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A Case Study of Rural Community Colleges' Transition to Entrepreneurship

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Walden University

College of Social and Behavioral Sciences

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James Genandt

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Walden University
2017

Abstract

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by

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MA, Emporia State University, 1988

BA, Huron College, 1978

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy and Administration

Walden University

May 2017

Abstract

The traditional role of workforce training by community colleges in support of regional economic development is insufficient to help rural areas survive in a global economy. Rural community colleges are uniquely positioned to provide enhanced economic development support through entrepreneurship and small business development programs. Using Woolcock and Narayan's conceptualization of social capital, the purpose of this case study of 4 community colleges in a Midwest state was to identify specific entrepreneurship strategies rural community colleges use relative to economic development. The data were collected via email and telephone interviews with 11 employees connected to leadership and/or economic development from the 4 community colleges. Interview data were transcribed, inductively coded, and subjected to thematic analysis according to job duties of the respondents. Findings from this study indicate that key factors in improving entrepreneurial capacity include a need to strengthen leadership development, and enhance regional social capital through synergy networks linked to economic development efforts involving the rural college. These findings are similar to the Rural Community College Initiative that was funded by the Ford Foundation. The implications for social change stemming from this study include advocating entrepreneurship through social capital and shared vision via rural community colleges to stabilize and strengthen those regions, with the potential creating more vibrant economies for rural communities.

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Dedication

I am dedicating this project to Drs. James and Janis Lovell, Dr. Bill Able, Dr. Bev Bowen Rhoades, and Dr. Brian Inbody: mentors, friends, and much more. Their support for me during our time together through treks at universities and community colleges taught me so much and gave me the opportunities that have resulted in a wonderful career in higher education.

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Chapter 1: Introduction to the Study

Background

Transfer education, preparing students for continuing to a senior college or university, and occupational education have been the primary goals of rural community colleges. The capacity of rural communities to survive and possibly have a meaningful role in the economy of the 21st century may rely in part on the community colleges in their area. A report noted, “rural community colleges enroll even higher proportions of low-income students and first-generation students” than similar institutions in non-rural areas (*Reclaiming the American Dream*, 2012, p. 28). The report also provided examples of rural community college roles with economic development. There is evidence that many such institutions also strengthened their role to support community economic development, including entrepreneurship. The National Association for Community College Entrepreneurship (NACCE) has more than 1,000 community colleges as members of the organization (NACCE Membership, 2009). This organization has as its mission support for community colleges in implementing and enhancing entrepreneurship education and leadership that emphasizes these capabilities for community colleges (NACCE Mission, 2009).

The role of rural community colleges in economic development was documented by the Ford Foundation, sponsor of the Rural Community College Initiative (RCCI) (American Association of Community Colleges, Rural Community College Initiative, 2008). The Foundation selected certain rural community colleges, with a preference for

those serving areas of significant minority populations or poverty conditions, to pilot various priorities of the project, including economic development.

For 10 years, (1995-2005) pilot institutions received support from the Ford Foundation in the form of monetary or other resources to improve and expand their capacity in their identified area of emphasis. Several institutions were selected to work on adapting their mission and capability to support economic development. Analysis of the project by Eller, Martinez, Pace, Pavel, Garza, and Burnett (1998) represented the baseline in analyzing results from the Rural Community College Initiative. Four main strategies were identified that enhanced economic development capacity with the engagement of the targeted rural community colleges. One strategy concerned building capacity for entrepreneurship and small business development training and support. Another was to enhance the college's ability to implement a comprehensive leadership development program for its service region. A third finding was improving the college's engagement as a partner for regional economic development. Finally, the colleges could employ methods to increase capacity and awareness of workforce training components (p. 18). Their findings were reviewed and refined in 2008 (Emery) through the North Central Regional Center for Rural Development. A companion research project by Torres and Viterito (2008) found evidence of sustainability in several of the target institutions from the original RCCI project, and evidence that some of the rural community colleges had gained a reputation related to the change project initiated through RCCI. The evidence items all related to one or more of the strategies identified in the 1998 Eller study. This included the element of entrepreneurship.

The value of higher education institutions in providing entrepreneurship education as a tool for economic development has also been reinforced by Goetz, Partridge, and Deller (2009). Per their study, entrepreneurship education at the college level had positive influence when public and business leaders of the region acknowledged their support for such training as a component of economic development. During the last part of the 20th century and the beginning of the 21st century, more American colleges developed entrepreneurship centers than were developed by higher education institutions in the rest of the world. American institutions emphasized teaching and training students to become entrepreneurs, while centers in Europe and Asia emphasized support for existing entrepreneurs (Zahra, Newey, & Shaver, 2011, pp. 113-114). A Kauffman Foundation (2010) report on entrepreneurship in higher education stated entrepreneurship has importance for the simple reason that when it is performed successfully, it creates both economic and social value (p. 7). Hindle (2010) noted that the community context could influence the entrepreneurial process. The notion that an entrepreneur can be a change agent for the community is one rooted in the combination of influencing both community and economic development (pp. 600-601).

The distinction of the rural emphasis does matter. One of the benefits of the Ford Foundation RCCI project was its focus on rural community colleges and their ability to influence economic development, including entrepreneurship as one component of that type of development. Yu, Orazem, and Jolly (2011) analyzed data and demonstrated that while rural areas of the United States had lower rates of entrepreneurial start-up businesses than urban areas, the rural areas had a stronger rate of those businesses lasting

than in urban areas. This reinforced the value in enhancing capacity of rural regions for entrepreneurship-oriented economic development. Rogers (2012), in a case study involving Canadian rural community colleges and communities, identified rural challenges like the RCCI project, and promoted the view that beyond workforce training rural community colleges should enhance social and cultural capital of their rural areas to strengthen economic development. This analysis was similar to Siemens (2010) based on another Canadian study. Siemens found that many rural businesses have been affected by the out-migration of population, either reduced availability, or need for natural resources from the area that supported primary economic activity. Insufficient attention and resources was often given to increasing capacity for small business development. The emphasis was trying to get quick results, such as getting a business to relocate to the area, rather than on investment in local resources and capacities, which take longer to produce results (pp. 72-73). Ring, Peredo, and Chrisman (2009) also identified issues of rural regions that affect economic vitality. Agriculture was the primary economic income source for only 10% of rural populations now, as compared to more than 25% only 40 years ago (p. 171). To provide for a more diverse and stable economy more support should be given to entrepreneurship education and small business development. They also noted that there have been few studies about rural entrepreneurship (p. 172).

There are organizations to promote and assist community colleges. The American Association of Community Colleges, the League for Innovation in Community Colleges, and the Rural Community College Alliance are some examples. In 2002, the National Association for Community College Entrepreneurship (NACCE) was formed to support

community colleges' involvement in promoting entrepreneurship for economic development. In less than a decade this organization had attracted more than 1,000 institutional and individual members (NACCE Membership, 2009) and succeeded in raising the profile of entrepreneurship as a viable economic development approach from community colleges. What needed to be considered, however, was the level of commitment and evidence for economic development and entrepreneurship in NACCE that goes beyond merely being a member in the organization.

The involvement of colleges and universities as a major player in support of economic development was also identified in a report for the Federal Reserve. Drabenstott (2006), in making recommendations for regional economic development policy changes, identified the role of higher education institutions in providing more direct support through entrepreneurship training, innovation education, and engagement in regional and cluster economic development, such as emphasizing local amenities and resources (pp. 123-124).

The targeted institutions for this project were in one state and possibly members of NACCE, but none was participants in the RCCI project. The selected institutions for the proposed study were: North Iowa Area Community College (Mason City), Western Iowa Technical Community College (Sioux City), Iowa Lakes Community College (Estherville), and Northwest Iowa Community College (Sheldon). These community colleges served rural counties and communities across portions of the state of Iowa. In addition, the districts served by these colleges represented most the counties of the state, and per U.S. Census data the rural nature of Iowa (based on people per square mile) was

confirmed by the fact that its population density was only 65% of the national average (U.S. Census Quickfacts, 2009).

North Iowa Area Community College began as Mason City Junior College in 1918, the first junior college established in the state of Iowa. The main campus is in Mason City, with centers in five rural communities within its district. The College served almost 3,000 students per year in credit and non-credit courses (NIACC General History, 2009). There was substantial evidence about this institution's commitment to economic development and entrepreneurship as it is the only community college in Iowa with a John Pappajohn Entrepreneurship Center (JPEC) (NIACC JPEC, 2009). This operation was created in 1997 by pizza magnate John Pappajohn, along with four other such centers. It is the only center located at a 2-year college; the others are at senior colleges and universities. The North Iowa Area Community College JPEC won the Innovation Award from NACCE in October 2009 (NIACC JPEC, 2009).

Western Iowa Technical Community College is in Sioux City, Iowa. Founded in 1966 the college served approximately 7,500 students in a six-county service area with one main campus and sites in four other communities. The only apparent evidence of economic development activity was in the institution's programs to support manufacturing and security businesses (WITCC About, 2009).

Iowa Lakes Community College is in Estherville in the north central portion of the state. Serving a five-county area this institution enrolled about 3,000 students per year, and has been in existence since 1967 (Iowa Lakes General, 2009). The only apparent economic development connection of the College was with two economic

development organizations within its district: Iowa Lakes Corridor Development Corporation and the Kossuth County Economic Development Corporation (Iowa Lakes Groups, 2009).

Northwest Iowa Community College was established in 1966 as the first institution in the state's community college system. The college served five counties, with the main campus in Sheldon. The institution served approximately 1,200 students (NWICC Past Present Future, 2009). For economic development, the institution stressed its programs for workforce development and collaboration with the state economic development agency (NWICC Business Industry, 2009).

Community colleges are a relatively recent development in American higher education. Vaughan (1985) wrote that the first 2- year college in the nation was Joliet Junior College in Joliet, Illinois in 1901 and that the American Association of Junior Colleges was formed in 1920. The legislature of California created a process to allow the development of locally controlled two-year colleges in 1921 (pp. 4-5). President Truman's Commission on Higher Education in 1947 and the passage of the G. I. Bill to support military personnel to go to college also provided an impetus to the growth of community colleges in the nation (pp. 7-8). Finally, the baby boom in population growth following World War II provided the other major element that spurred the creation of hundreds of community colleges in almost every state (p. 9). These institutions developed a significant role in providing the first two years of college education, and increasingly to provide vocational and technical education that formed the foundation for workforce and economic development roles (Vaughan, 2006, p. 37).

Problem Statement

The traditional role of workforce training by community colleges to support economic development has been insufficient for rural areas to survive, and possibly thrive, in a 21st century economy. Rural community colleges have the capacity to provide enhanced economic development support through entrepreneurship and small business development programs and activities.

Such efforts, as studied in the context of the Rural Community College Initiative (RCCI), demonstrate the potential effectiveness of such an approach. The traditional role of community colleges in support of economic development has been through workforce training. In times of high unemployment among younger workers, the role of the rural community college in economic development and job creation has been viewed as more critical than ever. Earlier evaluations of community colleges' involvement demonstrated the value of that participation but they are out of date with the times and did not reflect the challenges of economic development in remote and rural areas where these colleges may be the only viable partner for attracting employers or a pathway of entrepreneurship. The Rural Community College Initiative (RCCI) identified ways in which rural community colleges can have a positive influence on rural economic development. One of the elements noted in the RCCI findings was that entrepreneurship and small business development programs supported by the rural community college enhanced the economic development capacity of the institution and the region. The RCCI project was limited to select rural community colleges representing some of the most socioeconomically disadvantaged regions of the United States.

There was information from the rural community colleges in this study that indicated results like the outcomes identified in the RCCI project, indicating additional validation of the RCCI findings to use with other rural community colleges to enhance capacity for economic development. This may prove useful to an organization such as NACCE in advocating the role community colleges can have in supporting local and regional economic development through entrepreneurship.

Torres and Viterito's (2008) analysis of the RCCI project identified similar findings as the Eller study (1998). This included affirming the need for rural community colleges to be more involved supporting local and regional rural economic viability and sustainability. The value of the RCCI project was in assisting rural community colleges in economically distressed areas to understand how to increase their capacity for student success and economic development. As the report stated, project participant institutions performed at the same level or better than non-participating colleges used for comparison purposes. The ability to perform as well or better than the comparison colleges was significant as the RCCI participating rural community colleges served socioeconomically distressed regions.

Purpose of the Study

The purpose of the study was to determine the extent to which four rural community colleges in Iowa supported and implemented programs and services in regional economic development through entrepreneurship and small business development. Specifically, was there information that can be acquired that provided insights into the reasons the colleges made the commitment to support economic

development, emphasizing entrepreneurship? Was there information related to how the rural community colleges promoted this type of economic development program? Could strategies be identified from the efforts that strengthened the credibility of the colleges with other entities promoting economic development in the same regions?

Almost all rural regions of the United States are served by a community or junior college. The role these institutions can play to embrace change and planning in support of economic development, particularly entrepreneurship, may reinforce the ability of these regions to survive, and possibly thrive, economically. Identifying methods of community colleges, particularly those in rural areas, offers a reasonable path for consideration of replication of effort by other similar institutions. While specific activities may well vary, if similarities can be identified related to commitment of a rural community college to support economic development, and to engage in training and education for entrepreneurship and small business development, then those similarities can be promoted to leadership within the college while the specific actions are designed related to local and regional resources and opportunities.

Rogers (2012) examined information seeking a connection between rural community colleges and rural community and economic development. He acknowledged the elements that are often seen as the logical purposes of the colleges, but also noted that the market value has grown from just workforce training to now including entrepreneurship (p. 166). Crookston and Hooks (2012) wrote that rural areas with a community college nearby are at an advantage related to sustaining employment and

stabilizing an economic base, but also noted there were few studies of the impact of rural community colleges and rural development (p. 351).

The current project did reinforce earlier research from RCCI and the limited earlier studies. Information from target colleges points to a possible positive influence on supporting entrepreneurship and economic development, particularly since the economic collapse of 2007-2008, such information may have value to assist other colleges and their service areas.

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Nature of the Study

In determining the research methodology for this study, both qualitative and quantitative approaches were examined. Quantitative approaches often provide a process to affirm or deny validity of a proposition. Qualitative approaches provide processes to explore an issue in search of a connection that may be able to be verified (Creswell, 2008). A qualitative approach offered a method to examine information related to decisions by an individual and/organization which, upon first analysis, may provide a direction for more focused future research. This approach mirrors the structure used in evaluating the RCCI project. By using a similar method, it might be possible to provide a more viable comparison of information of this study with the RCCI analysis. In the analysis of the RCCI project, case study methodology emphasizing qualitative data was

used for primary research questions. Sixteen of the 24 participating rural community colleges in the RCCI project were analyzed through the case study approach (Eller, Jensen, Robbins, Russell, Salant, Torres, Viterito, & Barnett, 2003, pp. 13-15).

Yin (2009) stated that research using questions with the focus of “what” can be exploratory so that a qualitative approach, such as case study, can combine the focus on “what” with additional exploratory themes of “how” and “why” to provide stronger analysis of “operational links” to decisions (p. 9). Yin identified the case study method as a preferred approach when reviewing contemporary situations and conditions (p. 7). This method allowed the investigator to analyze information, which presented another component of strength when using this research approach (p. 8).

The nature of the proposed research was the role rural community colleges might have in providing programs and services of entrepreneurship to enhance their capacity for economic development. The commitment the target institutions have made to this role, their approaches to promoting that role, and if that role has been accepted by the other economic development partners in the colleges’ service areas. These are like findings from the RCCI study related to supporting regional economic development through entrepreneurship. The use of the case study approach with qualitative information allowed for the analysis to focus on similarities of earlier studies, such as RCCI, with data collected from the target institutions of this project. This was an appropriate method to see if there were possible connections between the RCCI analysis and the work of the target rural community colleges. This was also the research approach used in the analysis

of the RCCI project. Using the similar structure reinforced the comparison of the information gained in this study with the findings from RCCI.

Research Questions

The research questions for this case study were:

1. What were the reasons the community colleges made a commitment to entrepreneurship in support of local/regional economic development beyond the usual component of workforce training?
2. How have the community colleges promoted entrepreneurship as a method of economic development?
3. What strategies were successful in strengthening the community college's credibility with economic development partners?

Theoretical Framework

The World Bank recognized the significance of social capital with economic vitality. This institution noted that social capital represented the organizations and their engagement with each other along with shared and disparate values that provide the connections that bind people and organizations into a society. The strength of the connections increased the common goals that may reinforce economic vitality (World Bank, Social Capital, 2011).

The theoretical framework guiding the case study was the social capital structure theory identified by Woolcock and Narayan (2006) and the potential influence of social capital on economic development. Their research indicated that social capital could significantly enhance a community and its quality of life. Through four venues described

by Woolcock and Narayan, social capital could have varying degrees of interaction and influence on economic development. The fourth view they identified, the synergy view, was a focus of the case study in the research questions, as that venue seems to provide the optimum value of the social capital structure.

Rural regions of the United States generally lag urban areas in terms of economic gain per research from Ring, Peredo, and Chrisman (2010). Working from Drabenstott's earlier research, they reported that investment in rural economic development enhances the capacity for rural areas to survive and possibly expand their economic options. Metropolitan areas typically drive economic development more than rural areas given the diverse ranges of resources often available in those areas, and the sheer difference in population density. Rural areas may have alleviated some of their disadvantages in economic development, however, through investment in social and human capital to make their efforts more efficient (pp. 1-5).

This is like research of Woolcock and Narayan (2006) concerning a connection of social capital with economic development, which then reinforced rural development in total. Social capital provided a form of investment, and, in the analysis of Woolcock and Narayana (2000, 2006) it can be used for economic development focus. The theory Woolcock and Narayan (2000, 2006) developed is based on four possible uses of social capital by a community or region. The first perspective they formulated was *communitarian*. This view advocated the use of social capital to support economic development, raising awareness that the community improves as economic development makes progress. The second perspective is of *networks*, with an emphasis on the role

social capital can play in helping build vertical and horizontal relationships of people and organizations to promote economic development. The effective use of the networks was the focus in this perspective. If a network was not developed or supported to meet its potential, there could be a negative consequence of the economic development effort. The third perspective was *institutional*. That view was structured around the fact that if the formal institutions of a community or region do not see the social capital as being genuine and appropriate, it will have little or no positive influence on economic development. On the other hand, if the social capital efforts are seen to be genuine and appropriate by the formal institutions, it has a better chance to have positive influence with economic development. Finally, the last perspective was called *synergy*, and was a blending of the networking and institutional views. Woolcock and Narayan (2006, pp. 31-43) regarded the synergy perspective as having the most potential for moving social capital to a position of influence for economic development, as it uses the value of networks to ensure that the formal institutions see the social capital capability as valuable and legitimate.

The first research question examined commitment that is foundational to the strength of social capital and shared vision. The second question looked for information related to how the targeted institutions assessed their support for their area's economic development. This information may indicate the success of the investment of social capital and engagement of shared vision. The third research question sought information that may indicate that the value of social capital has increased due to the target institutions' activities and commitment to economic development and entrepreneurship,

which could also validate the effectiveness of the shared vision. There is no final element or action that completes the learning organization process. Again, evidence of the theory being applied with effect was analyzed by examining the elements of the process that have been identified with the overall analysis of how well the organization kept pace with changing needs, conditions, and opportunities. These are also common conditions related to successful economic development, a learning organization, and the interchange of social capital.

