areas or regions. States use the following strategies to promote business activity: financing through loans and tax incentives; technical assistance; support of research efforts; and improvement of the quality of the labor force (Kingry, 1984).

The American Economic Development Council (McKeown, 1984) indicated that the mission of economic development is to obtain for an area the highest possible levels of gainful employment and new investment needed to continue a

desirable rate of economic growth. Economic development also has been defined as a process to be implemented by a community or regional group. The initial steps involve identification and prioritization of the community's economic problems. An exploration of available resources is then completed. The process continues with the identification and assessment of alternative methods of solving the problems. The process concludes with the selection and implementation of the solution (Gillis, 1986).

The Elizabeth Development Company (1987), the economic development agency for that New Jersey city, provided an illustration of some common components to a municipal economic development program. The Company listed the following areas in which support is provided to encourage economic growth: financing; architectural assistance; government liaison; renovation; management assistance; site location; and job training (1987).

Birch (1984) suggested, however, that the emphasis within overall economic development has shifted over the past decade. Earlier, primary considerations of companies were cheap labor, low land costs, and the availability of tax abatement and alternative financing. A major shift has been identified from a nearly total emphasis on lower costs to more of a balance between costs and product or service quality. The trend is characterized by

increased interest in better education and training, higher levels of service delivery, higher quality of life, and increased availability of research and technology transfer. Innovation, a critical variable in economic success, requires access to a well-educated and creative labor force. Another shift in economic development has been toward fostering the growth of small businesses, especially in the areas of service (Jaschik, 1986) and high technology (Monthly Labor Review, 1983 and COSMOS Corporation, 1985).

Within the scope of human resource development, the importance of job re-training is emerging as an important factor (Birch, 1985). Since 1969, the U.S. has lost approximately 8% to 10% of all jobs each year. These jobs need to be replaced with other positions. One result of this trend is that the economy must replace about 50% of the job slots every five years just to maintain a current standard. Furthermore, the increasing use of applied technology contributes to an increasing rate of job loss. This continual need for job re-training is primarily and educational issue. Birch (1984) also estimated that more than half of the new jobs created through 1995 will require skills training and re-training at the postsecondary school level.

Burack and Mathys (1980) and Milkovich and Glueck (1985) suggested that there is an increasing awareness of the value of human resource development among corporate

and government leaders. The value of investing in the improvement of the organization's human resources is supported by the concept of Human Capital Theory. This view fosters efforts to improve organizational outcomes by improving the productivity and quality of the labor force (Breneman and Nelson, 1981).

The role of the higher education sector in human resource development (Johnson, 1984) is characterized by four broad functions: providing research and development; supporting technology transfer; giving technical assistance; and providing human resource development services. A study by Bernstein (1986) identified four international and national forces that have encouraged higher education in the U.S. to be more responsive to its role in economic development. First, we are now in a knowledge economy in which information based industries account for over 50% of the gross national product. More than half of all workers employed are involved in the collection, organization, and dissemination of information. Second, in an information based economy, institutions of higher education are in a critical position, since gathering of knowledge is the traditional role of colleges and universities. Third, productivity research suggests that, since 1929, the growth and improvement in human capital in the U.S. has contributed more to economic growth than has financial or capital development. Furthermore, education

and training provide the foundation for continued development of human capital. Fourth, there is a need to improve America's labor force to meet foreign competition. It is estimated that foreign competition is a factor in seventy percent of all U.S. goods sold in this country and abroad.

Studies by Carnevale (White, 1986) suggest that human resource development is the most critical factor accounting for growth in the national income. The importance of human resource development in overall economic development is supported by researchers representing a wide range of sources (Cross, 1984; Domer, 1986; Kearns, 1988; Stanford Research Institute, 1982; and Cuban, 1988).

Community Colleges and Economic Development

Historically, the community college has been committed to meeting the occupational education needs in its service area. This commitment has ranged from granting associate degrees in occupational areas to providing non-credit job training (Cohen and Brawer, 1982; Charner and Gold, 1987; and Bender and Lukenbill, 1984). At the statewide level, two particularly significant national trends have emerged concerning community college involvement in economic development. First, from 1976 to 1987 the number of pieces of legislation focusing on community college involvement in human resource development increased

from 171 to 620. Second, the major theme of the legislation is to encourage community college and private and public sector partnerships to meet economic development needs (Martorana and Gould, 1984; and Sanford, 1988). In addition, state coordinated economic development programs have increasingly recognized the community college as a key resource in the economic development process. Many community college leaders have, consequently, been responsive to this opportunity and have attempted to identify economic development as a major thrust for these institutions in the decade ahead (AACJC, 1988).

Demographic projections also serve to strengthen the community college link to economic development. Projections indicate a decrease in traditional college age population over the next ten years. Community colleges will need to consider alternative client groups in order to maintain current enrollment levels (Hodgkinson, 1983). Approximately 12 million persons attend colleges and universities in the U.S. Another 46 million adults participate in some type of education or training. Total expenditures for non-collegiate post-secondary education is about $50 billion, approximately the same amount allocated for all of higher education. It appears that community colleges will be increasing efforts to obtain a larger share of the adult education market by increasing

participation in economic development activities. Atwell, Vaughan, and Sullins (1982) also indicated that funding for traditional community services functions has been reduced by most community colleges. Many community services advocates are now viewing the human resource development role in economic development as a logical direction for their efforts. Community colleges also have the personnel and physical facilities, along with the status associated with the higher education community, to meet human resource and technical assistance needs of the private sector (Mahoney, 1984). Economic development can also serve as a vehicle for cooperation between community colleges and senior institutions (Sullins, 1985). Coordinated projects could lead to more effective outcomes for the higher education community. This last point is reinforced in "Time for Results: The Governors' 1991 Report on Education" (National Governors' Association, 1986). It should also be noted that faculty involvement in economic development activities can serve to support professional growth and renewal (Rohfeld, 1984).

Distinctions between the roles of the university and the community college in economic development appear in the literature. Churma (1986) suggested that universities are better suited for the following economic development functions: economic and policy analysis; research to develop knowledge and technology transfer;

and upgrading skills for scientists and engineers. Community colleges should focus on technical assistance for small business development and human resource development and job training.

A number of strategies have been identified to promote community college involvement in economic development. Zeiss (1986) suggested the following steps for community colleges to consider: create small business development centers; participate in chamber of commerce activities; provide representatives on site visit teams; offer business related seminars; provide customized training for area organizations; participate in state sponsored training programs; and publicize the college's efforts in economic development. The need for community colleges to more vigorously publicize their involvement in regional economic development efforts was reinforced by Harvey (1983). There is also evidence that community colleges are increasing the use of the consortium format to meet human resource development needs (American Management Association Newsletter, 1986).

Nevertheless, community college involvement in economic development should be viewed within the context of the long term discussion regarding the mission of these institutions. The literature of the past decade reflects a continuing debate which questions if the

community college can maintain a comprehensive mission without leading to "mission ambiguity". That is, can colleges maintain all of the traditional functions, in view of shrinking resources, and still provide a clear focus for the institution within the service area? Much of the literature on mission ambiguity tends to emphasize the importance of the issue but does not provide specific solutions or recommendations (Cohen & Brawer, 1982; Cross, 1985; Deegan & Tillery, 1987; Kassabaum, 1987; McCabe, 1981; Woodbury, 1987; and Yarrington, 1981). Some researchers, however, have made specific suggestions for dealing with this issue.

Breneman and Nelson (1981) recommended that community colleges concentrate on functions with which they have a comparative advantage over four year colleges. These functions include vocational-technical education, remedial education, and non-credit community services. These authors recommended a division of labor among higher education institutions. Under this format community colleges would be less involved in the traditional transfer function. Cross (1981) also indicated that community colleges could refine the mission by responding more to the priorities identified by the various constituencies within the institution's service area. This approach would reduce emphasis on some of the commonly held mission concepts throughout the community college sector while

having a greater proportion of college goals developed in response to local needs.

Although no clear consensus on the issue of mission ambiguity can be found in the literature, there have been some recent efforts to identify a compromise position. Vaughan (1988) suggested that individual college priorities should be developed within the framework of the functions of the traditional comprehensive mission. According to this view, the basic functions would be appropriate for all institutions. However, the selection of individual priorities would result in the college emphasizing one or more of the basic functions while assigning a lower priority to other functions in terms of resource allocation. Vaughan maintained that colleges will change priorities in an evolutionary manner, but that the changes in institutional focus will be made within the framework of the traditional functions of the comprehensive mission. Deegan and Tillery (1987) also emphasized that community colleges should develop priorities within the mission that are based on needs within the service area. Their view focused on the need to incorporate priorities into the college's institutional planning system. Mission priorities, such as economic development, would need to be integrated into the college's planning, budgeting, and assessment process to facilitate success. Despite

the lack of consensus on a sector-wide mission, these researchers suggest that many community colleges are increasingly viewing involvement in economic development as an institutional priority. Other studies, however, emphasize that the specific economic development functions of the community college need to be more clearly defined, especially as these functions are viewed by leaders of business and non-profit organizations.

Kingry (1984) indicated that community colleges have not developed satisfactory mechanisms for identifying training needs among business and industry groups that could be met by the community college. Kingry studied perceptions of community college administrators, full-time faculty, part-time faculty, and business leaders concerning the community college role in economic development in Oregon. Among the groups studied, college administrators and business leaders displayed the greatest degree of difference concerning the economic development functions in which community colleges should be involved. Consequently, Kingry made the following recommendation:

> A greater emphasis on communication between the college and its business community may need to occur if the college is to develop a highly effective economic development program. This study revealed that about 50 percent of the business community respondents expressed no knowledge of the level of emphasis the community college was placing on the selected economic development activities. The literature

> was very clear that close cooperation between business, industry, and education was necessary for economic development (1984, p. 121).

Kingry also suggested that other key groups be included in future studies. Among these are: non-profit organization leaders; members of boards of trustees; and economic development specialists.

Linck, (1983) in his study of the Maryland community college system, also reinforced the need for a greater level of cooperation among community colleges, state and local economic development offices, and local business leaders in order to strengthen the role of the community colleges in the economic development process. Linck also recommended that state-wide coordination of community college economic development efforts should be considered. This coordination would more clearly identify areas of program need, give state-level recognition and prominence to the community college sector, and avoid unnecessary duplication of effort. Linck's study concluded that local governments in Maryland have not yet recognized the ability of the community colleges to provide training for business and industry as an important element in local efforts to recruit new business firms. Linck's review of the literature suggested that this condition is not unique to the community college system in Maryland but may be characteristic of many other states.

King (1984) conducted a study of the efforts of

Colorado community colleges to meet the training needs of high technology businesses. Perceptions of leaders of post-secondary institutions were compared to those of chief executive officers of high technology firms concerning the community college's role in job training. King's findings strongly reinforce those of Kingry and Linck. Differences were found between perceptions of business leaders and college leaders concerning the training needs of entry level technical employees. Business leaders also indicated that the major item preventing them from seeking assistance from educational institutions was the lack of communication on the part of colleges concerning the services available. Finally, two of the six recommendations focus on the need for greater communication and coordination between college leaders and business leaders.

The literature also suggested a lack of agreement among community colleges on the preferred curriculum format for human resource development training. However, Terry (1984) suggested the use of a competency-based education format for meeting human resource development needs and Knowles (1983) recommended incorporating the concepts of androgogy into these curricula.

There also appears to be a need to develop more effective administrative structures within the community colleges for meeting economic development needs. Appropriate organizational structures should facilitate

the development of the policies and procedures needed to enable the institution to be more effective in its economic development role (Isreal and Custer, 1986; and Moser, 1986).

Despite the impact of mission ambiguity and research findings which indicate substantial differences between business leaders and community college leaders concerning economic functions of the college, the literature included wide support for utilizing community colleges as a primary resource for meeting regional human resource development needs (Kolberg, 1984; Braden, 1988; Brock, 1987 and 1988; Jones, 1988; Stulberg, 1987; AACJC, 1985; Choulochas and McKenney, 1986; Illinois Community College Trustees System, 1986; Lawson and Lloyd, 1986; Long and Spence, 1984; Owen, 1981; Council for Economic Development, 1985). Illustrative of this point, North Carolina provides an excellent example of the integration of community colleges into a state-coordinated economic development system (Owen, 1983; Scott, 1987).

New Jersey Community Colleges and Economic Development

In 1960, the New Jersey State Legislature appointed a study commission to investigate the need for two-year colleges in the state. The commission recommended the establishment of comprehensive institutions designed to offer a wide variety of academic and career programs and provide appropriate community services. The New Jersey

County College Act was passed in 1962 and authorized the state's 21 counties to establish county colleges and to provide local appointment of trustees. Service areas were established on a county bases rather than in consideration of economic or geographical factors. In 1981, when the Statewide Plan for Higher Education was approved by the New Jersey State Board of Higher Education, there were 15 county community colleges with a combined enrollment of 100,000 students. In 1987, the number of institutions had grown to 19, including two community college commissions and total enrollment had grown to 107,000 (New Jersey State Department of Higher Education, 1987).

Within the structure of state government, the State Board of Higher Education was given the legal responsibility for oversight of the community colleges. The New Jersey Department of Higher Education, under the leadership of the Chancellor of Higher Education, was assigned the state level regulatory and funding duties involving the community colleges. In 1974, the Office of Community Colleges was established within the Department of Higher Education. The Office participates in licensure reviews by the Middle States Association of Colleges and Schools, approves new degree programs, administers grant programs, and fulfills the regulatory and funding duties regarding the county community

colleges (New Jersey State Department of Higher Education, 1987).

The legal structure established for community colleges in New Jersey contains an inherent source of conflict between state and county governing bodies. While the state retains the responsibility for program approval and provides partial funding, the counties appoint the college trustees and provide the majority of the funding. This conflict situation has made it very difficult for the State Board of Higher Education to establish state-wide initiatives involving all county community colleges (New Jersey State Department of Higher Education, 1987).

Since 1964, there have been two major state-sponsored studies of the county community colleges. First, a 1979 study reinforced the original goals of NJ community colleges and emphasized the importance of institutional involvement in job training and in extending educational opportunities to adult students (State of New Jersey Department of Higher Education, 1979). The 1981 Statewide Master Plan for Higher Education strongly reinforced the role of community colleges in providing career education and job training (New Jersey State Department of Higher Education, 1981). The recommendations of the 1979 study have been incorporated in subsequent state level regulations concerning county community college

operations. State regulations now identify seven broad objectives for the county community colleges. Of these seven, three relate directly to the need for community colleges to become involved in meeting the human resource development needs of the service area (New Jersey State Department of Higher Education, 1981a). The second state-sponsored study of New Jersey community colleges occurred in 1987. The study utilized a commission of national experts on community colleges. One of the six charges to the commission was to identify how the community colleges could have a greater impact on economic development. More specifically, the commission was requested to clarify community college involvement in the following areas: providing training for existing businesses; enhancing productivity; and re-training work force personnel whose skills have become obsolete (New Jersey State Department of Higher Education, 1987).

The final report of the commission listed the following twelve areas under which recommendations were made: Mission; Finance; Students; Remedial Education; Liberal Arts; Retention; Economic Development; Faculty; Regionalization; Transfer; Articulation; and Capital. Identification of economic development as a distinct category for recommendations reinforces the role of community colleges in this area (New Jersey State Department of Higher Education, 1987).

The Commission made two main recommendations concerning community college involvement in economic development. First, the governor should direct state agencies to work with the Department of Higher Education and the Community College Presidents' Council to build liaisons with other agencies such as the Department of Labor and the Department of Commerce and Economic Development. The purpose of the liaisons is to define and strengthen the role of community colleges in economic development. Second, community colleges should be encouraged to establish partnerships with area business and industry to help meet human resource development needs. The commission suggested a policy of "active intervention" on the part of the colleges (The Report of the Panel, 1987).

The importance of community college involvement in economic development was also cited in the Governor's 1987 State of the State address. Also, a statewide task force on Technology and Human Resource Development acknowledged the importance of the community colleges as a vital component in supporting the availability of a skilled work force in the technology area (New Jersey Office of the Governor, 1983).

A recent statewide survey of community college students also underlined the importance of community college involvement in economic development. Two-thirds

of the students responding indicated that job and career considerations were the most important reasons for their attending a community college. Survey results also suggested that technology-related career preparation was an important reason for students having selected the community college (Eagleton Institute, 1987).

In 1987, the state legislature authorized the establishment of the New Jersey Occupational Information Coordinating Committee. The Committee is charged with coordinating the development and dissemination of occupational and career development information within the framework of state government. The Committee includes representatives from the following agencies: Vocational Education; Department of Labor; Department of Commerce and Economic Development; Department of Education; and the Department of Higher Education (New Jersey State Department of Labor, 1987).

This review of the literature suggests that community colleges have an important role in the economic development process occurring in New Jersey. Human resource development is an important aspect of economic development. Community colleges in New Jersey, and throughout the country, have had a strong role in career and occupational training and education. In New Jersey particularly, there are extensive state level policies and regulations supporting a critical role for the community colleges

in economic development.

However, neither the literature nor state policy in New Jersey provide a clear definition of the specific functions community colleges should have within economic development. Furthermore, the impact of mission ambiguity on virtually all community college functions serves to increase the difficulty of identifying specific economic development functions for these institutions. Finally, current research and state regulations do not identify appropriate funding sources for the various economic development functions in which community colleges could be involved.

This discussion indicates there is a need to clarify the specific economic development functions New Jersey community colleges should provide. In addition, it would be useful to clarify the appropriate sources of funding for these functions. An analysis of the views of business, nonprofit, community college and economic development leaders concerning the functions and funding sources for community college involvement in economic development would provide some insights into this important issue.

Chapter 3

METHODS

The study utilized a cross-sectional survey to investigate the views of academic leaders, leaders of business and nonprofit organizations, and leaders in the field of economic development in New Jersey regarding the appropriate role of the State's community colleges in economic development. Specifically, the investigation focused on which economic development functions are most important - by asking respondents to rate 26 economic development functions on a seven point Likert type scale. The study also asked respondents to indicate the proportion of funding for each function that should be provided by each of the three following groups: the state/county; the organization to which the function is directed; or the individual participant/student. Recommended funding sources for each function were expressed as a proportion of 100 points to be allocated among the three funding groups.

Data Gathering Instrument

An eight page folded survey instrument was used to gather data (see Appendix A). A three digit numeric code was used to differentiate the leader groups and to

identify individual respondents within leader groups. The cover page identifies the title and subtitle of the survey. The first page contains directions for completing the instrument. Pages two through five list the 26 economic development functions to be reviewed by the respondent. To the left of each function statement is a seven point Likert type scale. The scale allows respondents to rate the relative importance of each function on a range from "Not Important" to "Most Important." To the right of each function statement a scale is provided which allows the respondent to indicate the proportion of costs for each function that should be paid by the following sources: state/county; organization; participant/student. The proportion of costs is expressed by distributing a kitty of 100 points across the three funding sources. Spaces are provided on the survey form for respondents to enter the proportion of costs allocated to each funding source. The greater the source's responsibility for for funding a function, the greater number of points should be assigned to that source.

The following questions are listed on page six:

For leaders of business or nonprofit organizations:

1. What is your current position in your organization?

2. What is the size of the organization with which you are affiliated (if a unit of a larger company,

consider the size of the profit center)?

_____(# of employees).

3. In which county is your organization located (if a unit of a larger company, consider the location of the profit center)?

For community college leaders:

1. What is your current position in your college?
2. What is the full-time equivalent (FTE) student enrollment of your college?
3. In which county is your college located?

For economic development specialists:

1. What is your current position in your organization?
2. In which county is the primary effort of your office directed?

The final page of the survey provides respondents with an area to present additional information, make comments, or ask questions. The survey form was designed using the Total Design Method recommended by Dillman (1978). Three mailings were completed (see Appendices B, C, and D for copies of the cover letters for each mailing).

Identification of Participants for the Study

Leaders of Business and Non-Profit Organizations. The sampling frame for this leader group was the 1987 Business Directory of the New Jersey State Chamber of Commerce. The Directory listed 1825 organizations along with the name of the chief executive officer for the respective organization. The membership of the Chamber of Commerce includes both business and nonprofit organizations. The organizational

description in the Directory includes the designation "non-profit organization" for some groups. However, the Directory does not provide a definition of the term non-profit organization. A systematic sampling procedure was used to select a representative sample of leaders from the Directory. The sampling procedure did not differentiate between business and non-profit organizations in the selection of leaders from the Directory.

Community College Leaders. Leaders within the 19 publicly supported community colleges in New Jersey were the population of interest. Persons listed in the 1987 Higher Education Directory as having the following positions were selected for the survey: president; chief academic officer; director of community services, community development or economic development; or dean or assistant dean of instruction. A review of the Directory indicated that 56 persons met the selection criteria. Because of the small number, all 56 persons were surveyed.

Economic Development Leaders. Economic development specialists assigned to state, regional, county and municipal offices served as the third target population. The New Jersey Economic Development Network, a directory of specialists working in these offices throughout the state, was used to identify economic development leaders. The Network, which is maintained by the NJ State Department of Commerce and Economic Development, listed 220 persons.

Because of the relatively small number, all 220 persons were surveyed.

Validity

The economic development functions of the community college used in the study were developed using an initial list of 16 functions obtained by modifying the functions outlined by Kingry (1984). The list was validated using the content validity method (Ary, Jacobs, and Razavieh, 1982). A panel of 14 expert judges in the area of community college involvement in economic development was selected. judges were asked to identify which of the 16 functions were unclear or inappropriate, along with any functions that tended to overlap. Panel members were also requested to suggest other appropriate functions which were not listed. Judges' input was obtained through structured interviews conducted by the investigator. The validation process resulted in the identification of the 26 economic development functions of the community college used in this study. The functions are presented in the survey form in Appendix A. The list of the panel of expert judges can be found in Appendix E.

Data Analysis

Means and standard deviations of the values assigned to the 26 economic development functions have been computed. Independent variables established from the

demographic data were used to complete the statistical analysis. For research question #1, means of importance ratings were calculated for each function by leader group. The means were then placed in rank order. An analysis was completed to determine which functions were ranked in the top half of importance by each leader group. Functions which appeared in the top half ranking for all three leader groups were considered to be the most important in response to this research question. Also, Spearman Correlation Coefficients were calculated to determine the relationship among each pair-wise combination of leader groups in ranking of functions by importance. Data analysis for research question #2 was completed through the use of one-way ANOVA's to test for significant differences in ratings across groups represented by the independent variables. For functions that indicated an F-ratio significant at the .05 level, the Newman-Keuls post hoc multiple comparison test was used to identify which leader group means differed significantly from each other. The Q-statistic critical value for the post hoc test was established at p .05. For research question #3, the means of the allocation of the 100 points among each of the three funding sources were calculated. Means were determined for each function by leader group. The funding source which had the means for each function, by leader group, was considered to be the primary funding source

selected by the respective leader group. Data analysis for research question #4 was completed by identifying those functions for which all three leader groups selected a common primary funding source.

Completion of the data analysis, within the context of the literature review on community college involvement in economic development, has helped to resolve the research questions presented in the study. Furthermore, resolution of the research questions also provides clarification of the primary and ancillary purposes of the project: to determine the priorities among various economic development functions of New Jersey community colleges as viewed by leaders of business and nonprofit organizations, community college leaders, and economic development specialists; and, to have these leader groups identify which sources should fund these various functions.