The potential value of education, particularly higher education, has been linked to studies concerning both economic development and the development of human capital. Becker (2009) revisited previous work on human capital, but with an emphasis on the influence of education. This analysis indicated a correlation in education attainment and earnings increase, which in turn may have helped sustain or support further economic development in a community. Entrepreneurship both fed and was fed by this cycle in Becker's assessment (pp. 118-120).

Enhancing options for success in economic development and community change often involves education, according to Cordero-Guzman and Auspos (2006). Access to local postsecondary education institutions may lead to more opportunities for entrepreneurship, development of leaders for community change, and offer more access to innovation training (pp. 195, 197, 218, 247).

In 2008 research by Lundvald, reported by the World Bank in a study on higher education and regional development, access to college education enhanced networking, skills, and ideas that often reinforce expansion as well as new economic opportunities

(pp. 201-203). This component linking education to economic development is also emphasized in the American Association of Community Colleges' report (Reclaiming the American Dream, 2012) specifically mentioning the stronger capacity for partnerships and collaborations for economic development that are possible due to the proximity of so many community colleges to communities across the nation (p. 17).

The research examined the extent to which targeted rural community colleges supported economic development through entrepreneurship. The information collected from the targeted institutions was compared with the previous analyses of the RCCI project, both in terms of institutional commitment and in terms of the effect on the economic development capacity of the region served by the community college.

Social capital's relationship with higher education has been identified by Heliwell and Putnam (2007). While it is logical that higher education influences human capital, for the topic of economic development through workforce training, Heliwell and Putnam analyzed data and reported that educational attainment has a positive impact on social capital (pp. 13-14). Linking this to Woolcock and Narayan (2006), the case study examined information from the target rural community colleges to see if any of the four perspectives are evident which would reinforce the value of the college in advocating networking as well as how to influence formal institutions to enhance economic development capacity in a region. Both networking and effective use of formal institutions are key elements of entrepreneurship (Cope, Jack, & Rose, 2007).

Putnam (2000) conducted research and proposed that social capital had largely made a transition to being based on function in communities, rather than being limited by place

(p. 184). Information gathered in this case study rendered a similar analysis, with entrepreneurship through the rural community college creating an element of social capital to advance the area served by the emerging business or service. The notion of a synergy-based perspective, as noted by Woolcock and Narayan (2006), would favor a view such as Putnam's (2000) with emphasis on function, due to the alignment of networking capacity with formal institution support.

Definition of Terms

The following terms were used in this study:

Community College: A community college historically provides certificate and associate degree level formal programs of study, and has often been characterized as a junior or two-year college. In addition, community colleges have evolved to provide other common services such as college readiness (developmental) education, continuing education, and community service reaching a wide-range of students and persons for their professional education and personal enrichment needs. Some community colleges have merged with or have had significant technical education components as well as general education and transfer courses and programs (Vaughn, 2006).

Economic development. A process whereby a region realizes an increase in economic growth, and evidence of a structural change within that region's economy is usually categorized as economic development. The structural influence may be identified through changes in production, employment, use of resources, or other relevant elements within that region (Ezeala-Harrison, 1996).

Entrepreneurship. An ability to identify and pursue an opportunity that offers potential for both reward and risk, and most often requires the capacity for innovation (Roueche & Jones-Kavalier, 2005).

NACCE. The National Association for Community College Entrepreneurship is based in Chicago, Illinois. The organization was formed in 2002, and has more than 1,000 member institutions.

RCCI. The Rural Community College Initiative was a project funded by the Ford Foundation from 1995-2005. The Initiative worked with selected rural community colleges serving socioeconomically distressed regions. Institutions selected one of two primary areas of emphasis for assistance with resources and strengthening their capacity for effectiveness, in terms of economic development or increased access to education.

Rural. The U.S. Census Bureau, the U.S. Office of Management and Budget, and the U.S. Department of Agriculture's Economic Research Service each define rural differently. For the purposes of this study the guidelines from the U.S. Census Bureau will be used: the colleges serve areas not exceeding 999 persons per square mile.

Social capital. Putnam (1993) describes social capital as being a public resource that is created from the value people and organizations see among themselves through their interactions and services that support community and economic development.

Assumptions

For this study, it is assumed that:

1. Each of the target institutions is a member of the National Association for Community College Entrepreneurship that appears to indicate support for economic development and entrepreneurship.
2. Each target institution's senior administrative leadership employed strategies and tactics to enable the college to make entrepreneurship a higher priority for decisions and actions in support of economic development.
3. Each target institution extended services, resources, and/or training in entrepreneurship while meeting one of more of the long-term challenges to sustain rural economic development like those identified in the RCCI outcomes.
4. Information received from and discovered regarding each target institution will be accurate.

Limitations of the Study

One limitation of the study was in examining only rural community colleges in one Midwestern state of the United States. Another limitation was that this case study focused on only one topic in the findings of the RCCI project related to economic development and the connection of entrepreneurship toward that goal. One other possible limitation was lack of relevance to rural community colleges that are not members in NACCE.

Scope of the Study

This case study focused on a narrow area related to rural community colleges and their support for economic development through entrepreneurship. According to studies

sponsored by the American Association of Community Colleges, and researchers such as Tony Zeiss, workforce training has been the primary approach used by community colleges to support economic development (Reclaiming the American Dream, 2012). This case study did not review those approaches due to the extensive research that has already been done on workforce training at that level of higher education. The narrow scope targeted a topic with relatively little research, as it concerned an expanded role of community colleges in support of economic development that has occurred since the early 1990s.

Significance of the Study

The significance of this study was in reinforcing earlier analyses of the RCCI project and showing continued relevance of the entrepreneurial element through rural community colleges having some influence on the local and regional economy of the college service areas. One of the findings within the RCCI analysis by Eller, Martinez, Pace, Pavel, Garza, and Burnett in 1998 specifically identified the value of using entrepreneurship and small business development programs to strengthen economic development capacity in the rural areas served by the participating community colleges in the RCCI project.

Henderson (2002) provided the foundational work related to rural economic development. Henderson discussed the need for rural communities to understand and become more active in promoting entrepreneurship. In his report for the Federal Reserve Bank of Kansas City (2002), Henderson advocated that policymakers become more involved in and supportive of rural economic development through entrepreneurship,

especially to assist rural areas in developing a higher percentage of high-growth entrepreneurs (p. 45). He specifically mentioned community colleges as having become more active in providing entrepreneurship education and related small business support to the economic development aspect of the community college mission (p. 58).

This related to the purpose and significance of the study as it identified the value of rural areas and their economic vitality as well as the specific citation of entrepreneurship: the benefits through innovation, job creation, research and development, increased productivity of goods and services, and the strengthened capacity of the community and region. One target institution was an active member of NACCE, the mission and purpose of which is to promote and support entrepreneurship through community colleges. The potential benefit of the study was in identifying specific steps a rural community college may take that can help sustain and/or enhance capability to support regional economic development through entrepreneurship.

The potential policymaking opportunities for rural regions are evident. Some evidence of this potential was seen in the work and advocacy of the Rural Policy Research Institute (RUPRI). This organization promoted the development of public policies to support entrepreneurship in rural areas as a proven and tangible economic growth option. The group also supported policies reinforcing rural entrepreneurship to strengthen regional competitiveness (RUPRI, 2007). Findings from the proposed study may inform policymakers, and advocacy groups such as RUPRI, on options rural community colleges should be active and effective with economic development through the emphasis on entrepreneurship.

Summary

In chapter 1 the problem statement, purpose, theoretical framework, and significance of the study was introduced. This case study focused on four rural community colleges in Iowa. One of the colleges has an active membership in the National Association for Community College Entrepreneurship (NACCE), an organization formed to promote and support entrepreneurship education through community colleges. The case study identified information that was analyzed to see if a connection could be made to a finding from the Rural Community College Initiative (RCCI), a Ford Foundation sponsored project. The RCCI finding emphasized in this study identified an increase in economic development capacity with rural community colleges providing entrepreneurship and small business development education and training (Eller et.al., 1998). In chapter 2, I presented a comprehensive discussion of relevant professional literature on rural economic development, including entrepreneurship. Emphasis included current research related to policymaking using community colleges to support economic development, and the theoretical framework of the relationship of social capital to economic development, including entrepreneurship. In chapter 3, I detailed the research design and methodology for the study, as well as the literature on the methods and theory selected.

Chapter 2: Literature Review

Introduction

In chapter 2, I provided a review of current research on the topic of rural economic development and entrepreneurship, including information concerning involvement of higher education. In the chapter, I analyzed current research and reinforced the value of the proposed study to help fill in gaps related to the role of higher education in general, community colleges with an emphasis on rural community colleges, with rural economic development and entrepreneurship. The theoretical framework and research design for the study was also be examined in support of the use of the case study approach and the specific examination of information and documents as related to the research questions for this project.

Strategy for Searching for Literature

To conduct my study, I used several databases accessible through Walden University, Neosho County Community College (Kansas), Spoon River College (Illinois), and Northeastern Oklahoma A&M College (Oklahoma State University and A&M College System). The database search included EBSCO Academic Search Premier, Business Source Premier, ERIC, and ProQuest Entrepreneurship. The key terms and phrases included *rural economic development*, *rural entrepreneurship*, *higher education and economic development*, *higher education and entrepreneurship*, and *social capital and entrepreneurship*.

The review of current research was separated into six categories related to the focus of this case study. The categories include (a) the significance of rural areas, (b)

rural economic development and entrepreneurship, (c) resources assisting rural regions with economic development and entrepreneurship, (d) entrepreneurship, (e) and the scope of social capital in entrepreneurship.

Theoretical Framework

The use of organizations for economics, governance, and most enterprises that provide value for individuals and population groups was worthy of examination. The interaction within these groups and between the groups is influenced by the social capital elements promoted and valued by the organization or by members of the group who exercise leadership and authority. Social capital theory and research is of recent interest to social and behavioral science (Lin, Cook, & Burt, Editors, 2008, p. vii). Researchers such as Loury (1977), Woolcock (1998; 2002), Adlen and Kwan (2002), Krishna (2002), Feldstein (2003), and Putnam (2000) have provided contemporary studies and applications of social capital and its value within a broad array of social, organizational, economic, and political issues and structures. Social capital's value seems to relate to the strength of a group's shared vision of what they want to try to achieve and their commitment of effort to realize that vision (Wang & Rafiq, 2009).

The theoretical framework guiding the case study is the social capital structure identified by Woolcock and Narayan (2006) and the potential influence of social capital with economic development. Their research indicated that social capital could significantly enhance a community and its quality of life. Through four perspectives, social capital could have varying degrees of interaction and influence with economic

development. The four perspectives are described in chapter one. The components are communitarian, networks, institutional, and synergy.

Social capital is described as how people and groups use their resources with other people and groups based on social relationships (Payne, Moore, Griffis & Autry, 2010, p. 261). A connection of social capital to shared vision has been identified in research from Molina-Morales and Martinez-Fernandez (2010), and several social capital studies have commented on linkages with entrepreneurship (Woolcock & Narayan, 2000 and 2006; Kwon & Arenius, 2010, and Molina-Morales & Martinez-Fernandez, 2010). Senge described the value of shared vision as being connected to a process allowing people to become engaged and invested in their ideas and abilities to move an organization to new or improved capacity resulting in realizing the vision (Senge, 1990, pp. 12, 206). The study of organizations is significant because it involves how individuals can work to achieve more than they could as single persons. Yet, organizations are comprised of societies of people, and their interaction with other organizations is often influenced by social capital. As our society seems to be based on the use of organizations for economics, governance, and almost any other meaningful enterprise, understanding how organizations function and theories on how they may be more effective and valuable to society are critical.

Among the authors of organizational theory are Frederick Winslow Taylor (1911), Henri Fayol (1916), Max Weber (1922), Luther Gulick (1937), Herbert A. Simon (1947), Robert K. Merton (1949), and more contemporary theorists such as William G. Ouchi (1981), Rosabeth Moss Kanter (1985), Edgar H. Schein (1997), Tom Peters

(1997), and Peter Senge (1990). The many forms of organizations offer continual applications of organizational theories to seek affirmation and explanation of the value and effectiveness of organizations.

Given the focus of this study on the role of rural community colleges for economic development and entrepreneurship, the value of the shared vision and learning organization theory is even more connected. Senge (1990) stated that shared vision provides an understanding within an organization, and that some risk taking is acceptable and encouraged (p. 209). Senge also noted that a value of shared vision is providing a long-term vision for an organization to reinforce proactive decisions and actions rather than reactive behavior (p. 210). That element is essential for work to enhance and support economic development. The ability to access and leverage social capital strengthens the visioning and perhaps reduces concerns about the risk taking common to entrepreneurial activities (Woolcock & Narayan, 2000, pp. 10, 19).

Review of Current Literature

Significance of Rural Areas

Rural economic development and rural entrepreneurship are emerging trends for analysis and research. Shields (2005) identified that the rural United States comprises almost three-fourths of the land mass of the nation, and is home to 20% of the country's population (p. 49). Due to its proximity to numerous natural resources and limited population base, the quality of economic development in rural areas matters for the rest of the nation in order that resources be used effectively, and innovation and entrepreneurship be encouraged and nourished to reinforce the proper use of both natural

and human resources. Shields (2005) argued that the capacity for entrepreneurial networking in rural areas may be more important than even in urban or suburban areas so that opportunities for job creation and sustainability are not overlooked (p. 52).

Similar issues and concerns are expressed by Fleming (2009). He argued that rural areas can provide creativity and sustainability, and have impact in emphasizing these characteristics for entrepreneurship. Fleming indicated that rural areas can support true business entrepreneurship in a stronger manner by promoting ideas that are trends in social areas rather than true entrepreneurial opportunities. In other words, Fleming believed that rural areas can emphasize their capacity for creativity and sustainability related to topics such as environmentalism and social entrepreneurship (p. 61).

Drabenstott (2006) identified similar issues regarding the impact of economic policies for specific regions. In performing his research for the Federal Reserve, Drabenstott stressed that economic development policy making has not kept pace with the evolution of the American economy into a global economy, and that this issue has affected regions of the nation and their ability to sustain economic activity (p. 115). The role of levels of government related to economic development policy is important as it is the government that can decide on rules for the economy and the fairness of those rules where elements of economic development and activity can be controlled.

Drabenstott (2006) offered an example. He stated that the role of the government, working with a nonprofit agency, is to examine and provide a description of rural economic development. The existing description developed through the federal General Accounting Office and the Center for the Study of Rural America emphasizes facilities

and infrastructure more than technology, workforce training and availability, entrepreneurship, or innovation training. It is an example of a dated economic perspective that has not kept up with changes and emerging trends (pp. 117-118).

Drabenstott (2006) also identified the fact that current economic policies usually do not consider diversity in regions as related to resources or limitations of resources. One of the most telling pieces of evidence to support this contention is the path of federal funds that support economic development. Traditional economic policies have stressed facilities, infrastructure, and access to capital however the federal funding for economic development has been used to leverage urban and suburban areas rather than rural areas. Consequently, current policies do not address regional economic development strategies at all (pp. 119-121). Policies must reflect regional needs and abilities, rather than national conditions in Drabenstott's final analysis (p. 121).

Building from the research of Drabenstott, Ring, Peredo, and Chrisman (2009) examined the use of business networks in rural areas related to economic development. The networks identified in their project were composed of businesses that had been initiated through entrepreneurs, as these were business organizations that had successfully coped with some economic restrictions common in rural areas, including but limited to resources and markets (p. 173). The capacity for rural communities to develop and maintain business networks seems to rely on some common factors identified in this study, chiefly communication and social capital capability. These factors were offering a point of leverage for entrepreneurial rural communities, and the combination of business

and social entrepreneurship can be viewed as a logical reference point for community colleges and their programming and support in rural areas.

Nelson (2008) analyzed information supporting the effectiveness of seeing economic development through an evolutionary theoretical process. In his view the evolutionary approach seems to align with proactive roles found in various combinations of institutions. The economy is always moving and usually will not be clearly understood, per his analysis. Therefore, his assumption is that the strength and value of the economy will change as well, and so a primary way to utilize this economic theory is to understand the process of learning (p. 10). One key aspect within this framework, per Nelson, is to understand and appreciate the value of innovation within the flow of the economy (p. 12). Doing so may provide an additional linkage to entrepreneurship.

Potts (2007) provided insights that connect to Nelson's (2008), and to some extent, to Henderson's (2002). Potts (2007) noted that institutions and their decisions and actions often have a strong influence on the strength of the economy. In addition, institutions are always modifying what they do and how they do it and their evolutionary process in defining what they are and do then affects the economic activity in a similar manner (p. 341). Institutions depend on people for their leadership, their commitment, and their actions. Thus, organizational leadership can have a relationship to economic development (p. 342). Changes to policy can be initiated to influence institutions and their commitment and actions that support economic development (pp. 348-349).

Ensuring that rural regions and their institutions are responsive to economic development and entrepreneurship is important to reduce and perhaps reverse the

migration of younger persons from these areas. Seaton and Boyd (2007) found that rural areas may encourage younger persons to remain or move to rural areas if these regions embrace entrepreneurship and the culture of less formal organizations and structures. Along with access to technology, the post baby boom population seeks ongoing education and learning opportunities that are not bound by traditional structures and methods (pp. 69, 73). In addition to the entrepreneurial culture, rural areas that can develop broader citizen awareness and engagement of entrepreneurial thinking and related activities seem to have stronger capacity for innovation and sustaining economic development. This was identified by Summers, Holm, and Summers (2009) through a case study of two rural areas in Texas. Among their findings was that the ability to develop a foundation of trust related to social and business entrepreneurship communities could also strengthen their capacity for sharing vision and strategic planning to reinforce the culture (pp. 63-67).

Rural Economic Development and Entrepreneurship

Henderson's study (2002) is foundational for this proposal. He examined rural economic development with a specific focus on entrepreneurship in a study for the Federal Reserve Bank (Kansas City Branch). He noted that during the economic growth of the 1990s, the longest duration of economic growth in the history of the United States, most new jobs were believed to have been due to entrepreneurs (p. 45). His concern for rural regions is in their capacity to support high growth entrepreneurs.

Henderson (2002) argued that the economic value of entrepreneurship is based on several elements. Economic growth is almost always stronger in areas with

entrepreneurial business activity. Entrepreneurial operations most often create new jobs, provide the most growth for local and regional incomes, and often enhance the linkage of a region to the global economy (p. 46). The most common value identified in entrepreneurship is innovation. Henderson observed that the value of innovation comes through “allowing new products and new ways of doing business to add value...and improve the quality of life” (p. 47). Henderson’s findings are affirmed by research performed by Figueroa-Armijos, Dabson, and Johnson (2012). Their data indicated that persons in rural areas had a higher interaction with entrepreneurship activities than urban areas where there was evidence of access to entrepreneurship education.

Quality of entrepreneurship training and commitment of communities to entrepreneurship is also critical per Cheng, Stough, and Jackson (2009). One common denominator of entrepreneurial quality is the capacity for supporting and training for innovation, per their research. Quantity of entrepreneurial activity is not as important as its quality, and this has importance to rural areas in showcasing entrepreneurial capacity and in overcoming limited resources (pp. 330-331). One specific aspect of quality for innovation that rural areas can emphasize is in the ability of organizations to provide training and education to meet the needs of the knowledge-based global economy (p. 331). This aspect has a direct connection to the role of higher education institutions, including community colleges. The findings from this research are like conclusions of Frank (2007). The planning of entrepreneurship education is critical to make sure the necessary skills and knowledge elements are included in the curriculum. Without those elements, it is not possible to construct the necessary culture of entrepreneurship a

community must have to maximize the economic and community impact of the entrepreneurial activity (pp. 636-637).

Training in innovation was identified by Brown-Graham and Lambe (2008) as a critical component for entrepreneurship and economic development education in rural areas (pp. 1-2). Ahlstrom (2010) confirmed the connection of innovation capacity to positively impact rural economic development ability. Among the benefits beyond those traditionally linked to economic development (jobs, circulation of money, etc.) are also reduced poverty levels and reduced illiteracy (pp. 16-17). Emphasis, per Ahlstrom, was the ability of rural areas to adapt to disruptive innovation which targets unique products and services that are not provided by major companies and agencies due to limited market reach. Adapting to disruptive innovation provides a pathway for rural regions to develop niche markets that can still have a global interest, but not on the scale of traditional innovation and entrepreneurship (p. 19).

Cumming and Johan (2009) analyzed the role of broadband access to rural areas in support of entrepreneurship. Among their findings was the basic component of technology training to connect Internet access to entrepreneurship education, particularly for optimizing web access with the knowledge-based economy of the 21st century (p. 857). Their research also identified a secondary connection of the broadband access to provide support for knowledge clusters for economic development, and the link of Internet access to reinforce sustainability of entrepreneurship efforts in rural areas (pp. 858-859, 879). Again, institutions of higher education, such as rural community colleges, should play a key role in the technology training and support for access to the Internet.

Evidence of the increased support and interaction of higher education with entrepreneurship and small business education was identified by Maidment (2007). In 1980, only eleven colleges and universities in the United States had endowed chairs for entrepreneurship and small business programs. By 2004, that number had increased to 406. For community colleges, the transition to support entrepreneurship education with associate degree programs was slower, with 35 such programs in existence by 2005 (pp. 61-64).

Ring, Peredo, and Chrisman (2010) emphasized the changing economic nature of rural areas. While agriculture is still important, it only provided the primary income source for about ten percent of the rural population in the United States, down from 25 percent as recently as the late 1970s (p. 171). The economic downturns of the 1990s and early 2000s also damaged the rural population with 60 percent of rural communities not realizing any economic gain (p. 172).

However, rural business enterprises have stronger sustainability than urban areas per a study by Yu, Orazem, and Jolly (2011). While rural regions have a lower rate of new start-up enterprises, they have a better chance of surviving than those in urban areas. Among the states analyzed in this study was Iowa, which is the state where the four target institutions for the proposed research are located.

Two recent studies of entrepreneurship and rural economic development in Canada also reinforced the potential significance of such linkages and activities for rural areas in the United States. Siemens (2010) noted that rural areas seemed to have more self-reliance in developing business, but that this independence creates challenges to

networking and leveraging resources (p. 72). Rogers (2012) identified the strength of rural colleges in Canadian economic development, including the reinforcement of leadership development and engagement of social capital for networking and securing needed capabilities (p. 166).

Resources for Rural Regions: Economic Development and Entrepreneurship

This project was based on the Ford Foundation Rural Community College Initiative (RCCI). Prior to the RCCI project, rural community colleges that had been selected to be pilot institutions were primarily identified as having a neutral stance related to their role and responsibility for economic development. The same institutions, as they moved through the project, became more educated about economic development for their region and their ability to influence the strength of that development for their area (Eller et al., 1998, p. 12).

The RCCI reviewed the results of the first two phases of their project. Their analysis identified issues that successful rural community colleges would need to meet to provide evidence of necessary commitment for economic development. These issues include how the community college developed their strategy to support rural development, how to create and effectively use collaborations to support economic development, and how the community college improved its capability to be a stronger asset in the area for economic development (Eller et al., 1998, p. 12).

One of the rural community colleges selected for this study is a current member of the National Association for Community College Entrepreneurship (NACCE). Entrepreneurship activity is a viable measure of economic development beyond

workforce training. Entrepreneurship enterprises are critical in the overall economic development strategy for rural communities to survive, and possibly thrive, in the global economy of this century. Henderson (2002) identified the specific benefits of entrepreneurship in rural areas as these: “add jobs, raise incomes, create wealth, improve the quality of life of citizens, and help rural communities operate in the global economy” (p. 62). Such objectives fit the RCCI recommendations for developing and sustaining the capacity for economic development.

Identification of information related to specific decisions and actions that reinforced those RCCI recommendations strengthening economic development capacity can be used to help shape policies for other similar institutions and communities. Analyzing what has happened at the target institutions, as compared to the RCCI findings and recommendations, offered insights into several important elements that can reinforce a rural community college’s vision and mission for economic development. This aspect reinforced the purpose of this project. The purpose of the study was to search for and identify specific activities by the selected rural community colleges that connect to a commitment for rural economic development. This purpose linked to research by Torres and Vitorito (2008). Their study recognized the importance of rural community colleges in becoming change agents for their regions, and in the expansion of their internal and external capacity to affect economic development through local capabilities that may have regional, national, and global markets that have gone unnoticed (p. 36).

The Northeastern Regional Center for Rural Development (NRCRD) has provided analysis of entrepreneurship policies and engagement following the RCCI

project. A Center study identified that of the two common approaches to entrepreneurship, opportunity driven or necessity driven, the former had more presence in rural areas across economic conditions and especially benefited in areas where business and public leaders gave support to entrepreneurship as a major component of economic development (Goetz, Partridge & Deller, 2009).

The value of social capital combined with economic development has also been identified by Blair and Carroll (2008). Social capital may be perceived as an economic development tool in that it allows a community or region to use economic organizations and resources to overcome limitations or barriers to progress. In rural areas, this ability to use entrepreneurship to build new opportunities for employment, service, and productivity may be the key to allowing social capital to be created and reinforce the economic and social value of the region. According to Blair and Carroll, innovation is critical to both economic and social entrepreneurship. In their view, education institutions should be in position to play a significant role in helping a community build these capacities (pp. 44-45).

Rural areas often see lifestyle entrepreneurs. These are operations that provide a source of income for an individual or family, and may also focus on a product or service to match a local need or opportunity. High growth entrepreneurs have the goal of creating a new business entity that will have value and likely have some connection to a wider (global) economy. Such entrepreneurs will seek public support and likely an acquisition offer. High growth entrepreneurs offer more in terms of job creation, income creation, and sustainability due to the global economic linkage (Henderson, 2002, p. 49).

Henderson also discovered rural areas do not have accessible resources that can support high growth entrepreneurs compared to the capacity of urban regions. Rural limitations may be due to location and existing business and industry capacity. Location may influence lack of financial or other resource support (infrastructure, skilled workforce, access to research and development) (pp. 51-52).

However, Henderson (2002) noted that policy changes might offer methods to reduce the rural limitations in these areas and make rural high growth entrepreneurship more possible. Among the policy changes that are possible to support more rural entrepreneurship, including high growth activity, Henderson recommended that workforce skills development and a higher level of community awareness be generated regarding entrepreneurship through the efforts of regional community colleges (pp. 58-59). Community colleges can also become more engaged in supporting business incubators for entrepreneurial development (pp. 60-61). The National Association for Community College Entrepreneurship (2009) reported that there were at least 30 business incubators located at community colleges as documented by the National Business Incubator Association. That Association reported that 84 percent of businesses from community college incubators remained in the local communities. That success rate reinforces the capacity community colleges have toward a positive influence using entrepreneurship for local economic development.

A common element of rural economies is agriculture. Several extension service programs (hosted by state universities) support entrepreneurship efforts of community colleges. NACCE (2011) noted the cooperative effort of the University of Missouri

extension service with Moberly Area Community College to expand small business services and training. The University of Illinois Extension Service (2009) referred to Carl Sandburg College as a partner in providing entrepreneurship education into Hancock County, with an emphasis on training into area high schools. The community college and the university extension service offer complementary services that benefit their constituents and communities.

McElwee (2006) examined studies of agricultural economics to understand how to infuse a more entrepreneurial culture into farming. Higher education can play a significant role in the effort in several ways, including promotion of tourism with the farming economy by giving special emphasis to organic farming for example, or by using a specific crop or livestock activity that provides a focused market and shift of marketing and public relations (pp. 187-188). Another theme of rural development is location. Shields (2005) identified components that reinforce the importance of rural areas to social and economic well-being.

Siemens (2010) analyzed how available resources have been used to address small business needs in rural areas. Findings from Siemen include that communities that can balance maintaining a rural lifestyle identity while enhancing the social capital and social relationship of the community to embrace entrepreneurship seem to meet the challenges of overcoming limitations common to rural areas with economic development. Education, both formal and informal, can play a key role in helping these communities meet those social aspects that support an entrepreneurial culture in an area (pp. 66-67).

Innovation and increasing the capacity of a community or region to create economic value has also been reported by Peredo and Chrisman (2006). They determined that if local business operations can implement techniques to become more innovative and to enhance and give evidence of value creation or improvement, their area could become more capable of sustaining and attracting entrepreneurial individuals and organizations (p. 309). They proposed that communities learn to become more engaged in enterprise activities, based on entrepreneurship. Increased community efforts related to education and to creating awareness may strengthen the capacity of the community to build and increase value of their economic and community development activities.

Peredo and Chrisman (2006) argued that this approach could particularly benefit rural and underdeveloped areas (p. 310). Their approach blended business and social entrepreneurship training and programming to provide a comprehensive community and regional effort. The program they envisioned can be reinforced through levels of government and private enterprise that develop and implement policy and strategy initiatives to emphasize entrepreneurship, innovation, and value creation training (p. 311). The Rural Policy Research Institute (RUPRI) is an example of what Peredo and Chrisman propose (RUPRI, Entrepreneurship, 2014). This organization provided s training and support for entrepreneurship, poverty reduction, innovation training, rural health policy and human services, and help with other concerns affecting rural regions.

The topic of innovation with entrepreneurship was examined by Mack, Green, and Vedlitz (2008). Their contention was infusing more education and training about entrepreneurship decision making and action steps within an organization it might be

possible to engage a public-sector capacity to promote innovation for a region (p. 233). Specific leadership skills were identified that indicate the capability to promote support for innovation and awareness of potential benefits through entrepreneurial thinking and decision-making. These skills include persuasiveness, the willingness to assume risk, effective use of rhetoric, and the talent to develop practical coalitions. In addition, those who understand their community and region and its resources could exercise an additional capacity to encourage and drive public entrepreneurship for innovation in both private and public sectors (pp. 235-236).

Rural entrepreneurship has also been examined in Europe. North and Smallbone (2006) reviewed the significance of policymaking to support rural entrepreneurship in a 10-case study approach. They identified conditions that seemed to strengthen the effect of policy related to entrepreneurship education, entrepreneurship incubation, and infusing an environment of entrepreneurship. One condition was the alignment of policies to local conditions and situations. Another was avoiding multiple policies impeding their individual application in support of entrepreneurship and a third condition was that rural entrepreneurship capacity was based on the rural area's capacity to integrate necessary technology capability (pp. 43-51). It is not unreasonable to assume that these conditions could also apply to rural entrepreneurship policy needs in the United States, as basic components of entrepreneurship are common for any location.

Policy making in support of economic development has also been studied by Aziz and Norhashim (2008). They found evidence of economic development experts sustaining the concentration of existing resources to support related cluster development

of business and industry within a specific region. Aziz and Norhashim contended that when resources are limited, a cluster strategy should be anchored to available natural resources, geographic location, workforce availability, and education and training resources. In evaluating economic performance of a region, it would also be important to review the cluster approach. Entrepreneurship could offer advantages in both the development and analysis of the cluster strategy in reviewing success and sustainability measures (pp. 349-353).

Deller, Lledo, and Marcouiller (2008) offered similar evidence that points to ways regions used local amenities to support and sustain economic activity. The inclusion of natural amenities of a region could support both enhanced economic development and quality of life (pp. 1-3). Both the cluster and amenities approaches support community awareness and education that can help to develop realistic economic expectations while also encouraging the exploration of additional innovation styles and strategies.

The element of innovation as related to policy making for economic development has also been examined by Hall (2007). For areas to explore options in support of environmental economic growth, also called the green economy, it is important for levels of government and public influence to explore how the blend of technology, globalization of goods and services, and use of resources can be used innovatively (p. 630). Innovation is directly linked to an area's ability to develop and support entrepreneurship, but the concern with this approach is its dependence on entrepreneurship rather than on a balance of economic activity (p. 632).

Rural areas may have benefitted from the approach supported by Hall (2007) that mixes high growth and low capacity economic development. Both ends of economic activity are enhanced through innovation and entrepreneurship education, particularly if they concentrate on emerging needs and possibilities, such as the green economic movement. Hall believed such a strategy of policy making for economic development was more effective for meeting capabilities of the global and knowledge economy elements (pp. 633-634). In Hall's view, higher education institutions should be able to play a significant role in this economic growth method, particularly in the areas of technology and knowledge innovation (p. 636).

Hart (2008) analyzed the development of economic policy supportive of entrepreneurship in the United States. He identified high growth and high technology enterprises as common components of a traditional design for optimal economic development. Other designs build on the strategy of promoting entrepreneurship targeting sustainable economic activity. Hart noted that high growth and high technology strategies have been popular with the public and politicians, and have received more media attention. Using a case study approach Hart found evidence that leading government officials, and leading officials of organizations in communities, must promote entrepreneurship to affect public and institutional policy. At the government level, it was critical for governors to take the lead so that state agencies get clear direction when there are apparent competing regulations and procedures that can limit entrepreneurial development. Hart argued that executive leadership must be strengthened and used with

other organizations to provide a wider and supportive base for changing economic development policy toward sustainability and entrepreneurship.

Entrepreneurship

Steyaert (2007) examined the idea of entrepreneurship as a process theory for regional development. One area identified was that most organizational and process-learning structures rely on a linear or logical flow of information, analysis, decision, and action. However, entrepreneurship often uses less linear and logical structures, which makes modeling the elements of entrepreneurship more difficult to assess in relation to process or organizational learning applications.

Steyaert (2007) offered the notion that entrepreneurs and their skills may not provide the comprehensive and inclusive outlook necessary for an entire organization, or that provide a complete process for replication (p. 466). However, an approach that could meet the concerns identified by Steyaert was offered by Frank (2007) and relates to higher education policy with entrepreneurship. Frank indicated that the more colleges and universities adapt their missions and align their education and training activities with private enterprise related to entrepreneurship, the more they will include opportunities for entrepreneurs to develop a comprehensive outlook. Entrepreneurs could benefit from the ability of higher education institutions to apply the business concepts to the full spectrum of operating an organization, so that more than generic skills of entrepreneurship are learned. At the same time, by incorporating entrepreneurial skills into organizational learning an institution may be able to become to be innovative and to provide a stronger base for both social and economic entrepreneurship action (pp. 636-640).

Understanding and supporting entrepreneurial practices involves learning and practicing, and has been identified as a learning framework. Dutta and Crossan (2005) offered a perspective that organizations can be engaged in a learning process that embraces entrepreneurship. The value of learning entrepreneurial elements relates to increasing both individual and group capacity for innovation, invention, and insight into new ideas and applications of information, technology, services, and products to create opportunities. The researchers offered the notion that these same components of entrepreneurship are also vital to effective organizational learning (p. 427). Further, they analyzed the innovation quality of entrepreneurship with economic activity.

Entrepreneurship is either seen because of the destructive nature within the changing nature of economics, and the result of the destruction of what is the status quo results in innovation and creativity, or as the result of emerging changes with products, services, and information due to the strengths of the process of economics. Entrepreneurship is thus viewed as an evolving process of creativity by Dutta and Crossan (2005, pp. 430-432). In both instances, there is a level of learning that occurs within an organization, either viewed as the result of the destruction of the status quo or the result of innovation and creativity from the status quo. Dutta and Crossan (2005) identified a preference for an entrepreneurship plan that would extend the learning process to more persons in an organization, thus making it possible to embed entrepreneurship as part of organizational learning. This point is significant to infuse the skills of entrepreneurship in the organization and thereby influence decisions and actions, and become part of the behavior and habit of the organizational culture (p. 433).

A similar study of entrepreneurial elements and organization learning was also conducted by Harrison and Leitch (2005). One of the primary methods they used to promote both the theory and application of what is learned about entrepreneurship and to involve organizational learning processes was like a business incubator model. Such an approach would allow both the instructors and resource persons for entrepreneurship to examine the ways in which the organization invested the concepts and worked to provide examples of innovation and ideas. The concern would be related to the possibility that the notion of entrepreneurship creates a path with too much innovation without maintaining an anchor to the proper mission and vision of the organization (pp. 358, 360). Harrison and Leitch used observations from Senge (1990) that recognized the value of entrepreneurship elements of innovation and motivation, but also the concerns of entrepreneurship in often not using reflection to guide improvement and continued learning for individuals or organizations. Senge (1990) identified the issue that while entrepreneurs have their vision, they must learn how to share and spread that vision so that the entire organization will benefit rather than just the few who are entrepreneurs (pp. 360-361).

Findings such as those mentioned in the preceding paragraph connect with research performed by the Lumina Foundation in 2009. A Lumina Foundation report affirmed that the global economy is based largely on knowledge capacity and capability of workers and innovators. Higher education, including community colleges as they are a key entry point into postsecondary education for adults, must respond to the needs of the

knowledge component so economic development can be sustained and enhanced (Headden, 2009, p. 6).

Zahra, Newey, and Shaver (2011) documented that more colleges in the United States have entrepreneurship centers and stress educating new potential entrepreneurs, while entrepreneurship education in other areas of the world put more emphasis on assisting existing entrepreneurs (pp. 1-2). However, they noted that advisory committees in European and Asian entrepreneurship programs are more engaged with the students and teachers, in analyzing data and emerging research to assist existing entrepreneurs discover new paths for expansion. American advisory boards are often more involved with curriculum-based information to direct the instructors than on the data and research perspectives (pp. 2, 9). Hjorth (2011) added to this by posing the concern that American entrepreneurship education is too immersed in academe and this limits the options for both the education approach and the student to gain the broadest exposure to entrepreneurship ideas and practices (49).

Hindle (2010) posed the question of how much the community can matter in terms of entrepreneurship effectiveness. The notion of the model called economic gardening is emphasized by Hindle to provide a change agent perspective by the entrepreneur to influence economic and possibly social change to all or parts of the community (p. 606). Gibbons (2010) saw the economic gardening method as less disruptive to a community than a traditional entrepreneurship approach as the gardening method was not seen as a threat by existing businesses (p. 5).