Chapter 4

FINDINGS

Introduction

The purpose addressed in the study was to determine the priorities among various economic development functions of community colleges as viewed by community college leaders, leaders of business and nonprofit organizations, and economic development leaders in New Jersey. An ancillary problem is to have the same leader groups identify how the costs for these functions should be apportioned among three funding sources: the state/county; the organization; and the participant/student. Community colleges, especially in New Jersey, have been recognized as having an important role in the human resource development area of economic development. However, neither the literature nor state policy in New Jersey provide a clear definition of the specific functions community colleges should have in economic development. Furthermore, current research and New Jersey regulations do not suggest consensus on appropriate funding sources for these various economic development functions in which community colleges would be involved. It was proposed, therefore, to analyze the views of the three leader groups identified above concerning the functions

and funding sources for community college involvement in economic development.

Summary of Survey Returns

The summary of survey mailings and returns is presented in Table 1. The return rate for leaders of business and nonprofit organizations was somewhat low (26%). Therefore, it was decided to examine further the response rate of this leader group. In the sample of this leader group, the zip code categories for these organizations was as follows: 07 area zip code= 337 organizations; 08 area zip code= 171 organizations; and all other zip area zip codes= 26 organizations. The Chi-Square test for goodness of fit was completed to determine if there was a difference in zip code pattern between those business and nonprofit organizations that responded to the survey and total of business and nonprofit organizations in the sample. The analysis yielded a Chi-Square of 1.81 (d.f.=2) which suggested that that the collective differences between observed and expected frequencies in return rate according to zip code categories can be attributed to random fluctuation. That is, the geographical distribution of business and nonprofit organizations that returned surveys did not differ from the geographical distribution of these organizations in the total sample.

Research Question #1. Which of the 26 economic development functions are most important as viewed by community

Table 1

Summary of Survey Mailings and Returns

Leader Group	# Surveyed	# Returned	% Returned
Bus./NonProfit	534	136	26
Academic	56	32	57
Econom.Develop.	220	104	47

college leaders, leaders of business and nonprofit organizations, and economic development leaders?

Findings for Research Question #1

To respond to this research question, the three leader groups were asked to complete the questionnaire outlined in Appendix A. Respondents were asked to rate the importance of each of the 26 economic development functions using a seven point Likert type scale. The scale allows respondents to rate the relative importance of each function on a range from "Not Important" (1) to "Most Important" (7). Means of important ratings were calculated for each leader group for each function. The means were then placed in rank order. Table 2 illustrates the ranking of means of importance ratings for each function by leader group.

A review of the functions ranked in the top half for importance, by leader group as presented in Table 2, was completed. A summary of this review is presented in Table 3. It was reasoned that functions ranked in the top half of importance represent a reasonable approximation of the priorities of the respective leader groups. As indicated in Table 3, there are seven functions which all three leader groups included in the top half of their respective rankings of importance. Both of the functions relating to community colleges providing training and vocational counseling for unemployed persons (#21 and #22) appear in the top half rankings for all three leader groups.

Table 2

Rank Order of Importance of Functions by Leader Group: Business/NonProfit Leaders (BNPL); Academic Leaders (AL); Economic Development Leaders (EDL).

Function #		BNPL Rank	BNPL x	AL Rank	AL x	EDL Rank	EDL x	Total Rank	Total x
1	*	14	4.23	14	5.56	16	4.80	15	4.60
2	*	23	3.47	12	5.62	22	4.45	22	4.09
3		7	5.20	13	5.59	8	5.35	6	5.30
4	*	15	4.17	15	5.50	14	4.86	16	4.57
5		5	5.28	17	5.31	2	5.75	3	5.46
6		4	5.29	10	5.81	4	5.66	2	5.49
7		3	5.35	19	5.13	5	5.40	5	5.34
8		6	5.26	8	5.90	11	5.11	7	5.28
9	*	17	3.85	24	4.84	20	4.51	20	4.22
10	*	11	4.41	16	5.34	6	5.39	11	4.89
11	*	8	4.98	9	5.87	12	4.94	9	5.07
12	*	10	4.42	3	6.31	10	5.25	10	4.96

Note:

*= group means for all three groups differ from each other ($p < .05$) except as noted below.

___= group means which are not significant from each other.

---= additional group means which are not significant from each other.

Note: Table 2 continued on next page.

Table 2 (continued)

Rank Order of Importance of Functions by Leader Group: Business/NonProfit Leaders (BNPL); Academic Leaders (AL); Economic Development Leaders (EDL).

Function #		BNPL Rank	BNPL x	AL Rank	AL x	EDL Rank	EDL x	Total Rank	Total x
13	*	22	3.54	20	5.03	25	3.83	23	3.83
14	*	19	3.80	7	6.03	19	4.54	18	4.35
15	*	21	3.72	23	4.90	21	4.47	21	4.14
16	*	25	3.22	22	4.93	24	3.84	24	3.65
17	*	24	3.24	26	3.64	23	3.88	25	3.53
18	*	26	3.16	25	3.77	26	3.80	26	3.47
19	*	13	4.25	5	6.19	18	4.66	14	4.63
20	*	12	4.26	2	6.32	17	4.67	13	4.65
21	*	1	5.47	1	6.38	3	5.68	1	5.65
22		2	5.35	11	5.80	7	5.37	4	5.45
23	*	18	3.81	21	4.93	15	4.85	19	4.34
24	*	20	3.78	6	6.19	13	4.90	17	4.49
25	*	16	3.93	4	6.25	9	5.33	12	4.74
26	*	9	4.66	18	5.23	1	5.78	8	5.16

Note:

*= group means for all three groups differ from each other ($p < .05$) except as noted below.

___= group means which are not significant from each other.

---= additional group means which are not significant from each other.

Table 3

Summary of Function Ranked in the Top Half for Importance by Leader Group: Business/NonProfit Leaders (BNPL); Academic Leaders (AL); Economic Development Leaders (EDL).

Leader Groups in Agreement	Functions Ranked in Top Half
BNPL, AL, & EDL	3, 6, 8, 11, 12, 21, & 22
BNPL & AL only	19 & 20
BNPL & EDL only	5, 7, 10, & 26
AL & EDL only	24 & 25
no agreement	2 & 14

Function #21, involving community colleges providing training for unemployed persons, was ranked first by both business and academic leaders and third by economic development specialists. In addition, of the four functions relating to community college support for small business development (#'s 10, 11, 12, 13), two appear in the top half ranking for all three leader groups. These functions relate to the community college providing credit and non-credit courses or workshops for small business leaders/entrepreneurs (#11and #12). The survey also had four functions related to community college involvement in regional economic development (#'s 23, 24, 25, 26). With the exception of #23, these functions were selected in the top half of importance rankings by at least two leader group pairs. These functions focus on participation of community college faculty and staff on regional economic development councils and on local Private Industry Councils (PIC) and use of community colleges to disseminate research results on technical changes, business developments, and economic indicators. The remaining functions in the top half of importance rankings for all three leader groups focus on community college involvement in credit level supervisory level training (#3), awarding certificates for training (#6), and providing basic skills training for the organization's employees (#8). Also, the following

functions were ranked in the top 7 (highest quartile) according to total leader group mean rating: 3, 5, 6, 7, 8, 21; and 22. Function #21, basic skills training for unemployed, received the highest total leader group mean rating of all functions in the study.

To further analyze the findings related to research question #1, Spearman Correlation Coefficients were calculated on importance rankings for each pair-wise combination of leader groups presented in Table 2. A summary of the correlation calculations are presented in Table 4. The data in Table 4 suggest a very high level of agreement on importance rankings between business leaders and economic development specialists (Spearman rho .88). The next highest level of agreement was found between business leaders and academic leaders (Spearman rho .47). The lowest level of agreement was found between academic leaders and economic development professionals (Spearman rho .40). It should be noted, however, that the level of agreement among the latter two pair-wise groups suggests moderate degree of consensus on importance rankings. Finally, the following five functions were most frequently ranked in the lowest quartile by all three leader groups and appear in the lowest quartile for total leader group mean rating: 13, 15, 16, 17, and 18. These functions relate to community college involvement in supporting incubator programs, conducting

Table 4

Spearman Correlations of Importance Rankings of Economic Development Functions by Pair-Wise Combinations of Leader Groups

		Leader Group	
		BNPL	AL
Leader	AL	.4660	-
Group	EDL	.8783	.3949

training needs assessments, and providing skills assessment for potential employees of new and expanding organizations.

Research Question #2. For each economic development function, what are the differences in ratings of importance among the three leader groups?

Findings for Research Question #2

To respond to this research question, the mean of the importance rating for each function, by leader group, was compared using a one-way analysis of variance (ANOVA). For functions which indicated an F-ratio significant at the .05 level, the Newman-Keuls post hoc multiple comparison test was used to identify which leader group means differed significantly from each other. The Q-statistic critical value for the post hoc test was established at $p < .05$. The data in Table 3 identified functions for which all three leader groups indicated consensus on rankings of importance. Functions for which the leader groups displayed agreement, that is, no significant differences in rating means, are presented in Table 5. The data presented in Table 5 indicate there are six functions on which all three leader groups displayed consensus on ratings of importance. Four of these six functions (#'s 3, 6, 8, 22) were also ranked in the top half for importance by all leader groups (see Table 3). Of the four functions related to community college support for small business

development (#'s 10, 11, 12, 13), two different leader group pairs indicated agreement on ratings of importance for functions #10 and #11. Finally, for conditions in which two leader groups were in consensus on importance ratings, business/non-profit leaders and economic development leaders displayed the greatest frequency of agreement.

The data presented in Table 2 were also useful for indicating functions for which there were differences in importance ratings among leader groups. The following analyses focus on functions for which differences were found among leader group ratings of importance as presented in Table 2. The ANOVA Table for each function analysis below is provided in Appendix F.

Function #1. Provide credit courses tailored for non-supervisory personnel in the organization. An analysis of the means in Table 2 suggest there is no agreement among leader groups concerning the importance of this function. The differences in rating means among the three leader groups is large enough to be significant at the .05 level of confidence. Academic leaders rated this function highest (5.56) followed by economic development leaders (4.80) and business leaders (4.23).

Function #2. Provide non-credit courses tailored for non-supervisory personnel in the organization. An analysis of the means in Table 2 suggests there is no agreement

Table 5

Summary of Agreement on Ratings of Importance of Functions among Leader Groups: Business/NonProfit Leaders (BNPL); Academic Leaders (AL); Economic Development Leaders (EDL).

Leader Groups in Agreement on Importance Ratings	Function #
BNPL, AL, & EDL	3, 5, 6, 7, 8, 22
BNPL & AL	26
BNPL & EDL	11, 13, 14, 15, 16, 19, 20, 21
AL & EDL	9, 10, 15, 26
no agreement	1, 2, 4, 12, 17, 18, 23, 24, 25

among leader groups concerning the importance of this function. The differences in rating means among the three leader groups is large enough to be significant at the .05 level of confidence. This function was rated highest by academic leaders (5.62) followed by economic development specialists (4.45) and business leaders (3.47).

Function #4. Provide Non-credit courses tailored for supervisory personnel in the organization. A review of the means in Table 2 suggest there is no agreement among leader groups concerning the importance of this function. The differences in rating means is large enough to be significant at the .05 level of confidence. The highest mean rating for this function was recorded by academic leaders (5.50) followed by economic development leaders (4.86) and business leaders (4.14).

Function #9. Provide career and vocational counseling for employees of local organizations. The means contained in Table 2 suggest there is agreement between academic leaders and economic development specialists concerning the importance of function #9. However, the differences in rating means between these two groups and business leaders is large enough to be significant at the .05 level of confidence. Academic leaders rated this function highest (4.84) followed by economic development leaders (4.51) and business leaders (3.85).

Function #10. Support small business development by

providing consulting services to small business leaders/ entrepreneurs. An examination of the means in Table 2 indicates there is agreement between economic development leaders and academic leaders concerning the importance of this function. However, the difference in rating means between these two groups and business leaders is large enough to be significant at the .05 level of confidence. This function was rated highest by economic development specialists (5.39) followed by academic leaders (5.34) and business leaders (4.11).

Function #11. Support small business development by offering college credit courses or workshops for small business leaders/entrepreneurs. The means presented in Table 2 suggest there is agreement between business leaders and economic development specialists concerning the importance of this function. However, the differences in rating means between these two groups and academic leaders is large enough to be significant at the .05 level of confidence. The highest rating for this function was recorded by academic leaders (5.87) followed by business leaders (4.98) and economic development specialists (4.94).

Function # 12. Support small business development by offering non-credit courses or workshops for small business leaders/entrepreneurs. A review of the means in Table 2 indicates there is no agreement among leader groups

concerning the importance this function. The differences in rating means among all three groups is large enough to be significant at the .05 level of confidence. Academic leaders rated this function highest (6.31) followed by economic development leaders (5.25) and business leaders (4.26).

Function #13. Support small business development by having the college operate an incubator program. The means contained in Table 2 suggest there is agreement between business leaders and economic development specialists concerning the importance of this function. However, the differences in rating means between these groups and academic leaders is large enough to be significant at the .05 level of confidence. This function was rated highest by academic leaders (5.03) followed by economic development specialists (3.82) and business leaders (3.54).

Function # 14. Conduct training needs assessments for local organizations by surveying key management persons. An examination of the means in Table 2 indicates there is agreement between business leaders and economic development leaders concerning the importance of this function. The differences in rating means between these two groups and academic leaders is large enough to be significant at the .05 level of confidence. The highest rating for this function was recorded by academic leaders

(6.03) followed by economic development leaders (4.54) and business leaders (3.80).

Function #15. Conduct training needs assessments for local organizations by surveying employees. The means presented in Table 2 suggest there is agreement between economic development specialists and both academic leaders and business leaders concerning the importance of this function. However, the difference in rating means between academic leaders and business leaders is large enough to be significant at the .05 level of confidence. Academic leaders rated this function highest (4.90) followed by economic development specialists (4.47) and business leaders (3.22).

Function #16. Provide training needs assessments for local organizations by surveying key regional leaders. A review of the means in Table 2 indicates there is agreement between business leaders and economic development specialists concerning the importance of this function. However, the differences in rating means between these two groups and academic leaders is large enough to be significant at the .05 level of confidence. The highest rating for this function was recorded by academic leaders (4.93) followed by economic development specialists (3.84) and business leaders (3.22).

Function #17. Provide pre-screening and skills assessment of potential employees for new organizations.

The means contained in Table 2 suggest that there is no agreement among leader groups concerning the importance of this function. The differences in rating means among all three leader groups is large enough to be significant at the .05 level of confidence. The highest rating for this function was recorded by economic development specialists (3.88) followed by academic leaders (3.64) and business leaders (3.23).

Function #18. Provide pre-screening and skills assessment of potential employees for expanding organizations. An examination of the means in Table 2 indicates that there is no agreement among leader groups concerning the importance of this function. The differences in rating means among all three groups is large enough to be significant at the .05 level of confidence. Economic development specialists rated this function highest (3.80) followed by academic leaders (3.77) and business leaders (3.16).

Function #19. Provide job training tailored for new employees of new organizations. The means presented in Table 2 suggest there is agreement between business leaders and economic development specialists concerning the importance of this function. However, the differences in rating means between these groups and the academic leaders is large enough to be significant at the .05 level of confidence. This function was rated

highest by academic leader (6.19) followed by economic development specialists (4.66) and business leaders (4.25).

Function #20. Provide job training tailored for new employees of expanding organizations. A review of the means in Table 2 indicates there is agreement between business leaders and economic development leaders concerning the importance of this function. However, the differences in rating means between these groups and academic leaders is large enough to be significant at the .05 level of confidence. The highest rating for this function was recorded by academic leaders (6.32) followed by economic development specialists (4.67) and business leaders (4.25).

Function #21. Provide job training programs specifically designed for unemployed persons. The means contained in Table 2 suggest that there is agreement between business leaders and economic development specialists concerning the importance of this function. However, the differences in rating means between these two groups and academic leaders is large enough to be significant at the .05 level of confidence. Academic leaders rated this function highest (6.38) followed by economic development specialists ((5.68) and business leaders (5.47).

Function #23. Provide college staff (administrators, faculty, counselors) to participate on teams organized by

local or regional economic development offices to recruit new organizations to the area. An examination of the means in Table 2 indicates that there is no agreement among leader groups concerning the importance of this function. The differences in rating means among all three leader groups is large enough to be significant at the .05 level of confidence. This function was rated highest by academic leaders (4.94) followed by economic development leaders (4.85) and business leaders (3.81).

Function #24. Provide college staff (administrators, faculty, and counselors) to serve as representatives on local or regional economic development councils. The means presented in Table 2 indicate there is no agreement among leader groups concerning the importance of this function. The differences in rating means among all three groups is large enough to be significant at the .05 level of confidence. The highest rating for this function was recorded by academic leaders (6.19) followed by economic development specialists (4.90) and business leaders (3.78).

Function #25. Provide college staff (administrators, faculty, counselors) to serve as representatives on local Private Industry Councils (PIC). A review of the means in Table 2 suggests that there is no agreement among leader groups concerning the importance of this function. The differences in rating means among all three leader

groups is large enough to be significant at the .05 level of confidence. Academic leaders rated this function highest (6.25) followed by economic development specialists (5.33) and business leaders (3.93).

Function #26. Disseminate research results on technical changes, business developments, and economic indicators to local organizations. The means contained in Table 2 reveal that there is agreement between academic leaders and both business leaders and economic development specialists. However, the differences in rating means between business leaders and economic development specialists is large enough to be significant at the .05 level of confidence. This function was rated highest by economic development specialists (5.78) followed by academic leaders (5.23) and business leaders (4.66).

Research Question #3. For each economic development function, what is the primary funding source selected by each leader group?

Findings for Research Question #3.

To respond to this research question, the means of the allocation of the 100 points among each of the three funding sources (state/county; organization; and participant/student) were calculated. Means were determined for each function by leader group. The funding source which had the highest means for each function, by

leader group, was considered to be the primary funding source selected by the respective group. Means for allocation of funding source by function for each leader group are presented in Table 6. The data presented in Table 6 suggest a high degree of consensus among leader groups in the selection of a primary funding source for each function. All three groups chose the organization most frequently as the primary funding source. All three groups also chose the state/county and participant/student, respectively, as the second and third choices for primary funding.

Additional findings from Table 6 were obtained through an analysis of the response patterns among the leader groups. To identify response patterns, the funding source with the highest mean, by leader group, was considered "high", the source with the second highest mean "medium", and the source with the lowest mean "low". Using this approach, the data in Table 6 indicates that all three leader groups displayed the same high, medium, low pattern for the following fifteen functions: 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25, and 26. These findings suggest a high degree of consensus on the relative allocation of funding among the three sources. Specifically, the three leader groups recommended the same funding pattern for approximately 58% of the functions.

The following functions relate to the community

Table 6

Proportion of Costs for Each Economic Development Function by Leader Group: Business/NonProfit Leaders (BNPL); Academic Leaders (AL); Economic Development Leaders (EDL)

Function	Leader Group	Funding Sources		
		State/ County	Organization	Participant/ Student
1. Credit courses nonsuprv personnel	BNPL	17	40	43
	AL	33	50	17
	EDL	22	38	40
2. Noncredit courses nonsuprv personnel	BNPL	15	40	45
	AL	21	65	14
	EDL	21	40	39
3. Credit courses supervisory personnel	BNPL	13	52	35
	AL	28	54	18
	EDL	22	43	35
4. Noncredit courses supervisory personnel	BNPL	12	47	41
	AL	17	69	14
	EDL	20	46	34

Note: Table 6 continued on next page

Table 6 (continued)

Proportion of Costs for Each Economic Development Function by Leader Group: Business/NonProfit Leaders (BNPL); Academic Leaders (AL); Economic Development Leaders (EDL)

Function	Leader Group	Funding Sources		
		State/ County	Organization	Participant/ Student
5. Tailor assoc degree programs	BNPL	26	44	30
	AL	38	42	20
	EDL	41	33	26
6. Tailor certificate programs	BNPL	25	49	26
	AL	36	40	24
	EDL	39	38	23
7. Tailor diploma programs	BNPL	27	42	31
	AL	33	43	24
	EDL	43	32	25
8. Basic skills for employees local organizs.	BNPL	34	29	37
	AL	40	37	23
	EDL	42	31	27

Note: Table 6 continued on next page

Table 6 (continued)

Proportion of Costs for Each Economic Development Function by Leader Group: Business/NonProfit Leaders (BNPL); Academic Leaders (AL); Economic Development Leaders (EDL)

Function	Leader Group	Funding Sources		
		State/ County	Organization	Participant/ Student
9. Career counsel for employees local organizs.	BNPL	29	27	44
	AL	22	49	29
	EDL	33	31	36
10. Small business consulting	BNPL	41	59	....
	AL	44	56	....
	EDL	47	52	....
11. Small business credit courses	BNPL	35	65	....
	AL	51	49	....
	EDL	40	60	....
12. Small business noncredit courses	BNPL	33	67	....
	AL	46	54	....
	EDL	44	56	....

Note: Table 6 continued on next page

Table 6 (continued)

Proportion of Costs for Each Economic Development Function by Leader Group: Business/NonProfit Leaders (BNPL); Academic Leaders (AL); Economic Development Leaders (EDL)

Function	Leader Group	Funding Sources		
		State/ County	Organization	Participant/ Student
13. Small business incubator	BNPL	38	62	....
	AL	44	56	....
	EDL	40	60	....
14. Training needs assessmt key management	BNPL	32	57	11
	AL	34	62	4
	EDL	41	48	11
15. Training needs assessmt employees	BNPL	32	53	15
	AL	38	59	3
	EDL	38	51	11
16. Training needs assessmt regional leaders	BNPL	45	42	13
	AL	61	38	1
	EDL	50	40	10

Note: Table 6 continued on next page

Table 6 (continued)

Proportion of Costs for Each Economic Development Function by Leader Group: Business/NonProfit Leaders (BNPL); Academic Leaders (AL); Economic Development Leaders (EDL)

Function	Leader Group	Funding Sources		
		State/ County	Organization	Participant/ Student
17. Pre-screening new organizs.	BNPL	21	66	13
	AL	26	69	5
	EDL	25	70	5
18. Pre-screening expanding organizs.	BNPL	18	66	16
	AL	21	74	5
	EDL	21	73	6
19. Job training new organizs.	BNPL	22	73	15
	AL	32	62	6
	EDL	31	58	11
20. Job training expanding organzs.	BNPL	18	67	15
	AL	33	61	6
	EDL	30	60	10

Note: Table 6 continued on next page

Table 6 (continued)

Proportion of Costs for Each Economic Development Function by Leader Group: Business/NonProfit Leaders (BNPL); Academic Leaders (AL); Economic Development Leaders (EDL)

Function	Leader Group	Funding Sources		
		State/ County	Organization	Participant/ Student
21. Job training unemployed	BNPL	76	13	11
	AL	84	9	7
	EDL	77	18	5
22. Career vocational counseling unemployed	BNPL	80	9	11
	AL	85	7	8
	EDL	77	16	7
23. College staff econom develop recruit	BNPL	67	25	8
	AL	80	16	4
	EDL	72	20	8
24. College staff regional econom develop councils	BNPL	71	20	9
	AL	72	24	4
	EDL	67	26	7

Note: Table 6 continued on next page

Table 6 (continued)

Proportion of Costs for Each Economic Development Function by Leader Group: Business/NonProfit Leaders (BNPL); Academic Leaders (AL); Economic Development Leaders (EDL)

Function	Leader Group	Funding Sources		
		State/ County	Organization	Participant/ Student
25. College staff PIC's	BNPL	59	32	9
	AL	73	23	4
	EDL	61	32	7
26. Dissem research on econom develop	BNPL	54	38	8
	AL	74	25	1
	EDL	62	28	10

college providing instruction and counseling services to employees of local organizations: 1, 2, 3, 4, 5, 6, 7, 8, 9. For all of the functions in this cluster, business leaders assigned a higher proportion of costs to the participant/student than either of the other leader groups. Moreover, for each function within this cluster, business leaders identified the student as the primary funding source. This was the only leader group to follow this pattern completely. Also, for all functions in this cluster, with the exception of #6, academic leaders assigned a lower proportion of costs to the participant/student source than either of the other leader groups. It appears that business leaders displayed expectations that the participant/student source would pay a greater share of the costs for these functions than did the academic leaders. Within this cluster, both academic leaders and economic development specialists allocated a higher proportion of costs to the state/county than did the business leaders. This finding suggests that the latter groups prefer a greater role for governmental funding in this area than do business leaders. Finally, the highest allocation of funding to the organization by business leaders was for function #3 (credit courses for supervisors). This finding suggests that business leaders may be more willing to invest organizational resources for training of supervisors than for any of

the other functions in this cluster.