Sautet (2011) proposed that entrepreneurship is more geared to necessity-based opportunities that add little to economic value and increased wealth as opposed to opportunity-based entrepreneurship that has a stronger systemic influence on a community and region (pg. 387-399). Somerville and McElwee (2011) offered a similar analysis that entrepreneurial projects seem to either be economically based or community/society plus economically based (p. 317). Mars, Slaughter, and Rhoads (2008) believed the change in emphasis is often due to how engaged the entrepreneurship effort is at the grass-roots level in the community. There is more ability to influence persons at the top due to the priorities and energies of those who provide the work, informal networking, and social relationships that help provide a new company with legitimacy with the working population of the area (p. 640).

The Scope of Learning in an Organization

While there are many explanations and descriptions of learning and leadership, there is not complete agreement on what each concept truly means. Moller (2007) discussed different views of each concept and identified two components that seem to be specifically applicable to the notion of a learning organization and leadership that seeks to erect such a culture in an institution of higher education. These components are the interactions that leaders can develop to explain and engage workers and key stakeholders, and activities that leaders use to mold the interactions and reshape institutional culture for a learning organization climate (p. 32).

Though colleges are organizations providing learning and education, it would be erroneous to assume that they are learning organizations. Kezar (2005) argued that

colleges and universities might choose to try the learning organization approach due to increased calls for accountability by accrediting agencies and stakeholder groups (p. 7). The leader has a responsibility to ensure that employees, particularly those in key positions of formal and informal influence, are invested in the learning organization projects so that this change of culture can be sustained rather than just be the latest fad or trend (p. 11). Kezar identified shared vision as a critical component for the leader to understand and use as a foundation for moving the institution to the goal of being a viable learning organization (p. 12).

In developing a learning organization, a leader may well emphasize the scope of improvement that is possible by inculcating that type of organizational culture. Johnson (2006) noted that leaders often feel compelled to establish a vision of “high expectations” so that employees and others can clearly realize the importance and need to pursue the vision (p. 101). Creating the learning organization environment then provides a stronger and more valid platform to pursue significant changes, and the depth of the vision becomes the foundation for the decisions and actions by leadership (p. 103).

O’Banion (2007) stressed the need for community colleges to develop a “new architecture” for the learning college and for the college to be a learning organization as the challenges faced today cannot be met by the traditional structures of these institutions. O’Banion has identified that the specific activity of learning has become more explicit in both vision and mission statements of many community colleges, and that this is a clear signal that the new architecture is in progress (p. 714). O’Banion’s argument seems to be in alignment with the purposes Senge (1990) has developed concerning the learning

organization, and seem to connect to the environment of economic development and entrepreneurship in supporting innovation and creativity.

Eddy and Murray (2007) identified the need for community colleges to carefully review and understand their vision, mission, and goals to properly develop action plans to meet anticipated and desired opportunities and challenges. They supported an internal learning process that has a collaborative structure so that a broader understanding of the institution's resources and goals can help form a realistic, appropriate, and challenging strategic plan and planning process (pp. 99, 100). They stated that rural community colleges must take an active role in economic development, and that this role must be clear and present in the goals, vision, and mission of the institutions. Planning for necessary changes and educating employees about risk-taking and innovation is critical (p. 101). Their findings and recommendations are in alignment with those of White and Glickman (2007) regarding the need to promote more innovation in higher education. The ability for college leaders to educate key stakeholders about being more creative is critical for the institution to better cope with and manage change (p. 97). These researchers reinforced the importance of college leaders using the shared vision process of learning organizations to develop support for decisions and actions that lay the foundation for sustainable change, and in this case, for the role of economic development and entrepreneurship for rural community colleges.

Leadership and Managing Change in Higher Education

Leaders have options and various resources to lead change efforts in their institutions of higher education. George Boggs (2003), recognized as a leader and expert

on community colleges in the United States, discussed the role of community college leaders as change agents. In his presentation, Dr. Boggs, who has served as president of a community college district as well as chief executive officer of the American Association of Community Colleges, identified skills to meet the changing scope of mission for these institutions. The skills he delineated included the ability to develop and articulate a compelling vision, construct internal and external partnerships that will accept the vision, support actions that achieve college goals, and impart a culture of entrepreneurship that encourages innovation and risk taking in the institution.

Vision statements approved by community colleges may offer insight regarding the direction of the institutions. Per Abelman and Dalessandro (2008) clarity of vision, statements allowed college leaders to more effectively develop strategic initiatives (p. 306). The strength of the alignment of the vision and mission statements provided a future picture of the college and offered a heightened opportunity for leaders to influence stakeholders of the institution (pp. 307, 308). If stakeholders could realize visible evidence of vision components that have been achieved, the strength of the college leadership to effect change can be enhanced (p. 312).

It is also important to acknowledge the reality that community colleges have broad and wide-ranging missions. McPhail and McPhail (2006) suggested that while there are valid reasons for community colleges to have more comprehensive missions beyond providing freshmen and sophomore-level opportunities in higher education, the broader missions mean that the institutions are moving into more realms of competition for resources and markets (p. 91). Noting that community colleges should review their

missions in conjunction with O'Banion's (2007) learning college structure, McPhail and McPhail identified the point that the missions must connect to core values of the college, meet needs of external constituencies that may not otherwise be met, provide evidence that internal support for the broader mission exists, and clearly establish evidence-based evaluations of achievement of the mission components (pp. 94, 95).

Anticipating, understanding, and managing change are among the most important traits for an effective leader, including persons leading rural community colleges. How the leaders make decisions bears examination related to managing change. A key element in decision making by leaders is in the information they use to make educated decisions. These points were identified in research on community college leader decision-making by Romero, Purdy, Rodriquez, and Richards (2005, p. 292). In their study, the authors noted Senge's (1990) concern that there has been a trend that leaders lack the ability to use accurate information to form and support their decisions. They offered the view that the climate of a learning organization may help correct that concern (pp. 292, 301).

Per research by Goetz (2008), the number of self-employed rural workers has increased by more than 240% since 1969 (p. 1). Goetz also noted that self-employed workers and entrepreneurs in rural areas need assistance to access key resources that are often more known and available in urban areas. Goetz specifically mentioned the need for access to higher education that can support entrepreneurship and self-employed persons. The need he identified is also apparent in rural community colleges.

Leaders in rural communities have a responsibility to help their residents and organizations become and remain viable in a global economy. This is the major point of a

study by Clark and Davis (2007). Change will be a constant element for rural areas, and these researchers specifically pointed out rural community colleges must be engaged to support the sustainability of rural America (p. 47). Clark and Davis mentioned that learning teams provide a process and structure to support information acquisition, vision development, and change management plans reinforcing the platform of economic development (pp. 49, 51).

Shults (2008) supported the Clark and Davis (2007) research by emphasizing the need for community colleges to become more active in economic development and entrepreneurship by providing business incubator services as well as more support for research and organizational behavior that supports change management and active learning processes (p. 133). The comprehensive learning organization process helps to build human capital capacity for the college, and provides a ripple effect with the communities served by the college (p. 136). Shults (2008) identified a distinct benefit of this process in offering advantage options for leaders based on their ability to influence organizational culture and behavior in support of the shared vision that has been developed (p. 138).

Further emphasis on the role of community college leaders to develop and engage stakeholders through strong vision presentations is provided by Viniar (2006). The leadership goal should be one of transformational change, and should be specific to teaching others to understand and apply entrepreneurship as related to being innovative and proactive in decision-making and in forming future direction for the institution (p. 24). This approach is related to the learning organization structure in using shared vision

to develop and engage creative tension, which is an entrepreneurial perspective. Altogether, the blend of leadership supporting transformational change with the application of shared vision and creative tension reinforce the purpose of economic development and entrepreneurship in the mission of the rural community college, and the need for evidence of leadership commitment and action.

A study originally done in 2001, and then revised and republished in 2009 by McGrath, Swisher, Elder, Jr., and Conger analyzed how rural populations can access education to serve many purposes. Community colleges in rural areas are recognized for providing several avenues of educational advancement for individuals, as well as centers for community development. These colleges often provide critical services related to adult education, lifelong learning, and provide critical connections to government, non-profit, and private sector organizations in terms of leveraging resources for needed services.

Bruton, Ahlstrom, and Li (2010) reminded us that organizations use regulations and policies to influence the internal culture, to keep organizational behavior within limits they feel are appropriate, and that this practice may limit the group's ability to support entrepreneurial activities (pp. 422-425). However, this may be the element where social capital can balance the need of conformity for necessary regulations and policies while training and encouraging innovative thinking. Pender, Marre, and Reeder (2011) saw a connection of the effective use of social and human capital to reinforce the ability of a community to engage in activities to strengthen and expand economic growth. They identified that communities may see an array of options supporting transformative change

in the region (pg. 535-538). This approach is also supported by research from Doh and Zolnik (2011) where an analysis of social capital, like the structure identified by Putnam (2000) saw the associational value to develop and broaden social relationships that could also target entrepreneurial and economic activities that were not previously pursued.

In recent years, there has been enhanced interest for state education oversight agencies to more actively develop and implement statewide articulation agreements between community and technical colleges and senior colleges and universities, and between secondary schools and community and technical colleges. King and West (2009) pointed out the advantages these agreements provide for students in creating more seamless pathways for education. Community and technical colleges play a significant role as the level that links both sides into a higher education ladder. The articulation agreements have been used within some states to reinforce regional and statewide economic development capacity for business enticement and expansion.

Summary

In chapter 2, I synthesized the literature on the theoretical framework for the study, current research on the topics of economic development, entrepreneurship, rural resources, higher education/community college leadership, social capital and learning organization concepts, change management, for four rural community colleges and their mission, vision, and implementation for economic development and entrepreneurship. In chapter 3, I provided more information and justification for the methodology of the study, including why the case study approach was the most appropriate method, the proposed

data collection procedures, informed consent, analysis and storage of data, and specific processes and research tools to be used for the study.

Chapter 3: Research Method

Introduction

The purpose of the study was to gather information from four rural community colleges in Iowa and analyze the data related to three areas. First, was there information that provided an explanation that any or all the targeted institutions are committed to entrepreneurship? Second, was there information that provided an explanation of any or all the institutions assessing the influence of its entrepreneurship efforts related to local and regional economic development? Finally, was there information that provided an explanation that the efforts of any or all the target community colleges have succeeded in demonstrating their commitment to entrepreneurship as a form of economic development so that it is perceived to be credible for its service region? These three areas are based on the research questions of the proposed study. This chapter included an explanation of the research design, research sample and population, processes for collecting data, and consideration of ethical issues related to the proposal. The research questions for this case study were:

1. What were the reasons the community colleges made a commitment to entrepreneurship in support of local/regional economic development beyond the usual component of workforce training?
2. How have the community colleges promoted entrepreneurship as a method of economic development?
3. What strategies were successful in strengthening the community college's credibility with economic development partners?

Research Design and Approach

The purpose of the study was to analyze information from the research participants and documents related to the findings of the RCCI study, looking for similar patterns of engagement reinforcing rural community colleges' support for economic development through entrepreneurship. Rural community colleges involved with economic development activities in RCCI were identified as influencing regional leadership, enhancing capacity for economic development, and strengthening entrepreneurship and small business development (Eller, et al., 2003, p. 72). A qualitative approach is appropriate to the proposed case study, as it allows the study to have more value through using broader avenues of information and analysis, through semi-structured interviews and examination of information gained from those interviewed and from the target institutions' websites. Information topics ranged from the entrepreneurship curriculum and programs of each institution through reports of entrepreneurship and economic development activity in the regions served by each institution.

This structure met case study elements supported by Yin (2009) and Creswell (2008). The research questions examined "how" and "why" issues, which Yin has identified as areas lending themselves to the case study and qualitative approaches as the investigator has very limited control over and access to events related to the study. The study was contemporary in nature rather than historical, as the information was from recent years, and behaviors often associated with a quantitative method are not involved with this proposal.

Other qualitative research methods were also examined. McNabb (2002) examined several qualitative research methods as applied to public administration and social science. A review of his applications and summaries of the methods assisted in considering several qualitative approaches: ethnography was not appropriate because it carried a cultural and anthropological application; phenomenology centered on research questions of meaning related to specific events or conditions; and action science was not relevant as it focused on reasoning and attitudes of individuals. The use of the case study method is more direct in its flexibility to use a wide range of information. This was the main reason it was selected as the methodology for the study (pp. 276-280).

Case Study Methodology

Yin (2009) identified basic elements of a design for case study research: (a) research questions are the first component, (b) components of analysis make up a necessary part of the research structure, and (c) the standards to be used for analyzing the information and linking the analysis to any propositions (p. 27). Yin noted that case studies are a credible research method to analyze decisions, programs, how a group adapts to different situations, and how a group tries something new or revised (p.29). Case study methods permit the use of a wide range of information that can include interviews, observations, and review of documents and data. It is critical that the scope of the case (its context) be clear and appropriate to the plan of study for the research (Creswell, 1998, p. 61).

The selected research method is the one that aligns best to resolve the problem statement. For the case study, appropriate research questions relate to analyses of

contemporary issues and situations, and where the research questions seek information related to how and why. These parameters work well with a qualitative study as noted by Yin (2009). A case study approach allows the researcher to include information obtained through direct examination and interviews with participants of the event or condition being analyzed (Yin, pp. 8-11). Yin defended the use of case study research methods when a goal of a project is to seek some comprehension of a “real-life phenomenon” (p. 18). The key components for a solid qualitative research project, per Creswell (1998) include: substantial collection procedures for data and information, logical assumptions that guide the study, the methods for collecting, analyzing, and writing once the data and information are detailed and appropriate, that the data and information are examined from several levels of analysis, findings are clarified, and a conclusion offered (pp. 20-22, 67).

Literature Related to the Research Design

Yin (2009) and Creswell (1998) both provided support for using various qualitative methodologies in performing social science research. Creswell described qualitative research as a method of inquiry that examines “a social or human problem” (p. 15). The research examines words and reports, observes and considers the setting of the problem as closely as possible. Seeking to provide an explanation or description of how or what, qualitative research usually begins with exploration of information so that the research can be continued with enhanced focus. Creswell examined five qualitative methods, including the case study approach. The strengths of the case study structure, from Creswell’s perspective, lie in its flexibility to provide a method for examining

multiple sources of information, and in its flexibility to be used for description, explanation, or exploration (pp. 65-68).

The strengths of the case study methodology were reinforced by Yin (2009). The case study approach offers a structure to help answer the questions of *how* and *what* for a researcher who is examining current situations and has little or no control of events or persons within the scope of the study topic (p. 5). Use of the case study method permits the researcher to use several sources of documentation including interviews of participants or close observers of the situation being studied. This capacity to use a wide range of information helps the researcher examine and defend questions of how and what, and to pursue the study when it is not possible to know all the possible information prior to the analysis of the topic (pp. 8-9). Yin cautioned researchers to be careful to identify their biases as well as to be open in sharing all information that is discovered during the study of the documentation and information. It is also important to note that case study findings will only provide insight, not evidence. The value of the findings is in helping focus continued study of the topic (pp. 10-11).

The use of the case study structure for this project is valid based on additional foundations identified by Yin (2009) who argued that the logic of using the case study is strong “when the boundaries between phenomenon and context are not clearly evident” (p. 13). The validity of the case study came from using multiple sources of information and looking for patterns that can be linked. As patterns were identified and verified through the items of information, then the case study effort was providing a “comprehensive research strategy” (p. 14). The elements of analysis were information

from interviews with key individuals of the colleges who had knowledge of the institutions' commitment to economic development and entrepreneurship, and documents related to economic development and entrepreneurship activities of the targeted community colleges.

The research questions for this study were developed within the recommendations suggested by Yin (2009) and Creswell (1998). Creswell (2008) identified strengths of the cases study structure as including the ability to provide concurrent, sequential, and transformative research (pp. 13-16). Further, Creswell noted that such an approach may allow for open and closed questions, permitting some flexibility for follow-up and clarification in gathering information (pp. 17-21). By using three research questions the researcher acquired information that answers *how questions* and then to explore information and documentation which identified patterns that validated the potential capacity of rural community colleges to support entrepreneurship for economic development. The research structure was designed to help identify elements for future research into the topic of rural regions, rural community colleges, entrepreneurship, and economic development.

Selecting Participants

After IRB approval was completed persons who consented to consider participating in the research received the informed consent process (located in Appendix A) of Walden University. After reviewing each target institution's website for current information for employees in positions related to the research areas (i.e., president, chief academic officer, dean of business, entrepreneurship director) an initial contact was made

through email just to confirm that the individuals were still employed by that institution and in those roles, and then were asked to consider being a participant in the project through the Walden University protocol. If the institution had an internal institutional review process protocol the researcher complied with that process in addition to the Walden University procedure. The Walden procedure included a summary of the proposal, the research questions and related sub questions used in the semi-structured interview format, and that they were asked at the end of the interview for documents that have a direct connection to the research questions. The documents request included any materials provided by the institution or economic development agencies working in the colleges' service region that related to start-up businesses, business expansion, business relocation, participation in workshops or related activities concerning entrepreneurship and small business development, and examples of how the colleges promoted their entrepreneurship and economic development role in their region. This information was available via digital access.

The persons who participated in interviews held similar job responsibilities at each institution, and had direct roles related to their institution and economic development and/or entrepreneurship. Participants in the study included those in the following positions: President of the institution; administrators who oversee instruction and/or the business division; and directors/instructors who have roles related to small business development, entrepreneurship, and continuing education-business training. At least three persons from each of the four target institutions were involved in the project to meet the goal of consistency of job responsibility and connection to economic

development and/or entrepreneurship program. This number was appropriate as these are rural community colleges, formally identified as small to medium two-year colleges by the Carnegie Foundation for the Advancement of Teaching (Carnegie Foundation, 2010). These institutions generally had fewer senior and mid-level administrators, but often have multiple areas of responsibility. By focusing on persons with similar positions and duties, the research design had an appropriate foundation of consistency related to information from documentation and from interviews of the persons involved from the target institutions.

Interview questions are in Appendix A. The interview questions explored the subtopics of the research questions with follow-up questions asked to specify decisions, actions, projects, reports, and plans of the target institutions. Interview questions included queries about the institution's involvement with NACCE, entrepreneurship education and training activities, process of strategic planning and perceived strength to support economic development (including specific inquiry about entrepreneurship in that capacity), and questions related to findings from the RCCI study's component on economic development.

Role of the Researcher

The researcher was part of the research process in the proposal. In the case study structure, the researcher played a critical role in the development of the research questions and the application of those questions to relevant targets, in this case, the selected rural community colleges. I was aware of possible inherent bias due to professional experience with rural community colleges and economic development.

I interviewed participants and analyzed related documents, making me part of the research process (Creswell, 1998). Bracketing techniques were used to identify researcher and participant bias. This was an appropriate part of the process to reinforce the project's integrity (Tufford & Newman, 2010).

This method is not uncommon in qualitative research, especially if the researcher is involved with the research topic and desires to reduce the influence of bias (Tufford & Newman, 2010, p. 81). The common processes used in the method included noting the opinions of the researcher related to the topic (p. 84). Bracketing in this study took place with memos noting opinions and biases during the analysis of data, in order that the researcher maintained the flexibility for engagement with participants during interaction with them (pp. 85-86).

I was aware of the possibility of the participants providing their preconceptions while giving information to the researcher. To assist in identifying that element, a leading question was asked for participants to identify their experiences related to the topic. Obtaining that information assisted in filtering all information in the research component (Edmonds & Kennedy, 2012, pp. 139-142).

Interviews and Data Collection

Each prospective participant was asked to respond with their consent with a return email to me. If I received no response within five working days, I sent a reminder by email. If there was no response within an additional week, I attempted to reach the individuals by phone and asked for their decision and documentation of the decision. Participants were informed that their responses to questions would be maintained with

confidentiality, that participation was voluntary and that they could withdraw from the project at any time. I took notes during any person-to-person communication (phone and/or web-based mode such as GoToMeeting) and used a digital audio recording device with USB/memory card capability so that the information can be stored for review and to meet Walden University policies for electronic data.

Participants were provided with the project abstract, research questions, list of requested documents, and standard base questions after their participation approvals have been processed to comply with the Walden University Institutional Review policy. Other document requests were made at the conclusion of each interview and included curriculum information specific to entrepreneurship provided by the institution, other programming provided in support of entrepreneurship and economic development by the institution, information related to regional economic development per each institution, documentation of engagement by the institution with NACCE (e.g., training provided and/or attended, conferences, etc.). I also asked each participant to suggest other information related to the topic unique to the institution and its commitment to entrepreneurship and economic development. This information was provided electronically to the researcher.

Quality of the research was provided through using the same base questions and statements with all participants. Each institution was asked for similar documents. The participants were asked how the institution evaluates effectiveness in supporting economic development and submitted answers and information back to the researcher via

email, including attachments and/or web links to documents that comprised the secondary data. I analyzed this information to the research questions and to categorize the data.

The names of participants and institutions were coded to preserve confidentiality. For example, institutions were designated CC1, CC2, CC3, and CC4. Participants from each institution were designated in a similar manner. For those with CC1, the participant identification will be CC1A, CC1B, CC1C, and CC1D. Participants were informed of their identification designation. Documents and other information that was provided were given the institutional designation and document title, such as CC1 Entrepreneurship Curriculum, CC1 Entrepreneurship Enrollment. The following documents were requested from each institution's chief executive officer: mission statement, vision statement, purposes or values statements, academic curriculum information related to entrepreneurship and small business development, program information related to any service or activity provided in support of entrepreneurship and economic development (i.e., business incubator facility), listing of what organizations the institution is associated with in support of entrepreneurship and economic development (i.e., NACCE, community and/or regional development agencies), and data on enrollment, completion of programs of study, and on business start-up or expansion assistance.

The questions to the participants focused on the research question topics. Related to the first research question, topics included identifying internal and/or external reasons for the commitment to support entrepreneurship. Did entrepreneurship have an internal and/or external champion? What resources were mobilized for the effort, and again, were these reallocations of institutional support and/or were new resources provided? What, if

any, expectations were linked to the commitment and to implementation of resources?

Was there any significant opposition to the commitment and allocation of resources, and how did the institution react to the opposition? Were additional reasons uncovered as the institution moved into being more active with entrepreneurship that reinforced that decision?

For the second research question topics included the specific actions taken to market entrepreneurship and the result of those efforts. If curricular programs were provided, how were they developed and what has been the response by students, community members? For other programming, such as business incubator facilities and services, how were they promoted? What efforts have been identified as being effective, and what has not met expectations?

For the third research question, topics included identifying strategies that were developed and implemented to enhance institutional credibility with economic development partners, and how those strategies have been evaluated. What strategies appeared to meet expectations or failed to do so? Did the institution have any external organization provide ideas, resources, or other support that resulted in a new or more effective strategy to have the college engaged with economic development? Has there been any external opposition to the college being more active, and if so, how has the institution and/or other organizations responded?

Finally, participants were asked to reflect overall related to the institution's need to be involved with economic development, particularly entrepreneurship. What lessons

have been learned, and what are the possible future actions and expectations of the economic development commitment? The interview questions are in Appendix A.

Information gained through the interviews and questions were analyzed using Compendium software. Compendium assists in organizing and presenting, in graphic form, the connections among information items.

The first research question focused on the reasons a commitment was made related to entrepreneurship for economic development in their service area. The information received from the questions and document requests was analyzed and coded related to commitment and results. Relevant information will be coded as commitment and access to entrepreneurship.

The second research question emphasized how the target institution promoted entrepreneurship as a chosen method for economic development. Follow-up inquiries focused on the method(s) of assessing the effectiveness of the promotional efforts. Relevant information was coded as information of entrepreneurship promotion.

The third research question examined the strategies used by the institutions to increase their effectiveness with other economic development partners in their service area. Relevant information was coded as college influence with economic development. The interviews were conducted by telephone, with the initial interview lasting about one hour on average. Follow-up interviews were not necessary. The initial contact after the participants have been approved and all Walden University protocols have been met was by telephone. I contacted the approved participants and asked them to confirm receipt of the research information (research questions, abstract, and list of requested documents)

within five working days from its being submitted to them. The researcher employed a transcriber to document the interview sessions, using the same participant and institutional identification designations.

Ethical Protection of Participants

I complied with all policies and procedures required by Walden University related to the ethical protection of the participants. I have completed the online training of the NIH Research Ethics program (#998744). The Institutional Review Board documents were provided to the appropriate persons per the Walden University policy.

The research offered minimal to no risk to the participants. No protected classes were involved in the research project. There was no deception of the research subject or any coercion used to engage participants in the project. There were no issues in the research proposal related to personality, attitude or gender preferences. Finally, all possible participants will be provided with the IRB information as well as completing and submitting the necessary informed consent form, which also allowed any participant to end their involvement in the project at any time. One target institution had an institutional review policy, and I used their process to be in compliance with their standards.

The research proposal had detailed steps to keep institutional and participant identification confidential and anonymous. The research structure also allowed for participants to review segments of the data analysis that related to their involvement to reinforce accuracy in the representation of their responses and information.

Data Analysis

As noted in the section on the role of the researcher, bracketing, noting researcher opinion and biases, were used to minimize bias of the researcher during the analysis of data, and to afford the flexibility for engagement with participants during interaction with them (Tufford & Newman, 2010, pp. 85-86).

The bracketing process was implemented in three ways. First, all participants had complete explanations of the reason for the research. Second, I identified my presumptions and experience related to the topic. I am a senior rural community college administrator, currently serving as a president of a public technical college, for more than four years as a chief academic officer, and for more than 10 years as an academic dean. I have been involved with entrepreneurship and economic development programs and activities during my career. I have been a member of NACCE for approximately six years. I have no prior knowledge of or relationship with any persons from the selected rural community colleges. This reduced concerns of bias with the study.

Finally, the analysis was developed to provide the view of the participants. As much as possible, the analysis of the data included direct quotations from the participants. Participants were given the opportunity to examine and confirm the accuracy of the transcript of our conversation by email so that they could provide comments related to corrections, clarifications, or other related information.

This was a single case study as it involved the single issue of economic development examined through data from four similar organizations. This focus allowed

the research to use purposeful sampling that included multiple sources of documentation and data (Creswell, 1998, p. 62). The value of using multiple data sources was in the ability to identify similar patterns of analysis that could confirm or deny confirmation of trends or assertions. Using multiple data sources of information offered the capacity for the data analysis to be triangulated so that themes that were identified could be validated (p. 63).

As this was a descriptive study, the questions were semi-structured, reinforcing a primary goal of the case study methodology for exploration of a topic (Yin, 2009, pp. 68-70). The semi-structured approach meant that the interview items provided commonality to the participants, as well as the opportunity for follow-up to gain further clarification. Using up to four individuals from each of the target rural community colleges, it was my goal to probe in depth with the interview questions, to embrace the descriptive nature of the study (Creswell, 1998, p. 128). This design also allowed me to perform some data triangulation through checking information shared by participants from the same institution, as well as from similar institutions.

The persons involved as participants with each institution had roles similar to these; although their specific position titles varied, but the duties were similar: President/chief executive officer who was responsible for the institution carrying out its mission, vision, and purposes; provost/chief academic officer who was responsible for the instructional component of the institution; dean/chairperson of business or workforce training often involved with economic development support for the region through courses and academic programs, as well as continuing education programming; and

director/coordinator for business and industry training and/or entrepreneurship/small business development. The persons in these positions should provide information that address issues raised by the research questions. The practicality of this structure of participants is based on the researcher's experience in higher education administration and involvement in economic development and entrepreneurship through being a member of NACCE over the past six years.

I used the website information of each target institution and contacted the participants using email, with a follow up telephone or email communication after five working days, and a telephone call within one additional week if no response had been given. Based on their acceptance of being a participant in the research and meeting that component's requirements in the Walden University research policy, which included having them submit the consent form prior to my having any further contact with them related to the research topic and information request, I sent them the research questions, summary of the project, and a list of the interview topics that related to the questions. I asked each participant for the opportunity to interact via telephone or digital communication (i.e., GoToMeeting) so that I could receive and record their responses and information.

I anticipated that each interview session would be for 60 minutes, and asked each participant if they were willing to review their transcript to verify accuracy of information. I also asked each participant during the initial interview for the research to suggest specific documents or related evidence that may have reinforced that institution's performance and commitment as related to the research questions.

By using the coded structure of clustering the information into themes related to the research questions, the first level of analysis was conducted to determine patterns in the data. As McNabb (2002) noted, a primary purpose of sorting information into patterns is to aid the researcher in identifying the patterns that provide meaning and definition to the topic. Thus, the value and significance of the data related to providing a description of how these community colleges provided support for economic development can either be strengthened or cast aside as not being currently viable (p. 370). Similarities from the various coded clusters assisted the researcher in determining appropriate findings of significance. This design met a recommended data analysis processes for case studies from McNabb (pp. 373-374). Identifying commonalities from multiple sources of information reinforced the value of the study.

Using Compendium software to sort and graphically display the information also reinforced the validity of coding and categorization of information provided by participants and their institutions. Coding and categorization of information for research question one was *commitment*; for research question two, *assessment of efforts* and *impact of efforts*, the former relating to how the target institutions evaluate their entrepreneurship efforts and the latter focusing on the value the rural community college efforts appear to have for its service area; for research question three, *influence the institution has in being a credible factor for economic development in its region*.

An additional copy of records was encoded using Microsoft One Note 2007 that also provided the capability to search key terms, phrases, and other elements to assist in

multiple frames of analysis of data from the project. The analysis of the data through the Compendium software provided an additional layer of review.

Data Storage and Confidentiality

Storing data and information was also an important component of the overall research project. Following Creswell's (1998, pp. 133-134) recommendation, storage of information related to the kinds and forms of information collected. Notes from interviews, reflective comments, and other information were processed with Microsoft WORD and saved to four storage areas to which I have access on two hard drives and two flash drives.

I asked permission from the participants to do an audio recording (digital) of telephone conversations, and inform them that email communications will be kept for use in the study. I provided each participant with information about how their institution and personal identity will be masked to provide anonymity and as much confidentiality as is possible. I made each participant aware of the policies and processes of Walden University related to the efforts to provide confidentiality of information related to data storage. All electronic and paper data collected will be stored for 5 years in a locked fire-resistant case kept in the residence of the researcher with access available only to the researcher.

Documents obtained for the study are kept in electronic form (WORD document, Excel document, rich text format document, PDF document) and, where appropriate, include a web address link to the document if obtained through the institution's website.

Only my Ph.D. committee and I have access to the information. Five years after completion and defense of the dissertation the data will be destroyed.

Summary

In this chapter I provided information related to why a qualitative case study research approach is appropriate for the study, a review of why certain qualitative research methods was not selected, and why the case study structure was the more appropriate analytical approach. I also presented the research questions of the study. Details on the research design including types of information to be requested as related to the research questions were provided, as was an explanation of how information was coded and categorized for analysis. I also outlined the structure and reason for data analysis triangulation process to support value and significance of the findings of this study and stipulated the processes I took to ensure the ethical protection of the study participants.

Chapter 4: Results

Introduction

The purpose of this case study was to determine the extent to which targeted rural community colleges in Iowa support economic development, with a focus on entrepreneurship. Information was compiled from interviews with participants from the target colleges. While the same questions were asked to each participant, the objective was to get responses related to their position and role at the institution. Chief executive officers provided responses from their perspectives on how their institutions support economic development. One chief executive officer was also much more active with promoting entrepreneurship. The chief academic officers provided responses more aligned with traditional higher education resources such as courses, programs, transfer agreements than with other aspects of their institution's role with economic development. Others interviewed had more specific roles related to economic development and/or entrepreneurship. Their responses were similar in detailing how each college provided support through services such as training programs, incubator access, and the use of small business development centers established at each campus by the Iowa State Department of Commerce.

Some of the respondents provided copies of material concerning their institution's programs and services in support of economic development and entrepreneurship. This was especially true of the college hosting a John Poppajohn Entrepreneurship Center (JPEC). While there are four such centers located in the state of Iowa, only one is hosted by a community college. The web sites of each institution were also reviewed for

information as to mission statements, and how any of the institutions may have promoted their programs and services for economic development and entrepreneurship. Again, the college with the JPEC was the only institution promoting that resource. Each of the target institutions did have information on their web sites about the small business development centers, as each community college in Iowa has such a center on its campus. The data gathered and analysis made in this chapter explored the following research questions:

1. What were the reasons the community colleges made a commitment to entrepreneurship in support of local/regional economic development beyond the usual component of workforce training?
2. How have the community colleges promoted entrepreneurship as a method of economic development?
3. What strategies were successful in strengthening the community colleges' credibility with economic development partners?

The research questions emphasized how and why the institutions worked with the issue of economic development and entrepreneurship from a contemporary perspective rather than historical. This approach met case study structural components as identified by Yin (2009, pp. 27, 29, 174) and Creswell (2008, p. 61). The research questions focused on getting information related to why and how the institutions supported economic development and entrepreneurship. This focus in the design of the research questions satisfied structural requirements of Yin who noted that the questions typically used when gathering qualitative data can also be analyzed for how and why components. The case study research approach lends itself to that broader view, particularly in an

exploratory manner such as in this study (Yin 2009, pp. 7-9). The structure is a contemporary rather than historical study, which meets concerns of Creswell. As a contemporary review the data is often more qualitative than quantitative. Finally, the analysis structure itself meets Yin's concerns in that the information gained is linked back to the questions. The analysis design provides a convergence model that is another of Yin's elements of structure. Yin reinforced that case study approaches are appropriate to examine how an organization tries something new or revised (Yin, p. 29).

Research Process

I contacted persons from four rural Iowa community colleges initially through email. I selected persons from each college's website directory, looking for similar positions of responsibility. This directory also gave me contact information of telephone, regular mailing address, and email address. The positions I selected were the chief executive officer, the chief academic officer, and then persons connected to education and training in entrepreneurship, economic development, business administration, small business development, or business training. My goal was to have four chief executive officers, four academic officers, and eight persons from the areas of entrepreneurship or economic development or possible related business areas. Each institution has different methods for assigning employees to those areas of responsibilities and often have different job titles. With the email contact, I included the study information mandated through the Walden University IRB process. This included informed consent, a summary of the research proposal, the research questions and related interview topics, and

informing each potential participant that there would be no compensation, minimal risk, and that they could remove themselves from participating at any time with no recrimination. The message shared that if they responded to me via email they needed to indicate that they did consent to participate. Those who gave me no response at all were sent an email reminder after ten working days. Anyone who gave no response at all received a telephone follow up request from me after an initial five working days. At that point, I had secured eleven participants from three institutions. I tried one more time via telephone to those who did not respond and received no response. Therefore, I proceeded as I had good representation from three of the targeted community colleges and representative positions.

When they provided their consent, I contacted them by email to arrange a date and time convenient to them for me to call and interview them. I conducted the interviews by telephone, informing the person I was recording the conversation on a personal recording device belonging to and kept only by me. We conducted the interview using the questions I provided to them. Interviews ranged from 15 minutes to approximately one hour in length. I also asked if they had specific information to share with me via email or via their institution's website. I also reviewed each college's website for relevant information on mission, and on programs, services, and units connected to economic development, entrepreneurship, and small business support. One of the target institutions, CC 3, had a separate internal institutional review process. They asked me for permission to share the information I provided to the potential participants

for their review process, and they provided me an email approving the research effort. The consent information is included in the Appendix.

The ethical policies and procedures of Walden University were followed. Evidence of this is in the fact the research was done with institutions and persons for which there was no previous history of contact, employment, or other interaction. The structure of the research as a case study meets the ethical concerns of alignment of the research questions, data collection and analysis. Finally, the methods of the research are common practices that have been validated and encouraged for replication as appropriate components for a case study (Creswell, 2008 & Yin, 2009).

Through the Walden University URR review of the proposal, the research structure was identified as having minimal to no risk to the participants. The primary risk was in identification of participants. Coding identities helped ensure confidentiality and no payment or coercive methods were used to recruit the participants. The specific identity of the participants and their respective institutions were coded to protect confidentiality. The institutions were coded as CC1, CC2, and CC3. Participants were coded to match their shared positions of responsibility across the institutions, so the participants were identified as CC1A (chief executive officers), CC1B (chief academic officers), CC1C (economic development or entrepreneurship), and CC1D (small business development or business administration), with similar designations for CC2 and CC3 respondents. The participants were also able to withdraw at any time from the study without any reason. None of the participants withdrew.

The length of the interviews ranged from approximately 15 minutes with a chief academic officer to approximately one hour with the person who leads the John Poppajohn Entrepreneurship Center at one of the target colleges. Each participant received the initial request to consent to participate via email, with a combination of email and/or telephone follow up actions by the researcher. The interviews were transcribed after they had all been completed. They were transcribed over a period of two weeks by Cindy Fairchild, the person identified in Chapter Three. She transcribed the information into a Microsoft Word document on a flash drive device I provided to her. She returned the recording device, flash drive to me, and verified she kept no copy of the recording or document. I then listened to the recorded conversations while following along on the transcript document to verify accuracy. I made six edits to the written transcript to correct words. Participants were contacted by email and asked to review the transcript to ensure the information noted was accurate. This was done within thirty days of the interview by sharing the portion of the Word document that contained their conversation with me. I asked participants to notify me of any concerns by email, and none of them indicated that any change was necessary. The interviews were done on a personal recording device that has only been used by the transcriptionist and me. The device is locked in a personal safety container lock box belonging to me in my home. The only paper and digital copies of the interviews and raw data analysis are on thumb drive devices locked in the same safety container when not being used by me. All the data and information that has been kept will be destroyed five years after the completion and defense of the dissertation.