The following cluster of functions relate to the community college providing support for small business development: 10, 11, 12, and 13. For all functions within this cluster, academic and economic development leaders allocated a greater proportion of costs to the state/county than did business leaders. As with the previously discussed cluster of functions, academic and economic development leaders seem to view a greater role for governmental funding than did business leaders.

Functions #14, #15 and #16 form a cluster relating to community college involvement in completing training needs assessments for organizations in the service area. For all of the functions in this cluster, academic leaders and economic development professionals allocated a greater proportion of costs to the state/county than did business leaders. This finding reinforces the pattern that academic and economic development leaders supported a greater role government resources than did business leaders.

The following cluster of functions relate to community college involvement in screening and training employees for new and expanding organizations: 17, 18, 19, and 20. As with previous cluster functions, academic and economic development leaders allocated a greater proportion of costs to the state/county than did business leaders.

In contrast to academic and economic development leaders' tendency to allocate greater costs to governmental sources, business leaders tended to allocate a higher proportion of costs to the participant/student. In every function in the above clusters, business leaders allocated a higher proportion of costs to the participant/student than did the other leader groups. This finding suggests a fairly consistent level of disagreement between academic and economic development leaders and business leaders concerning the role of government resources and the individual student in providing funding for economic development functions.

Functions #21 and #22 relate to community college involvement in job training and counseling for unemployed persons. All three leader groups recommended that a substantial proportion of these costs should be paid by the state/county. However, business leaders again recommended a higher proportion of costs to be paid by the student than did the other leader groups.

The following functions relate to community college involvement in regional economic development activities: 23, 24, 25, and 26. An examination of the data in Table 6 indicates that academic leaders allocated a higher proportion of funding to state/county sources than did the other leader groups. This finding suggests that community college leaders place a high value on the

use of institutional budget to support college involvement in these functions.

Research Question #4. For each economic development function, what is the frequency of agreement in selection of a primary funding source among the three leader groups?

Findings for Research Question #4.

To respond to this research question, an analysis of the data in Table 6 was completed to identify those functions for which leader groups selected a common primary funding source. This analysis, summarized in Table 7, indicates that all three leader groups agreed on a primary funding source for 18 of the 26 functions (69%). Also, two of the three leaders groups were in agreement on a primary funding source for all remaining functions. That is, at least two leader groups were in agreement on selection of primary funding source for every function in the study. For functions for which all three leader groups selected the same primary funding source, the organization was selected most frequently (11) followed by the state/county (7). There was no function for which all leader groups selected the participant/student as the primary funding source.

For the eight functions for which only two leader groups agreed on selection of primary funding source, the organization was again selected most frequently (5) followed by the participant/student (2) and the

Table 7

Summary of Frequency of Agreement among Leader Groups in Their Selection of a Primary Funding Source for Community College Economic Development Functions: Leader Group Designations are: Business/NonProfit (1); Academic (2); and Economic Development (3)

Leader Groups in Agreement	Function #	Primary Funding Source		
		State/ County	Organization	Participant/ Student
1, 2, & 3	3		x	
1, 2, & 3	4		x	
1, 2, & 3	10		x	
1, 2, & 3	12		x	
1, 2, & 3	13		x	
1, 2, & 3	14		x	
1, 2, & 3	15		x	
1, 2, & 3	16	x		
1, 2, & 3	17		x	
1, 2, & 3	18		x	
1, 2, & 3	19		x	
1, 2, & 3	20		x	
1, 2, & 3	21	x		

Note: Table 7 continued on next page

Table 7 (continued)

Summary of Frequency of Agreement among Leader Groups in Their Selection of a Primary Funding Source for Community College Economic Development Functions: Leader Group Designations are: Business/NonProfit (1); Academic (2); and Economic Development (3)

Leader Groups in Agreement	Function #	Primary Funding Source		
		State/ County	Organization	Participant/ Student
1, 2, & 3	22	x		
1, 2, & 3	23	x		
1, 2, & 3	24	x		
1, 2, & 3	25	x		
1, 2, & 3	26	x		
1 & 2	5		x	
1 & 2	6		x	
1 & 2	7		x	
1 & 3	1			x
1 & 3	9			x
1 & 3	11		x	
2 & 3	2		x	
2 & 3	8	x		

state/county (1). A summary of selection of primary funding sources in which all three or two of the three groups were in agreement indicates that the organization was selected most frequently (16) followed by the state/county (8) and the participant/student (2).

Chapter 5

SUMMARY, CONCLUSIONS, and RECOMMENDATIONS

Summary

The purpose of the study was to determine the priorities for New Jersey community college involvement among 26 economic development functions as viewed by leaders of business and nonprofit organizations, community college leaders, and economic development specialists within the state. The study also sought to analyze the views of these leader groups concerning the most appropriate sources for funding for each of these functions. There were four principal research questions involved in the study.

1. Which of the 26 economic development functions are most important as viewed by community college leaders, leaders of business and nonprofit organizations, and economic development leaders?
2. For each economic development function, what are the differences in ratings of importance among the three leader groups?
3. For each economic development function, what is the primary funding source selected by each leader group?
4. For each economic development function, what is the frequency of agreement in selection of a primary funding source among the three leader groups?

Summary of Results for Research Question #1

The following functions were ranked in the top half for importance for all three leader groups: 3, 6, 8, 12, 21, and 22. These functions represent the following cluster functions for the community college: providing training for employees of local organizations (#'s 3, 6, 8); providing consultation and training for small business owners (#11 and #12); and, providing job training and vocational and career counseling for unemployed persons (#21 and #22). The following functions received the highest combined group leader mean ratings for importance: 3, 5, 6, 7, 8, 21, and 22. These functions represent clusters relating to community college involvement in providing job training for employees of local organizations (#'s 3, 5, 6, 7, 8) and career and vocational counseling and job training for unemployed persons (#21 and #22). Function #21, providing job training for unemployed persons, was ranked first by two leader groups and third by another. This function also received the highest combined leader group mean rating for importance. As outlined above, the following five functions appeared in both the top half rankings for importance by all leader groups and in the top quartile for combined leader group mean rating for importance. Function #3 involves providing credit courses tailored for supervisory personnel in local organizations.

Community college involvement in tailoring existing certificate programs to meet the training needs of local organizations is covered in function #6. The next function, #8, involves the college in providing basic skills training for employees of local organizations. Function #21 involves providing job training for unemployed persons. The fifth function, #22, involves the college in providing career and vocational counseling for unemployed persons. Conversely, the following five functions were most frequently ranked in the lowest quartile by all leader groups for total leader group rating means: 13, 15, 16, 17, and 18. Function #13 involves having the college operate an incubator program to support small business development. Functions #15 and #16 focus on conducting training needs assessments for local organizations by surveying employees and key regional leaders. Community college involvement in providing pre-screening and skills assessment for potential employees of new or expanding organizations are outlined in functions #17 and #18. Functions relating to community college involvement in regional economic development planning (#'s 23, 24, 25, and 26) received considerable support. All four of these functions were found in the top half rating for importance for all three leader groups. Furthermore, function #26, involving the community college in disseminating research results on technical changes, business developments, and

economic indicators, was the highest rated function for economic development leaders.

Business leaders and economic development leaders displayed the highest agreement on importance rankings (Spearman rho .88) among various leader group pairs. Business leaders and academic leaders indicated a moderate degree of consensus on rankings of importance (Spearman rho .47). Academic leaders and economic development specialists displayed the lowest, although still somewhat moderate, agreement (Spearman rho .40).

Summary of Results for Research Question #2.

All three leader groups agreed on the importance ratings for the following functions: 3, 5, 6, 7, 8, and 22. Five of these functions represent the function cluster relating to community college involvement in tailoring courses and programs to meet the training needs of local organizations (#'s 3, 5, 6, 7, 8). Function #22, relates to community college involvement in providing career and vocational counseling to unemployed persons. It should be noted that five of these functions (#'s 3, 6, 8, 22) were also included in the top half for importance by all three leader groups. Specifically, function #3 involves the community college in providing credit courses tailored for supervisory personnel in local organizations. Tailoring existing certificate programs to meet training needs of local is represented in function #6. Function #8 focuses

on providing basic skills training for employees of local organizations. For function for which only two leader groups agreed on importance ratings, business leaders and economic development leaders were in agreement more frequently than any other leader group pairs. This finding reinforces the high correlation in importance ranking found between these two groups in the analyses under research question #1. The greatest difference in ratings of importance was found most frequently between business leaders and academic leaders. For 18 of the 26 functions, business leaders and academic leaders displayed the greatest difference in rating means. This finding, however, should be viewed in consideration of the moderate correlation in importance rankings between these two leader groups indicated under the findings for research question #1. Although business leaders and academic leaders indicated considerable differences in rating means, they displayed a higher degree of agreement on the relative importance (ranking) of functions than did business leaders and economic development specialists.

Findings for Research Question #3.

The leader groups displayed an extremely high degree of consensus on allocation of costs for functions among the three funding sources provided. All three leader groups selected the organization most frequently

as the primary funding source followed by the state/county and the participant/student. The response pattern of leader groups was analyzed by identifying the high, medium, and low allocation of costs among funding sources for each function by leader group. All three groups displayed the same pattern of allocation of costs for 15 of the 26 functions (58%). Academic leaders and economic development specialists tended to allocate a higher proportion of costs to the state/county than did business leaders. Conversely, business leaders allocated a higher proportion of costs to the participant/student than the other groups for 24 of the 26 functions. The highest mean allocation of costs, for all three groups combined, for any specific functions, was found for state/county funding for functions #21 and #22. Function #21 focuses on community college involvement in providing job training for unemployed persons. Function #22 relates to community colleges providing vocational and career counseling for unemployed persons. For business leaders, the highest allocation of costs for the organization was for function #3; having the community college provide credit courses tailored for supervisory personnel in local organizations. Functions #23 through #26 focus on community college involvement in regional economic development activities. Academic leaders allocated a higher proportion of costs to the state/county for

all of these functions than did either of the other leader groups. This finding suggests that academic leaders may perceive value in receiving greater resources from the state and county to support college involvement in regional economic development efforts.

Summary of Findings for Research Question #4.