I asked each of the participants about their experiences related to the research questions and study topic before I started with the interview questions. Their responses enabled me to be aware of possible preconceptions of the participants that were of benefit in analyzing the information. This process of seeking preconceptions meets recommendations of Edmonds and Kennedy (2012) to identify and be aware of potential biases or issues in a case study process. I used a process called bracketing (Tufford and Newman, 2010) to identify my biases based on my shared experiences in higher education administration and involvement with economic development. My biases are based on being active in economic development projects and entrepreneurship capacity building at three community colleges and one technical college since 1993, and on similar efforts at one regional state university. None of these institutions was in Iowa, and I have no employment history in Iowa. The projects I have been involved with concerned enhancing a community's capacity to retain and attract business and industry, and my involvement was for workforce training. I have promoted entrepreneurship for more than 20 years, and have held a membership with NACCE for the past 12 years. I have never been a member of the board of directors for NACCE. This technique is appropriate to reinforce the study's integrity per Tufford and Newman (2010).

Interview Data by Participant Role and Topic Category

Each of the respondents was asked the same interview questions to reinforce the alignment of the study process. For the first research question, interview topics included identifying internal and/or external reasons for the commitment to support

entrepreneurship. The chief executive officer of CC1 noted that the primary reason for their institution's support was due to the state housing a Small Business Development unit on the campus (as at every Iowa community college campus). The chief executive officer of CC2 had the same response, but also added that for CC2 there was the added impetus of being the only community college in the state hosting a John Poppajohn Entrepreneurship Center (JPEC). CC1's chief executive officer noted: "The College receives funding each year for the Poppajohn Center from Mr. Poppajohn. This was a ten- year commitment by him to help the Center move to sustainability." The chief executive officer for CC2 added that the immediate predecessor was very active with the National Association for Community College Entrepreneurship (NACCE) and that this will be continued, including the selection of this current president to serve on the board of directors for NACCE. The engagement with NACCE was cited by each of the CC2 respondents as an additional factor in the institution's emphasis on economic development and entrepreneurship. Neither CC1 nor CC3 were currently active with NACCE, with the business trainer for CC3 noting, "we were members a few years ago, but we did not see sufficient benefit to justify the cost. Currently there is no champion for that organization at the college."

The chief academic officers had a different additional perspective that focused on how each institution provided courses in business administration, which had options for students to transfer to a state university for more focused education. Two of the chief academic officers, for CC1 and CC3, mentioned that most non-credit training in economic development and entrepreneurship occurred through the Small Business

Development Centers. These were perceived to be traditional academic approaches of the institution to support economic development. The chief academic officer for CC2 noted that the college president was supporting a stronger effort for both economic development and entrepreneurship, adding that “the impetus of the Pappajohn Center and the SBDC have moved the college into more activity supporting economic development and entrepreneurship.”

The interview participants representing each college with economic development and entrepreneurship activities provided more detail on the Small Business Development Center connections. The participant from CC2 stated: “The decisions within state government to develop stronger and more localized resources for economic development led to their decision to locate SBDC units at each community college. For our institution, the previous president established a focus on economic development and entrepreneurship that became an expectation of the next president. This emphasis is due to the expectations of our board members, area business owners, and Mr. John Poppajohn.” CC1D, working with business training, noted that “the Iowa legislature approved 260E, which is legislation providing tax benefits and training costs to businesses who create new training agreements with the state department of commerce and their local community college.” This has provided a funding stream of both public and private funds as incentives in support of economic development, per that respondent. CC2C provided detailed information as to the emphasis the institution placed on entrepreneurship as a primary economic development pathway. “The overall objective is to help create sustainable businesses,” CC2C stated. Among the support mechanisms

available were incubator space, helping business prospects and owners build engaged networks for workforce, investment, customers, and options on using virtual entrepreneurship services to test ideas as well as to shape businesses to see broader markets. “One aspect that seems to set the Poppajohn Centers apart in the state is using the entrepreneurship mindset as part of leadership training, per CC2C. Speakers from firms with national and global markets are often used to reinforce the PJEC training and to make regional political and business leaders more aware of successful entrepreneurial methods that enhance community and economic development.

CC3C mentioned that several of the previous leaders of the institution had been strongly engaged with economic development efforts. In this person’s view, the state had recognized a role that the community colleges should play in not only being sites for the Small Business Development Centers, but also to provide funding incentives for the colleges to assist the SBDC units with job growth and business sustainability and expansion. CC3D replied to this question by sharing that this institution would like become more proactive with economic development activities due to the formation of a Northwest Iowa Regents Resource Center to promote access to higher education and economic development services. This would include more collaboration with the University of Iowa and the University of Northern Iowa with the nearby community colleges.

For the second research question the interview topics included the specific actions taken to market entrepreneurship and the result of those efforts. The chief executive

officer of CC1 answered that the traditional academic programs were the common method for the college, and that with the addition of the Small Business Development Center unit on campus, that entity used their marketing budget that expanded awareness of the college. The chief executive officer for CC2 emphasized that for the college the promotions were done almost exclusively through either the SBDC unit or the John Poppajohn Entrepreneurship Center unit. The latter unit emphasized entrepreneurship training and related services, so the SBDC unit could provide more assistance in economic development, particularly in business and workforce expansion, retraining plans, and recruitment of new businesses per CC1A. Finally, CC2A cited the college's involvement with NACCE as a promotional component for that institution. The organization reinforced access to resources in support of entrepreneurship and economic development. Also, per CC2C, NACCE had featured CC2 for hosting a John Poppajohn Entrepreneurship Center.

The chief academic officers emphasized the normal marketing of college courses and programs of study, which included entrepreneurship courses and general business education. The chief academic officers for CC1 and CC3 both cited the SBDC units as having their own promotional avenues that were independent of the colleges, but due to their location, the colleges benefited from their marketing efforts.

The Poppajohn unit (JPEC) was the primary promotional component for CC2 per their interview respondent who directed that unit. The unit was promised sufficient seed funding for ten years so that it could reach sustainability. The JPEC uses a mix of

marketing approaches, including social media, regional media, and targeted items to reach current entrepreneurs in the service area of the college. The use of web-based marketing also allows the unit to make a global audience aware of its resources and the potential for entrepreneurial success within the college's service area.

For the third research question, interview topics included identifying strategies developed and implemented to enhance institutional credibility with economic development partners, and how those strategies have been evaluated. Each of the chief executive officers interviewed for this project indicated that part of their responsibility was to connect with business people in their college service areas. CC1A stated: "We have shared members of on our board as well as the economic development committees in the region. We are expected to be a partner where it meets our abilities and capacity." CC2A noted that as the president "I have to be actively engaged with the business community and with economic development so that the college can have a reciprocal arrangement of community support. This is an expectation in our service area."

The chief academic officer for CC1 indicated that the strategies were due to the college trustees taking time to listen to various stakeholders. With the addition of the SBDC unit to the campus, it made sense to the trustees and administrators to build upon that alignment. The economic development representative for CC1 reinforced that view, in that the college had responded but was not proactive. On the other hand, the respondents for CC2 all reinforced that for their institution the strategies were driven by the chief executive officer and that person's directives to the college to meet expectations

of regional business leaders. The economic development and entrepreneurship participants from CC3 both saw the strategies as being led by state initiatives to help Iowa recover from the economic recession, and that their institution's actions had also been more reactive similarly to CC1.

The assessment of the results is mostly coming from the data of the SBDC units at each campus. CC2 is the exception due to having its own John Poppajohn Entrepreneurship Center. That exception was noted by the chief executive officer of CC2 as well as its economic development and entrepreneurship respondents (CC2C and CC2D). CC2 will have data from the performance of the SBDC unit on its campus as well as the JPEC operation. For all three community colleges, the SBDC data has not been revised or integrated to provide a specific connection to any programs or services of the colleges. At CC2, the staffs of the SBDC and the JPEC have collaborated to reduce duplication of programs and services so that evaluation data is more accurate to each unit (CC2C). The chief academic officers noted that academic assessment of success is performed seen through the traditional data of course enrollment, student achievement, completion of programs of study, and transfer where that is an appropriate element. The academic data is not connected to any benchmarks such as business startups, expansions, job creation or other common economic development and entrepreneurship components (CC2B).

Coding Information

The data was examined from perspectives of content as well as frequency of key words and phrases. The key words and phrases were: certificate, credit course, degree, economic development, entrepreneurship, mission statement, NACCE, Poppajohn, president, and SBDC. Compendium software was used to assist in sorting the data and then transitioned to Excel spreadsheet format for providing a visual perspective of patterns. The Compendium Institute is an open forum for developing tools for acquiring and analyzing information (www.compendiuminstitute.net). The data came from the participants interviewed for this project and from information those persons shared with me. The interview questions were semi-structured to help participants go beyond yes and no responses. This structure follows case study guidance from Yin (2009, pp. 68-70). The responses to the interview questions were triangulated using analysis of comments within the institution, between institutions, and by similar positions of participants across the institutions. Looking at the commonalities within the responses indicated patterns connected to the research questions, and reinforced the viability of the information as it came from multiple sources within the study. This structure met recommendations of McNabb (2002, pp. 373-374), and are displayed later in this chapter in Tables 1-6.

The interview questions have been linked to the research questions to assist in analysis of the responses and the overall purpose of the study. The linkages are in the subject areas of the interview questions. For example, if an institution offered entrepreneurship coursework (credit and/or non-credit) that is evidence of a commitment

to provide support for economic development beyond the typical community college role of workforce (skilled training) education. Providing space for an incubator or entrepreneurship center offers another item of evidence of commitment. The decision by state leaders to house Small Business Development Centers at the community colleges is an indication that those leaders saw the institutions as needing to be engaged with economic development. Part of each interview question related to one or more of the research questions in like manner. The coding alignment used for analysis was with an axial logic and is as follows:

Research Questions	1. What were the reasons the community colleges made a commitment to entrepreneurship in support of local/regional economic development beyond the usual component of workforce training?	2. How have the community colleges promoted entrepreneurship as a method of economic development?	3. What strategies were successful in strengthening the community college's credibility with economic development partnerships?
Interview Questions			
1. Does your institution provide a credit and/or non-credit entrepreneurship or small business development program?	X	X	X
2. Does your institution provide support for entrepreneurship and small business development by providing a business incubator or other specific service?	X	X	X

3. How has your institution been involved with the National Association for Community College Entrepreneurship?	X	X	X
4. How does your institution evaluate its effectiveness in supporting economic development in your service area? Is there a specific process used to assess the effectiveness of the college's entrepreneurship program/activities?	X	X	X
5. What were the reasons the community college decided to make a commitment to entrepreneurship in support of local/regional economic development beyond the usual component of workforce training?	X		
6. How has the community college evaluated its efforts to promote entrepreneurship as a method of economic development?		X	
7. What strategies were successful in strengthening the community college's credibility with regional community and economic development partners?			X

Examining Response Frequencies with Research Question Alignment

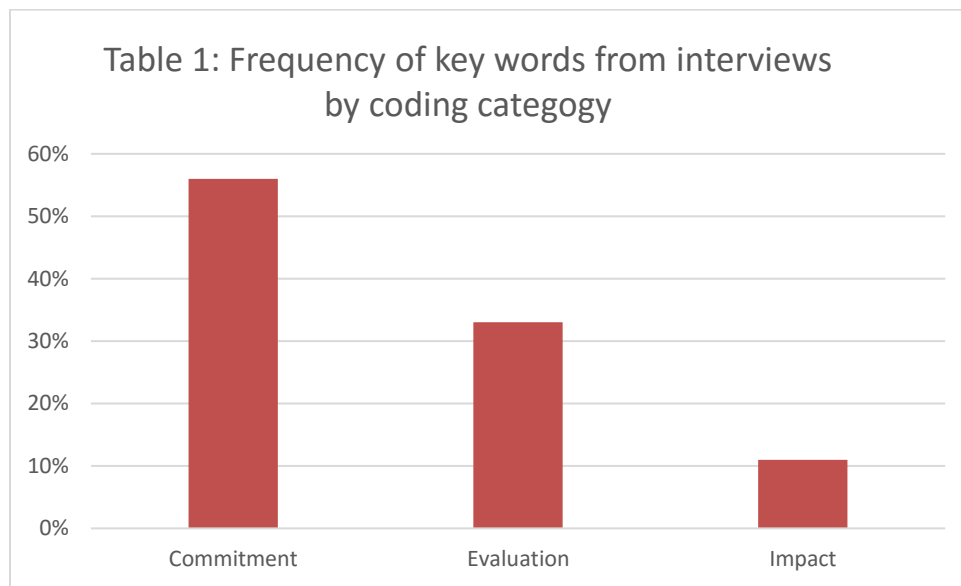
For research question one, the frequency of information responses on a collective basis for interview questions 1-5 are: small business development centers 21%, entrepreneurship 17.5%, economic development at 13.6%, and credit course at 10.3%.

All other responses were below ten percent in frequency, and those cited comprise over 62% of the frequency of responses by participants to the questions.

For research question two, the frequency of information responses on a collective basis for interview questions 1-4 and 6 are: small business development center 21.6%, entrepreneurship 15.7%, and credit course 14.3%, a total of 51.6%. Eight other responses comprised the remainder.

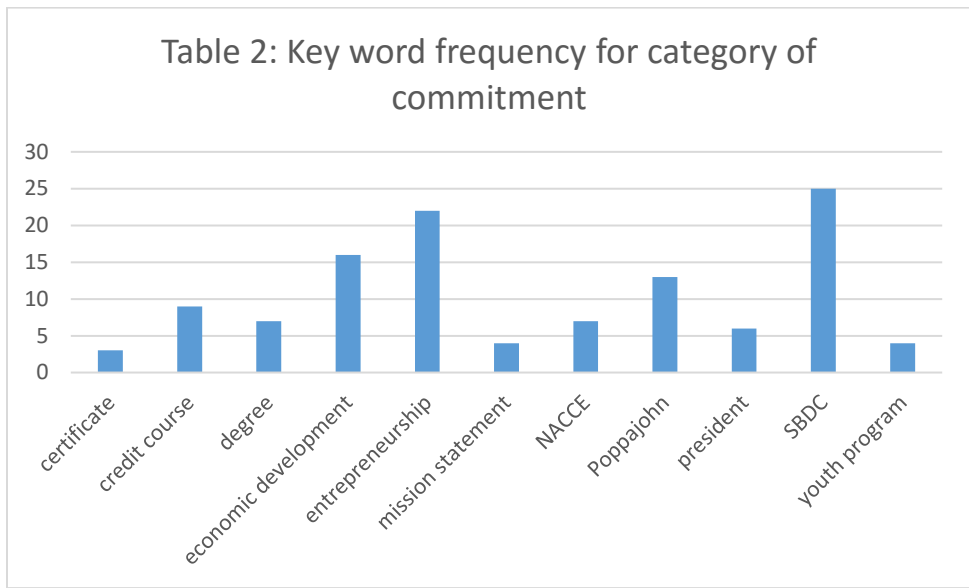
For research question three the breakdown is as follows: small business development centers 22.1%, entrepreneurship 15.2%, economic development 13.1%, and credit courses at 10.3%, comprising 60.7% of the response frequency.

The information from the interviews was coded and categorized to topics of commitment (research question one), assessment of efforts and impact of efforts (research question two), and institutional impact for economic development (research question three). In this way, the patterns of the responses were sorted for commonality, for being distinctive (in not being a common response), and in looking at each of the topics to help determine if any of the information has possible validity for further examination especially for identification of a best practice or other reason to encourage replication by other similar institutions of higher education. The results of the coding and categorization are apparent in Table 1:



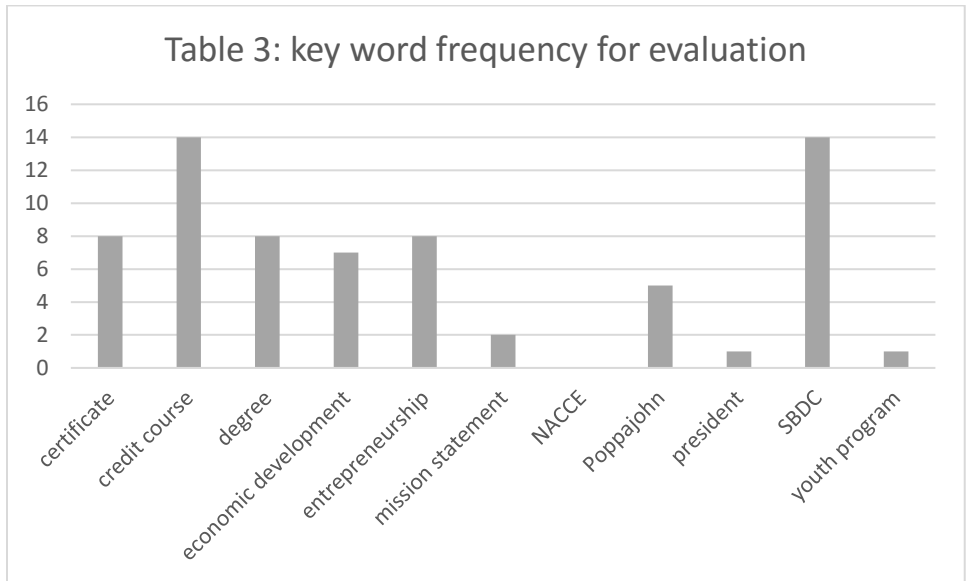
Analysis of the frequency of the key words being used by the participants during the interviews reveal that 56% fit into describing institutional commitment to economic development and entrepreneurship, 33% to evaluation of the promotional and results efforts of the institution for economic development and entrepreneurship, and 11% for the impact of the institution as being a viable partner for economic development and entrepreneurship. Within each coding category there is a frequency analysis as well.

For the frequency of key words related to the category of commitment, the data reveals the following in Table 2:

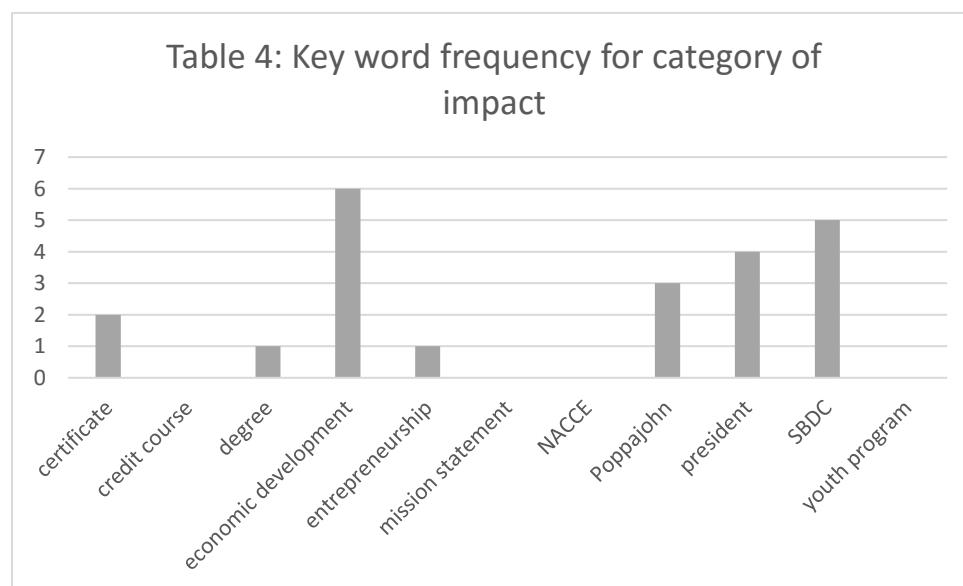


For frequency related to the category of evaluation, the chart is as follows in

Table 3:



For frequency related to the category of impact, the chart is as follows in Table 4:



The frequency of the key words and phrases given in the responses by the participants were analyzed per research question, and per category topic for coding the information reinforce basic conclusions. The significance of the presence of the Small Business Development Centers at each college campus is very apparent and has enhanced the profile of economic development for the target institutions from the perspective of all the participants. The SBDC units were the only key word descriptor to have a frequency of more than 20% related to the category analysis of the responses. Entrepreneurship and economic development were at 15% and 14% respectively.