Leader groups displayed an extremely high level of consensus on the selection of a primary funding source for each function. All three groups selected the same primary funding source for the 18 (69%) of the 26 functions in the study. These functions are as follows: 3, 4, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, and 26. Of these functions, #3, #12, #21, and #22 were also ranked in the top half for importance by all three leader groups. This suggests a very high degree of consensus on importance and funding source selection for these four functions. Function #3 relates to community colleges tailoring credit courses for supervisory personnel in local organizations. Function #12 focuses on providing non-credit courses or workshops for small business leaders/entrepreneurs. Functions # 21 and #22 involve community colleges providing job training and vocational and career counseling for unemployed persons. Furthermore, for functions #3 and #21, all three leader groups were in agreement on the ratings of importance. When considering both importance ratings and consensus on a

primary funding source, these two functions received the highest level of support from the combined leader groups. In addition to the 18 functions on which all three groups agreed on a primary funding source, at least two leader groups were in agreement on a primary funding source for all of the remaining 8 functions. Consequently, at least two leader groups were in agreement on the selection of a primary funding source for every function in the study. As the primary funding source, the organization was selected most frequently (16) followed by the state/county (8) and the participant/student (2).

Conclusions

The study revealed a high degree of consensus among leader groups concerning the rating and ranking of importance for the community college economic development functions under consideration. This finding is in conflict with the results of previous studies investigating perceptions of business leaders and academic leaders concerning the economic development functions of the community college (King, 1984; Kingry, 1984; Linck, 1983). In those studies, substantial differences were found between business leaders and academic leaders concerning the importance of various functions in which the community college could be involved. Leader group consensus found in this study may be attributed to at least three factors. First,

the previous studies (King, 1984; Kingry, 1984; and Linck, 1983) were completed at least four years ago. Since these studies were completed, the efforts of community college leaders may have contributed to an increased awareness among the other leader groups concerning the importance of community college involvement in economic development. Next, governmental leaders on a national level and in New Jersey increasingly have reinforced the critical role of the higher education community in economic development. Finally, the function descriptions used in this survey may have been at a greater level of specificity than the functions used in previous studies. An increased clarity of function descriptions could have reduced the influence of item ambiguity on leader group determination of function importance. Also, this study found a high degree of agreement among leader groups concerning the selection of a primary funding source for the functions under consideration. Because the literature does not include previous studies concerning preference of funding sources for functions by leader group, a comparative view of the findings in this study cannot be presented.

The results of this study indicated extensive agreement among leader groups regarding community college involvement in providing job training and vocational and career counseling for unemployed persons. All three leader groups displayed a high level of consensus

concerning the state/county providing the primary funding to support community colleges in this effort. Support for community college involvement in these functions can be found in the literature (Birch, 1984; Braden, 1987; Kolberg, 1984;) and in policies and regulations regarding New Jersey community colleges (New Jersey State Office of the Governor, 1983; New Jersey State Department of Higher Education, 1979 & 1981).

The study suggested consensus among the leader groups concerning community college involvement in tailoring existing courses and programs to meet training needs of local organizations. This finding is extensively supported in the literature (American Association of Community and Junior Colleges, 1985; Brock, 1987; Cohen & Brawer, 1982; Martorana & Garland, 1984; New Jersey State Department of Higher Education, 1987; and Zeiss, 1986). To support training needs of local organizations, the leader groups in the study viewed three specific functions as having predominant importance. Leader groups most valued community college involvement in tailoring credit courses for supervisory personnel, providing certificate programs tailored to meet training needs of local organizations, and providing basic skills training for employees of local organizations. Among these three functions, business and nonprofit leaders allocated the highest proportion of funding to the organization

for tailoring credit courses for supervisory personnel. This finding suggests that this leader group may be willing to invest a higher level of the organization's resources in community college efforts to train supervisory level personnel than to the other types of customized training.

Findings revealed that leader groups highly valued community college involvement in providing support for small business development within the institution's service area. The leader groups viewed as most valuable the community college providing credit and non-credit courses and workshops for small business leaders/entrepreneurs. The literature provides evidence of support for community college involvement in serving as a resource to assist small business development (Birch, 1985; Jaschik, 1986; American Association of Community and Junior Colleges, 1988).

Findings also indicate that the leader groups reflected consensus on the low priority for certain functions presented in the study. Very low priority was allocated to having the college operate incubator programs to support small business development. Community college involvement in conducting training needs assessments for local organizations and providing pre-screening and skills assessment for potential employees of new or expanding organizations were given low priority by all three leader groups. This finding is in

some conflict with the literature which suggests that community college should be involved in these types of activities (Owen, 1981; Scott, 1987; Zeiss, 1986).

The study revealed a number of findings regarding characteristics of leader group allocation of costs among the three funding sources. Academic leaders and economic development leaders tended to allocate a greater proportion of costs to the state/county than did business leaders. Conversely, business leaders tended to allocate a greater proportion of costs to the participant/student than either of the other leader groups. For all three leader groups combined, the organization was selected most frequently as the primary funding source, followed by the state/county and the participant/student. All three leader groups also indicated agreement on having the state/county provide a high level of funding to support community college involvement in regional economic development activities.

Recommendations

General Recommendations

Based on the summary and conclusions outlined above, the following general recommendations pertaining to New Jersey community colleges are presented.

1. Community colleges should collaborate with business/ non-profit leaders and economic development specialists to identify the specific economic development functions

the college could provide within its service area.

2. External consensus building on the economic development functions of the college also should be linked to the institution's strategic planning process to assure institutional commitment to an economic development role.
3. Community colleges should seek to build consensus with business/non-profit leaders and economic development specialists on the appropriate funding sources for the functions the college is expected to provide. Furthermore, the institutions should elicit the support of these leader groups in efforts to obtain the funding needed from county and state sources to support college involvement in economic development.
4. Community colleges should be especially alert to the potential for building an economic development role based on the following functions:
   a. Providing job training and career and vocational counseling specifically designed for unemployed persons;
   b. Providing basic skills training for employees of local organizations;
   c. Providing training tailored for supervisory personnel in local organizations;
   d. Offering certificate or diploma programs tailored to meet the training needs of local organizations;
   e. Supporting small business development by offering

credit and non-credit courses and workshops, along with consulting support, to small business leaders; and,

f. Providing college staff to work on regional economic development committees and on private industry councils (PIC).

Recommendations for Further Research

Based on the findings in this study, the following areas of research could serve to further clarify the role of New Jersey community colleges in economic development:

1. A study to determine if the views of business leaders concerning the economic development functions of the community college vary according to the type of business;
2. A study which explores the views of state legislators and policymakers at the state higher education and economic development levels, concerning their perceptions of the economic development functions of community colleges;
3. A replication of this study in another state; and,
4. A study of community college funding policy to determine how fiscal adjustments are made to support the continually evolving economic development functions with which these institutions become involved.

REFERENCES

American Association of Community and Junior Colleges. (1988). Building communities: A vision for a new century. Washington DC: Author.

American Association of Community and Junior Colleges. (1985). Keeping America working: Problems in partnerships. Washington DC: Author.

Ary, J., Jacobs, L., & Razavieh, A. (1985). Introduction to research in education (3rd ed.). New York: Holt, Rinehart, and Winston.

Atwell, C., Vaughan, G., & Sullins, R. (1982). Reexamining community sevices in the community colleges. Los Angeles: ERIC Clearinghouse for Junior Colleges.

Bender, L., & Lukenbill M. (1984, October). Let's begin with ourselves. Community, Technical, and Junior College Journal, pp. 16-18.

Bernstein, M. H. (1986). Higher education and the state: New linkages for economic development. Washington, DC: National Institute for Working and Learning.

Birch, D. (1984, Winter). The changing rules of the game. Commentary. pp. 12-16.

Birch, D. (1985, April). Matters of fact. INC., pp. 31-36.

Braden, P. (1987-88, December-January). The impact of technology on the work force. Community, Technical, and Junior College Journal, pp. 24-29.

Breneman, D. W., & Nelson, S. C. (1981). Financing community colleges: An economic perspective. Washington, DC: Brookings.

Brock. W. (1987-88, December-January). Community, technical, and junior colleges: Key partners in economic development. Community, Technical, and Junior College Journal, pp. 48-49.

Brock, W. (1987, Fall). Service wars: The race to be the best in product service. Community, Technical, and Junior College Journal, pp. 13-18.

Burack, E. H., & Mathys, N. J. (1980). Career management in organizations: A human resource development planning agenda. New York: Harcourt & Brace.

Charner, I., & Gold, G. (1987, Winter). Building effective business/higher education partnerships. The Community Services Catalyst, 1, 20-23.

Choulochas, J., & McKenney, J. (1986, April/May). Partnership building. Community, Technical, and Junior College Journal, pp. 62-64.

Churma, T. (1986). The higher education-economic development connection: Emerging roles for colleges and universities in a changing economy. Menlo ParK, CA: Stanford Research Institute.

Cohen, A., & Brawer, F. B. (1982). The American community college. San Francisco: Jossey-Bass.

Committee for Economic Development. (1985). Investing in our children. New York: Author.

COSMOS Corporation. (1985). Attracting high technology firms to local areas. Washington, DC: Author.

Cross, K. P. (1981). Community colleges on the plateau. Journal of Higher Education, v. 52, no.2, pp. 113-123.

Cross, K. P. (1985). Determining mission and priorities. Reviewing the american community college: Priorities and strategies for effective leadership. San Francisco: Jossey-Bass.

Cross, K. P., & McCartan, A. (1984). Adult learning: State policies and institutional procedures. Washington, DC: ERIC Clearinghouse for Higher Education.

Cuban, L. (1988, April). You're on the right track, David. Phi Delta Kappan, pp. 571-572.

Deegan, W., & Tillery, D. (1987, April/May). Toward a 5th generation of community colleges: Seven priorities for action. Community, Technical, and Junior College Journal, pp. 36-40.

Dillman, D. A. (1978). Mail and telephone surveys: The total design method. New York: John Wiley & Sons.

Domer, E. (1986). Reflections on economic development. Essays in Economics. Boulder. CO: Winslow Press.

Eagleton Institute. (1987). Report on 1986 survey of New Jersey county community college students. New Brunswick, NJ: Rutgers University.

Elizabeth Development Company. (1987). Linking the public and private sectors. Elizabeth, NJ: Author.

Gillis, W. (1986). Guidelines for local economic development. University Park, PA: Pennsylvania State University.

Harvey, L. J. (1983, Summer). Community colleges and high technology. The Community Services Catalyst, 3, 11-13.

Higher education directory. (1987). Washington, DC: Higher Education Publications.

Hodgkinson, H. L. (1983). Guess who's coming to college: Your students in 1990. Washington, DC: National Institute of Independent Colleges and Universities.

Illinois Community College Trustees Association. (1986, February). Economic development through education: The community college approach. Springfield, IL: Author.

Isreal, C., & Custer, H. (1986). Making economic development work. Des Moines: Des Moines Area Community College.

Jaschik, S. (1986, April 16). State plans to link small businesses and universities. The Chronicle of Higher Education, p.1.

Johnson, L. (1984). The high technology connection. Washington, DC: ERIC Clearinghouse for Higher Education.

Jones, R. (1987-88, December/January). Influence beyond the college gates. Community, Technical, and Junior College Journal, pp. 21-23.

Kassebaum, N. (1987, April/May). Renewed focus on community colleges. Community, Technical, and Junior College Journal, pp. 30-32.

Kean, T. (1986, September 3). Governors call on campuses to develop programs to measure student learning. The Chronicle of Higher Education. p. 78.

Kearns, D. (1988). An education recovery plan for America. Phi Delta Kappa, p.570.

King, W. J. (1984). Post secondary institutions' role in meeting the training needs of high technology industries. Dissertation Abstracts International, (University Microfilms No. 84-27858).

Kingry, L. K. (1984). The role of Oregon community colleges in economic development as perceived by community college faculty and administration and the business community which they service. Dissertation Abstracts International, (University Microfilm No. 84-64038).

Knowles, M. (1983, Fall). Adults are not grown-up children as learners. The Community Services Catalyst, 4, 4-7.

Kolberg, W. (1984, Fall). The role of the community college in restoring America's place in world competition. The American Association of Community and Junior College Trustees Quarterly. pp. 1-4.

Lawson, W., Averill, D., & Lloyd, L. (1986, February). The community college as an economic development center. Sacramento: California Community College Administrators of Occupational Education.

Linck, H. F. Jr. (1983). Cooperation between community colleges and business/industry: An analysis of policy issues. Dissertation Abstracts International, (University Microfilm No. 84-1951).

Liston, E., & Ward, C. (1984, November). The greenhouse effect. Community, Technical, and Junior College Journal, pp. 20-23.

Long, J., Gordon R., & Spence, C. (1984). Economic development and community colleges. Columbus: Ohio State University.

Mahoney, J. R. (1984). Putting America back to work: The kellogg leadership initiative. Washington, DC: American Association of Community and Junior Colleges.

Martorana, S. V., & Garland, P. (1984, November). Public policy for economic development: The two-edged sword. Community, Technical, and Junior College Journal, pp. 116-119.

McCabe, R. H. (1981. May). Now is the time to reform the American community college. Community and Junior College Journal, pp. 5-10.

McClenney, K. M., & McClenney, B. N. (1988, April/May). Managing for student success and institutional effectiveness. Community, Technical and Junior College Journal, pp. 53-55.

McKeown, J. (1984, September). Economic development institute mission statement adopted. Economic Development Network. pp.1-4.

Milkovich, G., & Glueck, F. (1985). Personnel: A diagnostic approach. Plano, Texas: Business Publications, Inc.

Moser, K. (1986, May). Business-industry linkages with post-secondary institutions: Implications for building successful partnerships. Lifelong Learning, pp. 4-5.

National Governors' Association. (1986). Time for results: 1991 report on education. Washington, DC: Author.

New Jersey State Chamber of Commerce. (1987). Business directory. Trenton, NJ: Author.

New Jersey State Department of Commerce and Economic Development. (1987). New Jersey economic development network. Trenton, NJ: Author.

New Jersey State Department of Higher Education. (1987). Building partnerships: The opportunities ahead. The report on the future health and vitality of the county community colleges. Trenton, NJ: Author.

New Jersey State Department of Higher Education. (1979). Excellence and the open door: An essential partnership. Recommendations of the commission to study the mission, financing, and governance of the county colleges. Trenton, NJ: Author.

New Jersey State Department of Higher Education. (1981). Statewide plan for higher education. Trenton, NJ: Author.

New Jersey State Department of Higher Education. (1981a). Regulations and statutes for New Jersey community colleges. Trenton, NJ: Author.

New Jersey State Department of Labor. (1987). Newsletter of the occupational information coordinating committee. Trenton, NJ: Author.

New Jersey State Office of the Governor. (1983). Report of the governor's commission on science and technology for the state of New Jersey. Trenton, NJ: Author.

Occupational employment projections to 1995. (1983, November). Monthly Labor Review, p. 2.

Owen, J. (1981, Summer). Economic development: the community college's role. Journal of Studies in Technical Careers, pp. 281-89.

Rohfeld, R. (1984). Faculty growth through community development. The Community Services Catalyst, 7, 8-11.

Sanford, T. (1987-88, December/January). Decision makers. Community, Technical, and Junior College Journal, pp. 10-11.

Scott, R. (1986-87, December/January). Proven partners: Government and education. Community, Technical, and Junior College Journal, pp. 16-19.

Stanford Research Institute. (1982). In good company: Corporate community action and how to do it in your community. Menlo Park, CA: Author.

Stulberg, G. (1987, August). Decision makers. Community, Technical, and Junior College Journal, pp. 8-9.

Sullins, W. R. (1985-86, December/January). How can community colleges improve relations with four-year colleges and universities? Community, Technical, and Junior College Journal, pp. 43-44.

Terry, A. (1984, Winter). Short term training: A means of providing community colleges and students with long term benefits. The Community Services Catalyst, 1, 22-24.

United for economic development. (1986, December). American Management Association Newsletter, 5, 1.

Vaughan, G. T. (1988, February/March). The community college mission. Community, Technical, and Junior College Journal, pp. 25-27.

White, J. (1986, July 19). Strategic investments in the future. Southern Growth Policies Board, pp. 1-6.

Woodbury, K.B. Jr., (1977, October). Should the mission be modified? Community and Junior College Journal, pp. 1-13+.

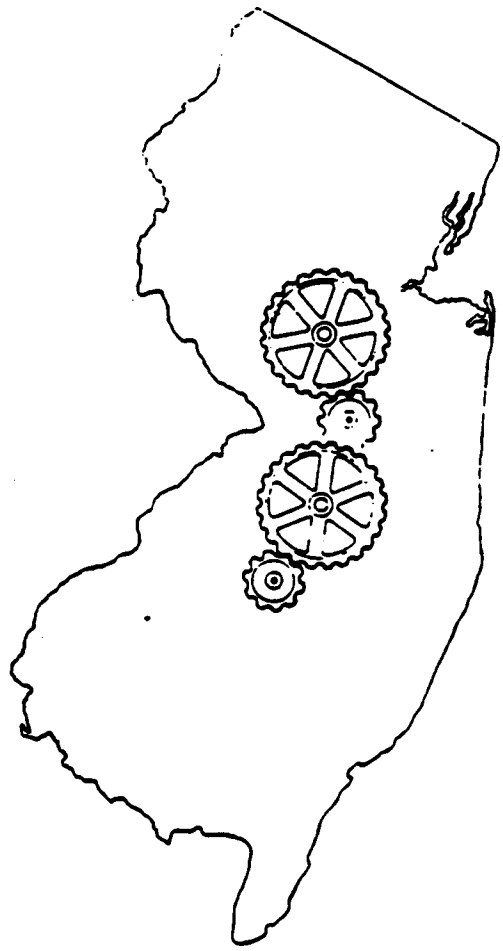
Yarrington, R. (1980, October). Interpreting the mission. Community and Junior College Journal, pp. 6-10.

Zeiss, T. (1986, March). Positioning community colleges via economic development. ERIC Digest, pp.1-4.

APPENDIX A

Survey Instrument

COMMUNITY COLLEGE PARTNERSHIPS



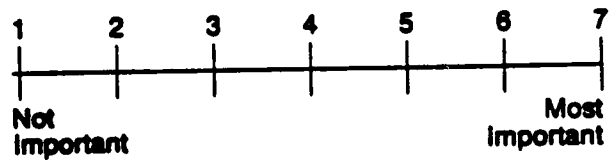
What Are The Economic Development Functions of New Jersey Community Colleges?

A Survey of Community College, Corporate, Non-Profit, and Economic Development Leaders.

A. Directions

We are interested in your opinion regarding the importance and funding of 26 economic development functions that a comprehensive community college might provide. For each of the 26 functions listed you are asked to make two judgements.

1. We would like to judge the relative importance of each function. The following scale is to be used for your rating:



Please record your numerical rating in the space provided to the left of each function statement.

2. You are also asked to indicate your beliefs about who should pay for each function. Specifically, you are asked to indicate the proportional costs that should be paid by: a) the state/county; b) the organization; and, c) the individual participant/student.

The proportional share is to be expressed by distributing a kitty of 100 points across the three possible funding sources. Please record your responses in the spaces provided to the right of each function statement.
Thank you.

Importance Rating 1—7 (1 = Not Important; 7 = Most Important)		Proportion of Cost To Be Paid By: State/ County	Organization	Participant/ Student
_____	1. Provide credit courses tailored for non-supervisory personnel in the organization.	____pts.	____pts.	____pts. = 100
_____	2. Provide non-credit courses tailored for non-supervisory personnel in the organization.	____pts.	____pts.	____pts. = 100
_____	3. Provide credit courses tailored for supervisory personnel in the organization.	____pts.	____pts.	____pts. = 100
_____	4. Provide non-credit courses tailored for supervisory personnel in the organization.	____pts.	____pts.	____pts. = 100
_____	5. Tailor existing associate degree programs to meet the training needs of local organizations.	____pts.	____pts.	____pts. = 100
_____	6. Tailor existing certificate programs to meet the training needs of local organizations.	____pts.	____pts.	____pts. = 100
_____	7. Tailor existing diploma programs to meet the training needs of local organizations.	____pts.	____pts.	____pts. = 100

Importance Rating 1——7 Not Important / Most Important		Proportion of Cost To Be Paid By: State/ County	Organization	Participant/ Student
_____	8. Provide basic skills training (math, reading, writing) for employees of local organizations.	____pts.	____pts.	____pts. = 100
_____	9. Provide career and vocational counseling for employees of local organizations.	____pts.	____pts.	____pts. = 100
_____	10. Support small business development by providing consulting services to small business leaders/ entrepreneurs.	____pts.	____pts.	X pts. = 100
_____	11. Support small business development by offering college credit courses or workshops for small business leaders/ entrepreneurs.	____pts.	____pts.	X pts. = 100
_____	12. Support small business development by offering non-credit courses or workshops for small business leaders/entrepreneurs.	____pts.	____pts.	X pts. = 100
_____	13. Support small business development by having the college operate an incubator program.	____pts.	____pts.	X pts. = 100

Importance Rating 1—7 (1 = Not Important; 7 = Most Important)		Proportion of Cost To Be Paid By: State/ County	Organization	Participant/ Student
_____	14. Conduct training needs assessments for local organizations by surveying key management persons.	____pts.	____pts.	____pts. = 100
_____	15. Conduct training needs assessments for local organizations by surveying employees.	____pts.	____pts.	____pts. = 100
_____	16. Provide training needs assessments for local organizations by surveying key regional leaders.	____pts.	____pts.	____pts. = 100
_____	17. Provide pre-screening and skills assessment of potential employees for new organizations.	____pts.	____pts.	____pts. = 100
_____	18. Provide pre-screening and skills assessment of potential employees for expanding organizations.	____pts.	____pts.	____pts. = 100
_____	19. Provide job training tailored for new employees of new organizations.	____pts.	____pts.	____pts. = 100
_____	20. Provide job training tailored for new employees of expanding organizations.	____pts.	____pts.	____pts. = 100

Importance Rating 1——7 (1 = Not Important; 7 = Most Important)		Proportion of Cost To Be Paid By: State/ County	Organization	Participant/ Student
_____	21. Provide job training programs specifically designed for unemployed persons.	____pts.	____pts.	____pts. = 100
_____	22. Provide career and vocational counseling specifically designed for unemployed persons.	____pts.	____pts.	____pts. = 100
_____	23. Provide college staff (administrators, faculty, counselors) to participate on teams organized by local or regional economic development offices to recruit new organizations to the area.	____pts.	____pts.	____pts. = 100
_____	24. Provide college staff (administrators, faculty, counselors) to serve as representatives on local or regional economic development councils.	____pts.	____pts.	____pts. = 100
_____	25. Provide college staff (administrators, faculty, counselors) to serve as representatives on local Private Industry Councils (PIC).	____pts.	____pts.	____pts. = 100
_____	26. Disseminate research results on technical changes, business developments, and economic indicators to local organizations.	____pts.	____pts.	____pts. = 100

B. Background

For Leaders of Business or Non-profit Organizations:

1. What is your current position in your organization?

_____

2. What is the size of the organization with which you are affiliated (if a unit of a larger company, consider the size of the profit center)?

_____ (# of employees).

3. In which county is your organization located (if a unit of a larger company, consider the location of the profit center)?

_____

For Community College Leaders:

1. What is your current position in your college?

_____

2. What is the full-time equivalent (FTE) student enrollment of your college?

_____ (FTE).

3. In which county is your college located?

_____

For Economic Development Specialists:

1. What is your current position in your organization?

_____

2. In which county is the primary effort of your office directed?

_____

Is there anything else you would like to tell us about your view of the role of New Jersey community colleges in county and regional economic development efforts? If so, please use the space below.

Also, any comments you wish to make that may help us in future efforts to understand the role of community colleges in economic development will be appreciated, either here or in a separate letter.