For CC2 there is the additional significance of hosting a John Poppajohn Entrepreneurship Center. That is certainly a major component of that institution's identity with economic development and entrepreneurship, clearly reflected in the responses of each of the participants from that college.

NACCE is only a positive element for CC2, as their chief executive officer serves on the NACCE board of directors, and the organization has featured CC2 due to the John Poppajohn Entrepreneurship Center's connection to the college. NACCE was viewed as a commitment objective only.

The traditional academic elements of courses, degrees, and certificates had a significantly lower frequency pattern. Courses were mentioned as evidence of commitment and evaluation, but had no mention for impact. The role of the president was also seen in terms of commitment, with a minimal frequency for impact. The institutional mission statement was also a lower descriptor in terms of frequency, and was mentioned related to evidence of commitment and in terms of evaluation.

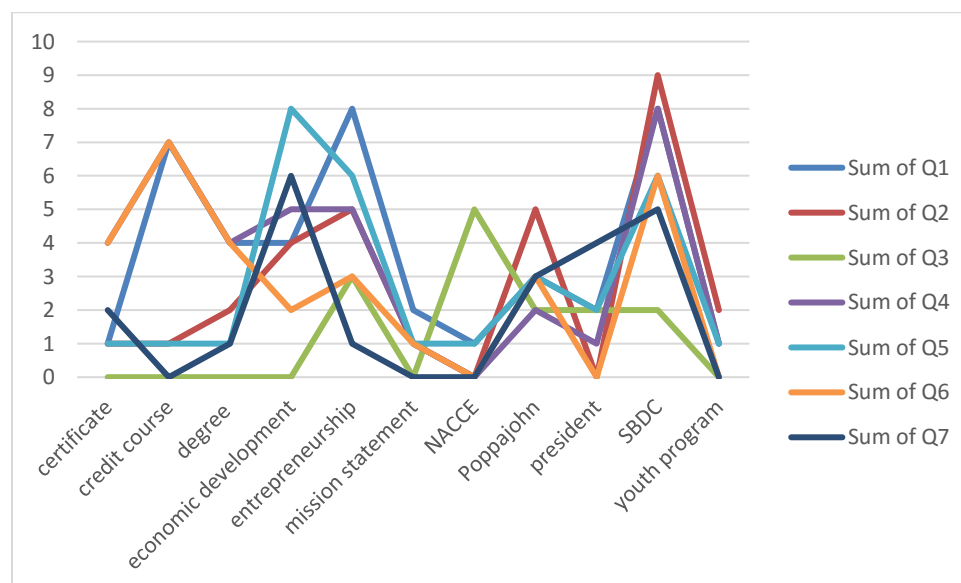
An additional analysis of the respondents' answers to the interview topics was through the overall frequency and commonality of key words and phrases per each interview question. The list of key words and phrases and the frequencies in the responses are listed below as Table 5 and Table 6. This information is a result of processing key words and phrases to the interview and research questions with responses and the analysis using Compendium.

The commonality or frequency of certain words and phrases to identified topics of the study offers a reinforcement of patterns of information. These patterns help form the findings of the study and provide support for further research into the findings and the issue of rural community colleges and their role with economic development and entrepreneurship.

Table 5: Commonality of key words and phrases from participant responses

Row Labels	Sum of Q1	Sum of Q2	Sum of Q3	Sum of Q4	Sum of Q5	Sum of Q6	Sum of Q7	Total
certificate	1	1	0	4	1	4	2	13
credit course	7	1	0	7	1	7	0	23
degree	4	2	0	4	1	4	1	16
economic development	4	4	0	5	8	2	6	29
entrepreneurship	8	5	3	5	6	3	1	31
mission statement	2	1	0	1	1	1	0	6
NACCE	1	0	5	0	1	0	0	7
Poppajohn	3	5	2	2	3	3	3	21
president	2	0	2	1	2	0	4	11
SBDC	8	9	2	8	6	6	5	44
youth program	1	2	0	1	1	0	0	5
Grand Total	41	30	14	38	31	30	22	

Table 6: Frequency of key words and phrases from participant responses



This avenue of analysis is used to verify trends of the responses to the study questions so that a recommendation for further research might be justified. There were 206 total specific responses to the seven questions by the respondents for an average of 29 per question. Using that average there are three items that meet or exceed the average in terms of frequency overall from the question responses. These items are small business economic development center (44), entrepreneurship (31), and economic development (29). The remaining items by frequency in being mentioned are: credit course (23), Pappajohn Entrepreneurship Center (21), associate degree (16), certificate (13), president (11), NACCE (7), mission statement (6), and youth program (5).

The answers to the research questions can be identified through the trends of the responses. These trends match the perceptions of the interview respondents in terms of what they see their institutions doing in support of economic development and entrepreneurship.

The first research question concerned the reasons the community colleges made a commitment to entrepreneurship in support of local/regional economic development beyond the usual component of workforce training. This topic focused on the reasons each institution has for supporting economic development in general, and entrepreneurship specifically. The dominant theme from the responses for that question are centered on the decision of the state to locate Small Business Development Centers at each community college campus. All respondents gave input to this topic. The chief executive officers as well as those staff who engaged with the Small Business

Development Centers (SBDCs) at each campus see the addition of those units as the focus for economic development. CC2A stated: “While the traditional academic component has interest from a traditional student audience, the addition of the Small Business Development Centers onto the campus has significantly enhanced exposure to the region of the college and economic development.” CC1B added: “We see some persons checking out the services of the SBDC units, and then becoming more interested in academic courses. Our advantage there are clear articulation agreements with several state universities related to complete business programs of study.” CC1C said, “For most folks, the line seems clear that academic credit is served by the college and non-credit training is through the Small Business Development Center.” Entrepreneurship has both an academic context (credit courses, parts of academic programs of study, linkage to a senior university program for transfer) and a business start-up context either through the SBDC units for all the institutions. The frequencies of small business development centers, entrepreneurship, and economic development seem to validate that the participating individuals of the target institutions recognize that their college does have a current and active role in business development and promotion.

The participants from the target institutions see the addition of the Small Business Development Centers (SBDCs) as the focus for economic development. The programs and services of the SBDCs have been accepted by the community colleges as a resource and as a visible marker to raise their institutional profiles in their service areas related to economic development. Part of the services available through each of the Small Business Development Centers are in support of entrepreneurship, including assistance with the

development of a business plan and options for financing the plans. Therefore, for CC1 and CC3 the presence of the SBDC units was the primary reasons for becoming more involved with economic development and entrepreneurship beyond just academic courses. The addition of the SBDC units provided a stronger platform of economic development and entrepreneurship visibility through the community colleges than had existed before (with the exception of CC2), and have been the main impetus for the colleges to work beyond career and technical/workforce training in support of their regional economies. CC1A told me that, “Almost all community inquiries on economic development and entrepreneurship are channeled first to the Small Business Development Center. But we have made sure they have information on our academic programs for those clients that are interested and/or are referred by SBDC personnel for the academic education and training.”

The addition of the SBDC units for all three institutions, and the Poppajohn Center for CC2, are also evidence of the enhanced capacity of networking social capital (Woolcock & Narayan, 2000, 2006). The Poppajohn Center for CC2 is an added resource for institutional social capital, also an element noted by Woolcock and Narayan. For the participants of CC2 entrepreneurship is also highly visible due to hosting both an SBDC unit and the John Poppajohn Entrepreneurship Center. This perception is based on comments from CC2 participants. CC2A stated, “Because of both the SBDC and the Poppajohn Center being part of the College, we now have interaction on a formal and regular basis with economic development representatives of the county as members of the Poppajohn board of directors. These persons carry information and news both directions,

helping the College raise its economic development and entrepreneurship profiles.”

CC2B described the arrangement of having the SBDC unit, the Poppajohn Entrepreneurship Center, and the college’s own academic courses and programs for entrepreneurship and small business management as “providing a collaborative competitive structure, which has enhanced each area’s self-promotion related to the topic of economic development.”

The responses from those interviewed from CC1 and CC3 indicate that NACCE is less of a factor than I originally thought. Only one target institution, CC2, has an active role with NACCE, but it is a significant element for that institution due to the engagement of the college’s chief executive officer serving on the NACCE board of directors, and the recognition NACCE has given CC2 because of the John Poppajohn Entrepreneurship Center connection. CC2A was direct with these comments: “We are the model for the state. We have the SBDC office, the Poppajohn Center, and we are active with NACCE. For the SBDC and the Poppajohn Center there are established metrics that will be used to evaluate performance. The metrics include the change with private investment, return on investment, jobs retained, jobs created, job retraining, as well as total number of clients and related client services.”

The data trends indicate that for that one institution the president’s role has more emphasis toward economic development. Again, CC2A stated: “We have worked to integrate the economic development services to increase transparency, sharing and use of

resources, and to do our best to collect the success stories. We market those successes to document our credibility.”

Academic elements form a second tier of emphasis for why the institutions support entrepreneurship and economic development, but it is the traditional basis for what engagement they had prior to the presence of the Small Business Development Centers, and the Poppajohn Center in the case of CC3. The credit courses, degree and certificate options combine for a score of 52. This is a significant frequency and relates to the traditional role of a community college, and of higher education in general. However, when it is the primary component for economic development and entrepreneurship support for a community college it often struggles for interest and effectiveness. This was explained by CC2C: “Folks interested in starting or strengthening a business usually do not want to invest the time or resources in a program of many credit hours and semesters. The business world is often impatient with the usual academic approach. The ability of the SBDC units and the staff of the Poppajohn Center to speak the same language of the business person, and sometimes to interpret the academic language, makes the non-academic components of more value, of having a greater comfort zone to the business community.” This is not unexpected as the main structure of the institutions is academic instruction that is provided primarily through credit hours within coursework and the combination of courses to allow a person to earn a qualifying certificate and/or degree, particularly for a community college. CC1B told me: “Retraining persons for changes in their jobs as well as different jobs has been stronger in the past several years. The state has provided incentives through tax breaks to employers who invest in the retraining

process by paying us to re-skill their workers. This has retained jobs in communities, but has not increased jobs.” Yet the traditional academic components for a college are not as strong as the institutions’ recognition and reliance on using the SBDCs. The linkage with the Small Business Development Center units, and for one institution the added capacity of the John Poppajohn Entrepreneurship Center, may have provided a pathway for supporting economic development that is more flexible than the usual academic component. Perhaps the actual business community sees more value in the non-academic activities. CC2C stated, “While the SBDC units have common metrics that provide a state-wide analysis, the Poppajohn Center allows for a more specific, regional set of metrics to demonstrate regional engagement and value. We use our preferred version of a business plan versus what the college academic course teaches and also different from the SBDC model. We can address items of interest to those stakeholders who are providing funding, and other resources that support the area’s economic development goals.” CC2D added: “We are the nonthreatening entity to bring competing businesses together to find common needs, common resources, and common ground to advance growth. The critical mass in terms of clients and services comes through the overall awareness of economic development, and that directs some client traffic to entrepreneurship. Other traffic often goes to worker training, or to small business needs such as financing and business plans.”

The second research question asked how the institutions promoted entrepreneurship as a method of economic development. The answer to the second research question again has focused on the presence of and resources of the Small Business Development Centers on the college campuses. The SBDCs provide a new

service for the colleges in support of economic development and entrepreneurship. The SBDC units have had resources to market their services, and this has allowed for a connection to the colleges (who have had more limited marketing resources for that purpose). Again, the state's decision to promote economic development to all areas of the state through the SBDC sites has provided a marketing boost for their services, and the colleges have included information about the SBDC sites with their web sites and their own promotional materials. In the case of CC2 is the added "bonus" of the John Poppajohn Entrepreneurship Center with that institution, which has become a point of emphasis concerning entrepreneurship. CC2C stated: "We play in both worlds: academic and entrepreneurship. The resources of the academic component with business and entrepreneurship basics, and then the combination of the SBDC and the Poppajohn Center have enhanced our visibility, and our standing to discuss programs and services with the universities that also have Poppajohn Centers." Because of the Poppajohn Center, CC2 has also been more active in leadership and membership with NACCE than the other institutions in the study. CC2D added, "One of our purposes with the Poppajohn Center is to extend awareness and engagement for entrepreneurship to an audience that includes K-12, our own college students, and as an economic development path for continuing education and lifelong learning." CC2 has done more promotion than the other institutions concerning entrepreneurship due to hosting the Poppajohn Center and being active in leadership, through their president, with NACCE. Again, these were proactive choices by leadership to reinforce their support for their institution's role with economic development and entrepreneurship. The addition of the SBDC sites and their

marketing resources, linked to their locations at the colleges, also reinforces the networking and synergy social capital elements identified by Woolcock and Narayan (2001, 2006). This is evident from comments from several respondents. CC1A told me: “With the addition of the SBDC units, their performance has become our primary evaluation for involvement with economic development. Their data provides both a regional and statewide assessment, with the regional data tied to performance in meeting local economic development goals and objectives.” CC2C stated, “We have been able to make more persons aware of common ground to use both non-credit and credit resources depending on the goals of the clients. This alignment has created more engagement of the college to the business community, and vice versa.” CC1D added: “Part of the promotion and evaluation has been more active use of student and client satisfaction surveys, including both workers and employers. Similar to course and instructor evaluations, this feedback provides more information to gauge effectiveness and efficiency in promoting and supporting economic development and entrepreneurship.” CC2A told me that “the addition of SBDC resources for promotion and marketing have been “co-opted” by each of the colleges to provide evidence of more awareness and marketing, even though the SBDC resources are not connected to college resources in any direct manner.”

The third and last research question concerned what strategies the college was successful in using to gain or enhance their credibility to the business community for economic development and entrepreneurship. The answer for the last research question follows a similar pattern. The location of the SBDC units has been a significant legitimizing strategy to connect the colleges with economic development organizations.

The Poppajohn Center has been an additional driver in the case of CC2. With all three institutions, the leadership and engagement of the president is also a key factor.

Interacting with business leaders, and promoting the institution's mission and capacity for workforce training as well as other economic development services are part of the dossier of the chief executive officers, as noted by the leader of CC2. CC1B stated, "With the addition of the SBDC units we are seen as being more responsive to community, particularly business, demands. They initiate conversations with us and have become more engaged with the college." CC3C stated, "There is an expectation to promote and cultivate a culture of leadership to the community based on accountability." The extra "tools" of the SBDC units strengthen that institution's perceived capacity at minimum. CC1B: "Summer activities for youth have raised awareness and expectations related to entrepreneurship. This has also increased visibility of the institution to others in the area who then contact us for small business assistance." CC1A stated: "We have been more proactive in sharing key persons on both college boards and regional economic development boards. We listen, and we carefully engage in those projects that meet our abilities and capacities." CC1B added: "We have seen a strengthening of the value of our program advisory committees by more engagement of business representatives who have either used or understand our tools: academic courses and programs, as well as the addition of the SBDC." These examples reinforce the social capital components identified by Woolcock and Narayan (2000, 2006) connected to entrepreneurship, the enhanced alignment of the colleges, the SBDC units, and the colleges' communities match with the researchers' components of communitarian, networking, and synergy.

Perhaps the best overall example to this research questions is again from CC2D: “We created a venture capital fund of \$2.4 million from regional sources, which allows us to look at an annual investment fund of more than a quarter million dollars to support entrepreneurship through the Poppajohn Center.”

Evidence of Trustworthiness

The processes for trustworthiness as noted in chapter 3 have been performed. The biases of the researcher were disclosed, and confidentiality processes of the participants and their institutions were followed. The coding process was used to match interview questions back to the research question topics to reinforce the scope of the analysis process. I also reviewed information either provided by participants (each participant was asked if there was public information that I could obtain for review related to supporting the responses from the participants) or located through the website of each of the target institutions. This information has reinforced the accuracy of participant responses and views to the interview questions. This provides additional trustworthiness as part of the triangulation process of the information obtained during the study. I provided each of the participants with a copy of the information used in this report reflecting their input and were asked to review the copy for accuracy of transcription only. Thus, the appropriate steps to support trustworthiness have been implemented.

Non-interview Data

Responses from participants of community college led to the institution’s web site to check for evidence to reinforce the accuracy of the response information. The college’s

web site did have evidence of economic development as part of the mission. For CC1 their mission statement includes their responsibility to “promote economic development for our communities.” CC2 has their economic responsibility cited in their vision statement as “responsive and collaborative partnerships with business and industry.” For CC3 their mission includes “to economically enhance the communities we serve.” Searching the web site for CC1 under entrepreneurship brought up items about Junior Achievement and Entrepreneurship, and one academic course for entrepreneurship. Searching using economic development brought up items linking to the Small Business Development Center unit. A search of the web site for CC3 using entrepreneurship brought up academic coursework, including courses for entrepreneurship and business. Using the phrase economic development for CC3 referred me to their mission statement, and to the SBDC unit. A search of the web site for CC2 using the word entrepreneurship brought up items related to their connection to the SBDC, to the Poppajohn Center, and to academic coursework and a search for economic development brought up several items related to workforce training, the Poppajohn Center, and the SBDC unit under the entrepreneurship prompt. The NACCE web site indicates the president of CC2 as a member of the board, verifying the interview information.

The information readily accessible through the target institutions’ web sites and linked pages supports the responses provided by the interview participants. This process enhances the validation of the information. The clearest finding is the presence of the small business development centers, supported by the state and federal government (through their respective Departments of Commerce), on the community college

campuses reviewed in this study. Those centers provide a linkage to both the college and their service areas for general economic development resources and services, with an emphasis on small business management and entrepreneurship. The response frequencies and documents found in reviewing the target institutions' web sites reinforces this conclusion.

For one target institution, the emphasis on entrepreneurship is due to the presence of hosting a John Poppajohn Entrepreneurship Center. This element, plus the president's more engaged role with NACCE and in representing the institution in its more active role for economic development are also clear from the interview and web site findings.

Summary

In chapter four analysis of data from the interviews was provided in relationship to the research questions. From the perspective of responses from 11 participants from 3 target institutions, the analysis indicated several trends. The most evident factor is the presence of a Small Business Development Center on the campus of each of the state's community colleges. This action has had the effect of linking small business services with each of the community colleges that has enhanced the institutional connection to economic development. For one of the target colleges the additional presence of a John Poppajohn Entrepreneurship Center has reinforced the role of that college with economic development and entrepreneurship, continuing a commitment made by a previous president of the college. The example of that college and its leadership does provide the

strongest indication of a community college leading the way in its service area with entrepreneurship and economic development as a proactive model.