Atlantic Community College
Mays Landing, N.J. 08330-9888

Your contribution to this effort is greatly appreciated. If you would like a summary of results, please print your name and address on the back of the return envelope (NOT on this questionnaire). We will see that you get it.

APPENDIX B

Cover Letter 1st Mailing

October 12, 1987

Dear Colleague or Associate in Education:

Over the past few years there has been an increasing interest in promoting economic development in New Jersey. I'm sure you'll agree that both private and public sectors benefit from a viable economic climate in all regions of the state. New Jersey's nineteen community colleges constitute a valuable resource for supporting county and regional economic development.

This study is intended to clarify the role of community colleges in economic development. Specifically, we are trying to compare the views of leaders of business and non-profit organizations, community college leaders, and economic development specialists on the appropriate economic development functions of the community college. Consequently, your response to this survey is extremely important.

The survey forms are coded to facilitate follow-up for non-returns. Your response will be kept confidential. Survey results will be shared with business and non-profit groups, community college leaders, and economic development specialists. The findings should contribute to improved policy planning by the colleges and identify potential linkages between the colleges and corporate and non-profit groups. The study will also serve to complete requirements for the doctorate in community college administration at Virginia Polytechnic Institute and State University.

If you have any questions concerning the study please contact me at (609) 343-4935. Your participation in this project is greatly appreciated.

Sincerely,

Peter L. Mora Sr., Director
Office of Institutional Planning and Research

APPENDIX C

Cover Letter 2nd Mailing

ATLANTIC COMMUNITY COLLEGE
MAYS LANDING, NEW JERSEY 08330-9888
609-625-1111. 646-4950

November 11, 1987

Dear Colleague or Associate in Education:

About three weeks ago I wrote to you seeking your opinion of the role of New Jersey community colleges in supporting economic development in our state. As of today we have not yet received your completed questionnaire.

This study has been undertaken to clarify the role of community colleges in economic development. We think it is critical to consider the views of leaders of business and non-profit organizations, community college leaders, and economic development specialists concerning the appropriate economic development functions of the community college.

I am writing to you again because of the significance each questionnaire has to the usefulness of the study. Your name was selected through a scientific sampling of leaders of business and non-profit organizations, community colleges and economic development agencies. In order for the results of this study to be truly representative of these leader groups it is essential that each person in the sample return their questionnaire.

In the event that your questionnaire has been misplaced, a replacement is enclosed. Thank you for your cooperation.

Sincerely,

Peter L. Mora Sr., Director
Office of Institutional Planning and Research

APPENDIX D

Cover Letter 3rd Mailing

ATLANTIC COMMUNITY COLLEGE
MAYS LANDING, NEW JERSEY 08330-9888
609-625-1111, 646-4950

December 7, 1987

Dear Colleague or Associate in Education:

I am writing to you about our study of the role of New Jersey community colleges in supporting economic development in our state. We have not yet received your questionnaire.

The large number of returns is very encouraging. But, whether we will be able to describe accurately how leaders of business and non-profit organizations, academic leaders and economic development professionals view the role of the community college in economic development depends upon you and the others who have not yet responded. This is because our past experience suggests that those of you who have not yet sent in your questionnaires may hold quite different views than those who have.

This is the first statewide study of this type to be done in New Jersey. Therefore, the results are of particular importance to the business and academic communities and to economic development policymakers. The usefulness of our results depends on how accurately we are able to describe the views of the key leader groups in the study.

In the event that your questionnaire has been misplaced, a replacement is enclosed. May I urge you to complete and return it as quickly as possible. Your contribution to the success of this study will be appreciated greatly.

Sincerely,

Peter L. Mora Sr., Director
Office of Institutional Planning and Research

APPENDIX E

Panel of Expert Judges Used to Validate the Economic Development Functions of New Jersey Community Colleges Used in this Study

John Cavan, President, Southside Virginia Community College. Alberta, VA.

Gordon Dahl, Economist, Atlantic County Division of Economic Development. Atlantic City, NJ

Yvonne Doggett, Director, Atlantic County Division of Economic Development. Atlantic City, NJ

Nolen M. Ellison, President, Cuyahoga Community College District of Cleveland. Cleveland, OH

Ben Ferrara, Director, Division of Economic Development, NJ State Department of Commerce and Economic Development. Trenton, NJ.

Robert Hughey, President, Atlantic Community College. Mays Landing, NJ.

Patrick Killian, Director of Research, South Jersey Casino Hotel Association. Atlantic City, NJ.

James McKenney, Associate Director, "Keeping America Working Project", American Association of Community and Junior Colleges (AACJC). Washington, DC.

Samuel D. Morgan, Associate Professor of Community College and Higher Education, Virginia Polytechnic Institute and State University. Blacksburg, VA.

Gordon Putnam, Commissioner, New Jersey Department of Commerce and Economic Development. Trenton, NJ.

Norman P. Shea, President, Hagerstown Junior College. Hagerstown, MD.

W. Robert Sullins, Associate Professor of Community College and Higher Education, Virginia Polytechnic and Institute and State University. Blacksburg, VA.

Daniel E. Vogler, Associate Professor of Community College and Higher Education, Virginia Polytechnic Institute and State University. Blacksburg, VA.

Tony Zeiss, President, Pueblo Community College. Pueblo, CO.

APPENDIX F

ANOVA Tables of Importance Ratings for Functions for Which at Least Two Leader Groups Indicated a Significant Difference

Table 8

Analysis of Variance of Importance Ratings for Economic Development Function #1 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	51.96117	25.98059	7.06 *
Within	267	982.424	3.679491	
Total	269	1034.385		

*= p< .05

Multiple Comparison Test

Means	4.23	4.80	5.56
Group	1	3	2

Table 9

Analysis of Variance of Importance Ratings for Economic Development Function #2 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	140.859	70.4259	22.69 *
Within	267	828.6372	3.10351	
Total	269	969.4963		

*= p< .05

Multiple Comparison Test

Means	3.47	4.45	5.62
Group	1	3	2

Table 10

Analysis of Variance of Importance Ratings for Economic Development Function #4 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	60.72941	30.3647	11.40 *
Within	267	711.1373	2.663436	
Total	269	771.8666		

*= p< .05

Multiple Comparison Test

Means	4.14	4.86	5.50
Group	1	3	2

Table 11

Analysis of Variance of Importance Ratings for Economic Development Function #9 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	40.8077	20.04038	6.60 *
Within	269	817.0877	3.038064	
Total	271	857.3199		

*= p< .05

Multiple Comparison Test

Means	3.85	4.51	4.84
Group	1	3	2
		XXXXXXXXXXXXXXX	

Table 12

Analysis of Variance of Importance Ratings for Economic Development Function #10 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	63.41156	31.70578	10.00 *
Within	267	846.4736	3.170313	
Total	269	909.8852		

*= p< .05

Multiple Comparison Test

Means	4.11		5.34	5.39
Group	1		2	3
			XXXXXXXX	

Table 13

Analysis of Variance of Importance Ratings for Economic Development Function #11 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	23.40081	11.0041	4.86 *
Within	267	643.1177	2.40868	
Total	269	666.5185		

*= p< .05

Multiple Comparison Test

Means	4.94	4.98		5.87
Group	3	1		2
	XXXXX			

Table 14

Analysis of Variance of Importance Ratings for Economic Development Function #12 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	106.1174	53.05869	22.50 *
Within	267	629.5123	2.2357724	
Total	269	735.6296		

*= p< .05

Multiple Comparison Test

Means	4.26	5.25	6.31
Group	1	3	2

Table 15

Analysis of Variance of Importance Ratings for Economic Development Function #13 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	54.63512	27.31756	7.32 *
Within	254	943.5011	3.734256	
Total	256	1003.136		

*= p< .05

Multiple Comparison Test

Means	3.54	3.82	5.03
Group	1	3	2
	XXXXXXXXXX		

Table 16

Analysis of Variance of Importance Ratings for Economic Development Function #14 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	134.3211	67.16057	10.98 *
Within	267	1633.253	6.117053	
Total	269	1767.574		

*= p< .05

Multiple Comparison Test

Means	3.8	4.54	6.03
Group	1	3	2
	XXXXXXXXXXXXX		

Table 17

Analysis of Variance of Importance Ratings for Economic Development Function #15 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	53.12818	26.56409	7.75 *
Within	266	911.5038	3.426706	
Total	268	964.632		

*= p< .05

Multiple Comparison Test

Means	3.72	4.47	4.90
Group	1	3	2
	XXXXXXXXXXXXXXXXXXXXXXXXX		
		XXXXXXXXXXXXXXXX	

Table 18

Analysis of Variance of Importance Ratings for Economic Development Function #16 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	79.34013	39.67006	11.71 *
Within	264	894.6449	3.388806	
Total	266	973.9851		

*= p< .05

Multiple Comparison Test

Means	3.22	3.84	4.93
Group	1.....3.....2		
	XXXXXXXXXXXXXX.....		

Table 19

Analysis of Variance of Importance Ratings for Economic Development Function #17 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	24.43619	12.21809	3.17 *
Within	264	1016.043	3.848649	
Total	266	1040.479		

*= p< .05

Multiple Comparison Test

Means	3.23	3.64	3.88
Group	1.....2.....3		

Table 20

Analysis of Variance of Importance Ratings for Economic Development Function #18 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	26.75073	13.375737	3.60 *
Within	264	981.886	3.719265	
Total	266	1008.6377		

*= p< .05

Multiple Comparison Test

Means	3.16		3.77	3.80
Group	1		2	3

Table 21

Analysis of Variance of Importance Ratings for Economic Development Function #19 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	95.555959	47.779797	14.69 *
Within	266	865.0055	3.2519	
Total	268	960.5651		

*= p< .05

Multiple Comparison Test

Means	4.25	4.66		6.19
Group	1	3		2
	XXXXXXXXXXXX			

Table 22

Analysis of Variance of Importance Ratings for Economic Development Function #20 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	108.5549	54.220292	16.85 *
Within	266	856.597	3.220292	
Total	268	965.1527		

*= p< .05

Multiple Comparison Test

Means	4.25	4.67	6.32
Group	1.....3.....2		
	XXXXXXXXXXXX.....		

Table 23

Analysis of Variance of Importance Ratings for Economic Development Function #21 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	21.33735	10.66868	3.78 *
Within	266	751.198	2.824053	
Total	268	772.5353		

*= p< .05

Multiple Comparison Test

Means	5.47	5.68	6.38
Group	1.....3.....2		
	XXXXXXXXXXXX.....		

Table 24

Analysis of Variance of Importance Ratings for Economic Development Function #23 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	73.75893	36.87947	9.53
Within	262	1014.301	3.87138	
Total	264	1088.06		

*= p< .05

Multiple Comparison Test

Means	3.81	4.85	4.94
Group	1	3	2

Table 25

Analysis of Variance of Importance Ratings for Economic Development Function #24 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	172.3301	86.16507	25.06 *
Within	262	881.9189	3.366103	
Total	264	1054.249		

*= p< .05

Multiple Comparison Test

Means	3.78	4.90	6.19
Group	1	3	2

Table 26

Analysis of Variance of Importance Ratings for Economic Development Function #25 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	190.8576	95.4288	30.13 *
Within	260	823.5607	3.167541	
Total	262	1014.418		

*= p< .05

Multiple Comparison Test

Means	3.93	5.33	6.25
Group	1	3	2

Table 27

Analysis of Variance of Importance Ratings for Economic Development Function #26 for Business, Academic, and Economic Development Leaders: Groups 1, 2, and 3 Respectively

Source	DF	SS	MS	F
Between	2	72.04118	36.02059	12.27 *
Within	261	765.955	2.934694	
Total	263	837.9962		

*= p< .05

Multiple Comparison Test

Means	4.66	5.23	5.78
Group	1	2	3
	XXXXXXXXXXXXXXXXXXX		
		XXXXXXXXXXXXXXXXXXX	

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