In chapter five, there will be additional interpretation of the findings, a review of the limitations of the study, and recommendations from the researcher including possible implications from the overall analysis of the project for positive social change. The information provided in the study is emphasized in chapter five related to connections to the findings from the Rural Community College Initiative (RCCI) project of the Ford Foundation. That project, in one of its components, targeted increasing economic development capacity of rural community colleges. The answers listed in chapter 4 for the research questions indicate a link to the RCCI project in that the presence of the Small Business Development Centers, and for one institution its hosting a specific entrepreneurship center and active engagement with NACCE, have enhanced the capacity of the targeted community colleges with economic development, including entrepreneurship.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction and Purpose of the Study

The purpose of the study was to determine the extent to which four rural community colleges in Iowa have supported programs and services for regional economic development. The emphasis was on entrepreneurship and small business development. Analysis of responses and information received through interviews identified key findings toward the research questions.

Each of the target institutions provided some service to support economic development and entrepreneurship beyond workforce training. The common threads of activities included being regional sites for units of the state's Small Business Development Center, and in providing some form of academic education through a basic entrepreneurship course. These elements were identified during interviews with representatives from each of the target institutions. One institution, CC2, exceeded these activities by sponsoring an actual entrepreneurship operation for education and assistance.

The primary promotional emphasis for each of the target institutions is through the state's support of the Small Business Development Centers (SBDCs) as that involves resources from the state's Department of Commerce for both statewide and regional marketing (<http://www.iowasbdc.org/about-us/>). This arrangement enhances the value of resources of each of the community colleges and each of the SBDCs. Each entity often mentions the other as they do marketing and promotional materials, and the SBDC unit address is on the campus of each of the community colleges that further reinforced the

image of a partnership for economic development, per CC21. For two of the three institutions involved in this research, CC1 and CC3, the other primary promotion was of academic courses and programs related to business and entrepreneurship. For one of the colleges, CC2, there was also extensive promotion of its John Poppajohn Entrepreneurship Center.

For all three of the target institutions evidence of being a viable partner for entrepreneurship and economic development was noted through the alliance with the Small Business Development Centers. Each center provides a report back to the state and the colleges cite that as documentation of their support for business services. Per CC2A, the report offers a summary of clients worked with and what services were provided: assistance with business plans, with starting a business, with business expansion, with connecting to new global markets, and with refinancing the business are the common services from the SBDC units.

One of the three colleges, CC2, could provide information about its value as an economic development partner through its use of resources to implement and sustain the John Poppajohn Entrepreneurship Center, and proudly noting it was the only community college with such a center (the other JPECs in the state are with public universities).

As related to engagement with NACCE, only one of the colleges is an active member and promotes the advantages of being part of that organization, as well as provides leadership to the organization's board of directors

<http://www.nacce.com/page/OurMembers>. That College identifies the curriculum components, case studies, and benefits of networking to promote entrepreneurship as

benefits NACCE brings to its member institutions, per CC2A. One of the other institutions noted previous involvement, but no current employee to champion NACCE and the allocation of resources for membership.

Interpretation of Key Findings

Findings as Compared to Peer-Reviewed Literature

Rural areas comprise almost 75% of the geography of the nation (Shields 2005). Iowa has 15 community colleges enrolling over thirty percent of all state residents who are students in higher education institutions in the state, and their legal service areas guarantee that an institution serves every county of the state (www.educateiowa.gov/community-colleges). Approximately 35% of the state's population resides in rural areas, and the state has more than 50,000 square miles of land, with a steady migration from rural to urban areas of the state (www.iowadatacenter.org/quickfacts). This case study collected data from 20% of the state's community colleges. While more people reside in urban areas, the size of the state and the significance of agriculture to the state's economy signifies that the rural areas need to remain as strong as they can in their role of economic development, per CC2 1A. A 2014 report by the Iowa State Department of Agriculture, that sector accounts for one third of the state's economic strength, and that twenty percent of the state's jobs. The rural communities and regions drive this sector of the state's economy (www.nass.usda.gov/Statistics_by_State/Iowa/Publications/Annual_Statistical_Bulletin/). Drabenstott (2006) noted the need to help rural areas develop economic development policies based on what had success in other rural areas. The addition of the Small

Business Development Center units at the community college campuses is an example of Drabenstott's perspective within the state of Iowa.

While there is no statistical data on employment in the target community college service areas that has any connection to the institutions' economic development activity, the effort by the state to provide local access to the Small Business Development Centers can be viewed as a policy decision that affects rural areas as well as urban regions. The evidence that each of the target institutions also provides some academic credit learning for entrepreneurship indicates further rural access to education and training that could affect each service area's economic development capacity.

The combination of the Small Business Development Center (SBDC) locations at the community colleges, and the fact that at least one of the community colleges also hosts a John Poppajohn Entrepreneurship Center (JPEC) reinforces elements identified by Cheng, Stough, and Jackson (2009) related to quality of entrepreneurship training. The SBDCs and the JPEC use traditional approaches, such as client services to develop business plans, financial plans, and business operations training, as well as emerging best practices of education, training, and access to investment capital per CC2A and CC2C. Per 1C, CC2 uses various models to customize training and services to the potential entrepreneurship client: economic gardening, business model canvas, angel investors, and more.

The Small Business Development Centers, the JPEC, and the assortment of credit options also reinforce the literature related to having appropriate resources in a rural region as noted in the RCCI findings (Eller 2003). CC2 provided the strongest example

of meeting this component through having both the SBDC and the JPEC resources available to meet the economic development needs of its service area. CC2 also provides the only example of being active with NACCE and in seeing value with its membership and level of engagement (including CC2A serving on the NACCE Board of Directors). CC2A shared that the preceding president believed in NACCE and became active with the organization, and brought that passion and direction for entrepreneurship to the college. CC2A inherited that culture; in fact, it was part of the interview process that any person selected as president of CC2 would continue to emphasize entrepreneurship and engagement with NACCE. The benefits of NACCE were seen through its interaction with businesses to create more active partnerships for entrepreneurship and common activities such as incubators and access to investors. Curriculum information, case studies about community colleges and entrepreneurship efforts, and consultation services were also mentioned by all respondents of CC2 as reasons why the institution was active with NACCE. So, there is evidence that an additional part of the RCCI findings are seen in this research, as those earlier study's results indicated that a community college that provided active support for small business development or entrepreneurship or both had a stronger capacity to have a viable regional role for economic development (Eller 1998; Torres & Viterito 2008).

The blend of academic entrepreneurship courses, the JPEC options to support entrepreneurship training and SBDC services align with Steyaert's (2007) concerns of using entrepreneurship training as a process theory for rural economic growth. Each of the target institutions, through their economic development activities, seek to assist more

start-up businesses have successful launches and sustainability as well as helping existing enterprises continue to remain viable, per CC2A.

The best example of the learning organization and shared vision is being used at CC2 and its use of entrepreneurship education as part of leadership training for employees, business and community leaders, and emerging entrepreneurs (CC2C). The institution's emphasis, primarily through the college's senior leadership in proactive support for NACCE, the SBDC effectiveness, and the success of the JPEC, provide the strongest potential example for future community college economic development strategies. The inclusion of the entrepreneurial mindset as part of the culture with CC2 also seems to meet O'Banion's (2007) view that the institution must always be learning to adapt to changes and challenges.

The findings cited so far meet the element of leadership and managing change in higher education. The example of how CC2 has embraced entrepreneurship internally and as a key element of its mission and services to its stakeholders concur with leadership and change management concerns of Boggs (2003) and O'Banion (2007). The combination of academic credit courses and programs, the JPEC, and the location of the SBDC unit with CC2 provide a comprehensive example of economic development capacity as well as organizational culture change agents due to senior leadership example and commitment (CC2A).

Findings Related to the Theoretical Framework

The theoretical framework was based upon the social capital structure (Woolcock & Narayan 2006). Woolcock and Narayan's research indicates that the engagement of

networking can enhance the capacity and effectiveness of economic development. Their identification of a synergy element was identified as a focus for this case study. The synergy element could develop through the interaction of individuals or groups creating social capital in their analysis. The value created from the synergy is seen through evidence of formal and informal strategies within and between organizations to create decisions and actions to advance ideas, plans, and efforts to reach mutually identified goals. This conclusion is based on the content of the interviews with the participants of the community colleges. The participants' responses show that synergy is evident in the relationship of each of the target community colleges and the Small Business Development Center located at their campuses. This is seen beyond just the location of the SBDC unit on each college campus as a physical effort. The evidence is also seen in how both the colleges and the SBDC units market their programs and services in shared materials, and in collaborative referrals of students and clients to each organization to optimize service to meet client needs. In the case of CC2, there is the additional social capital component of the John Poppajohn Entrepreneurship Center adding an additional strand of synergy. The capacity of the colleges and SBDC units to work effectively and collaboratively, and with the addition of the Poppajohn Center for CC2, adds value for the colleges to be seen and engaged as viable economic development partners in the Woolcock and Narayan (2006) framework. In addition, the engagement of CC2, particularly with presidential leadership with the National Association for Community College Entrepreneurship (NACCE) demonstrates another thread of synergy and capacity building for the college.

Another element of synergy is from the academic component in each institution in offering coursework and a transfer option for students to gain basic entrepreneurship education and have the pathway for further learning beyond the community college within a business administration program through one of the state universities. This facet was mentioned by each of the chief academic officers during the interviews. At the same time, each of these participants noted that this option is not promoted beyond traditional methods related to college enrollment, program of study options, and individual academic departmental efforts. These are the four indicators of synergy identified from the responses of the participants who were interviewed.

Findings and Limitations of the Study

Limitations initially identified for the case study were that only rural community colleges in one Midwestern state would be involved, that only one finding from the Rural Community College Initiative project would be examined (concerning economic development and entrepreneurship), and that the value of being part of NACCE may be difficult to gauge based on active membership of each of the participating institutions. The most evident issue related to the limitations identified in chapter 1 is that only one of the target colleges had an active membership and engagement with NACCE. At least one of the other colleges noted earlier membership but had not renewed it due to no champion advocating for the use of NACCE resources and the decision that limited the institution's resources would be used with more value for some other purpose, such as adding to the business/entrepreneurship curriculum and strengthening the academic component for economic development, than the NACCE membership. However, the engagement of CC2

with NACCE does indicate possible value with membership and active engagement with the Association and its resources. NACCE offers a range of services and programs for its members, including training programs, case studies of community colleges and entrepreneurship ventures (such as incubators), curriculum, publications, and conferences (www.nacce.com). As CC2A discussed, an institution must be proactive in using the services of an organization like NACCE to optimize the benefit of membership. The example of the president being a champion for economic development, for entrepreneurship, and for engagement with a group like NACCE is critical to advance that component of the college's mission and purposes.

The limitation of looking at only the economic development findings of the RCCI project related to the purpose of this case study was not a negative factor. The social capital structure cited by numerous participants (CC13, CC2A, CC2C, and CC3C) during interviews reinforce the RCCI finding (Torres & Viterito, 2008) of the value of networking economic development resources and services to enhance a community college's capacity for more effective support for economic development. Specifically, when a community college realizes it has resources that can have a positive influence on economic development the confidence of that institution is enhanced to promote and commit resources to that end. That internal recognition coupled with external realization by economic development agencies, businesses, financial services, and governmental entities puts energy into the social capital component which then further advances economic development activity (World Bank, Social Capital, 2011).

The other identified limitation was of reviewing a small number of institutions from only one state. Yet, the purpose identified early with this study, was to explore for information that might relate to the RCCI finding concerning economic development and entrepreneurship in rural areas through community colleges to gauge if further investigation can be supported. In addition, the discovery during this case study of the state's commitment of locating Small Business Development Centers in each community college service area could be perceived as negating this limitation as that alignment of the SBDCs with the community colleges may be an element that provides reasons for more research on this topic. The Iowa SBDC state office self identifies as the "preeminent provider of hands-on assistance to current and future business owners" (www.iowasbdc.org/about-us). They further note that of their 15 SBDC centers around the state, 10 are located at community colleges, and that each regional center is charged with working with local economic development initiatives, as well as to assist in regional and community collaboration for a healthy business climate. The flow of activity, the incentive for new funding for the colleges based on their providing job training projects fueled by employer tax credits, offers a possible policy and implementation model for other states.

Recommendations

A purpose of this case study was to see if any element from the Rural Community College Initiative project could be identified from any of the target institutions. A primary finding of the RCCI project was that rural community colleges had to increase their institutional capacity to gain a stronger role with economic development. In

addition, the theoretical framework was based on a synergy element of social capital to enhance a rural community college's economic development efforts (Woolcock & Narayan 2006; Siemens 2010). The target institutions have one potential component in common with the alliance with Small Business Development Centers located on their campuses. That common factor connects to the RCCI finding as well as to the entrepreneurial social capital component. Further exploration of the efforts of the colleges and the SBDCs related to synergy of activities and results is warranted due to this commonality. Having these units within each community college service area should increase the familiarity of both college and SBDC staff with economic development and business leaders within their region. Performance metrics of the SBDC units need more detailed review, particularly to identify one or more metrics that could be linked to collaboration with the community college to reinforce evidence of effectiveness. Possible examples of this could include entrepreneurial incubator activity or investor connections, per CC2C.

Implications

Positive Social Change Considerations

The findings from this case study indicate significant potential for positive social change at the individual, organizational, and community levels. The blending of social capital with entrepreneurship education should offer opportunities for individuals to enhance their strengths in creating synergistic networks using the entrepreneurial mindset and culture. This seems to be evident in the way CC2 uses entrepreneurship training with leadership development to impact employees, organizational culture, as well as

entrepreneurial capacity within their service area. These are components of training and services of the John Poppajohn Entrepreneurship Center as well as its mission within CC2. NACCE, as well as the Kauffman Foundation and other organizations promoting entrepreneurship within NACCE, have emphasized entrepreneurial mindset training for individuals over the past several years for both business and social applications (<http://www.nacce.com/news/40535/Defining-Entrepreneurship.htm>). In Iowa, this basic element of entrepreneurship for economic development seems to be grounded at least minimally in the decision to locate Small Business Development Center units at each community college. There is potential to go further based on the example of CC2. While CC2 provides an example of a community college optimizing its capacity to influence entrepreneurship and economic development because of the blend of academic courses and programs, NACCE engagement, hosting a Poppajohn Center, and hosting a Small Business Development Center, the fact that the other institutions have academic courses and programs and the SBDC connection continues to validate the social capital structure. The difference is in breadth and depth of that capacity based on the components available to each institution and their effectiveness in employing them.

At the organizational level, evidence suggests that colleges adapt the entrepreneurial mindset as noted in the example of CC2 within responses by each of that institution's respondents during the interviews. CC2, through the commitment of key leaders, has embraced this approach and it links to the overall institutional capacity issue recognized in the RCCI findings. As the Eller (1999) RCCI report notes, this ability to change the institution's focus and enable transformative change in establishing "college-

community teams” (Eller, 2003, p. 47-48). Positive social change may be a result of shifting the organizational culture to the entrepreneurial “what-if” perspective. CC2 seems to have captured this with its presidential leadership and its commitment to the John Poppajohn Entrepreneurship Center.

Positive social change may also be possible for the community through the blend of entrepreneurship education and the social capital synergy of enabling more persons and organizations to discover common interests for community and economic development. Beyond the work by Woolcock and Narayan (2006) on social capital, is the World Bank report of 2011, noted in chapter one with theoretical framework. This report reinforces the value of social capital as a common factor in forming alliances of organizations to individuals and to communities and regions. The example of CC2, suggests the importance of connecting entrepreneurship and social capital for the service area of that college. As Ring, Peredo, and Chrisman (2010) reported, investment in rural economic development significantly enhances the chances that a rural region and survive, and possibly thrive, in a global economy. CC2 and their integration of the credit course and program of study option, the John Poppajohn Entrepreneurship Center, and the Small Business Development Center offer the opportunity for further observation and research concerning both impact on economic development as well as on the advantages the social capital element has on enhancing the region’s quality from a societal aspect.

Conclusion

Rural America comprises approximately 75 percent of the land, 20 percent of the population, and 70% of interstate highways (www.ers.usda.gov/media). Thus, rural

America's higher education needs are predominantly served by a community college. Rogers (2012) and Crookston (2012) both reported that rural areas can take advantage of their regional community college for workforce training and for other economic development support. Therefore, if rural areas of the nation matter for our national economy, we have an obligation to optimize the use of available resources in rural areas for economic stability and growth. The ability of individuals, organizations, and communities in rural areas to effectively use social capital methods may help them leverage limited resources for economic development. The location of community colleges in rural areas provides a reasonable resource for investment of programs, personnel, and services to enhance entrepreneurship and social capital capacities emphasizing economic development using local strengths and for the examination of those local economic strengths for broader markets.

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Appendix A: Information Informed Consent Notification

You are invited to take part in a research study of rural community colleges and entrepreneurship. The researcher is inviting specific employees with apparent similar responsibilities from four rural community colleges to be in the study. This form is part of a process called “informed consent” to allow you to understand this study before deciding whether to take part.

This study is being conducted as dissertation research by James Genandt, who is a Ph.D. student in the School of Public Policy at Walden University.

Background Information:

The purpose of this study is to examine how and to what extent selected rural community colleges support regional economic development through entrepreneurship. If common efforts can be identified that imply best practices, there may be evidence for further research to verify those implications and strengthen the value of the research for similar institutions of higher education.

Procedures:

If you agree to be in this study, you will be asked to:

- Provide responses to a list of questions that connect to the research questions of the study via telephone/digital interactive communication, with possible follow up by telephone/digital communication and/or email. The total time involvement per individual is estimated to be 60-90 minutes for the project, including approximately 45-60 minutes for the initial conversation, and the other time for the follow up, if necessary.

Here are some sample questions:

- Does your institution provide a credit and/or non-credit entrepreneurship or small business development program?
- Does your institution provide support for entrepreneurship and small business development by providing a business incubator or other specific service?
- How has your institution been involved with the National Association for Community College Entrepreneurship?
- How does your institution evaluate its effectiveness in supporting economic development in your service area? Is there a specific process used to assess the effectiveness of the college’s entrepreneurship program/activities?

Voluntary Nature of the Study:

This study is voluntary. Your decision of whether you choose to participate in the study will be respected by the researcher. No one at Walden University will treat you differently if you decide not to be in the study. If you decide to join the study now, you may still change your mind later. You may stop at any time without giving any reasons.

Risks and Benefits of Being in the Study:

Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as taking time to respond to a survey, looking up information requested for a report, and taking time for a telephone conversation. Participating in the study would not pose risk to your safety or wellbeing.

The potential benefit of the study is to identify specific steps a rural community college may take that can help sustain and/or enhance its capability to support regional economic development through entrepreneurship.

Payment:

No payment is involved for participating in the project.

Privacy:

Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. A coding system will be used to mask any identifier information concerning you and the organization you work for. When the data are not being used by the researcher, they will be kept in a locked device. Data will be kept for a period of 5 years, as required by the university, at which point all electronic and paper data will be destroyed.

Contacts and Questions:

You may ask any questions you have now. Or, if you have questions later, you may contact the researcher via either his cell phone (309-231-0472) or email (jgenandt@gmail.com). If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612-312-1210. Walden University's approval number for this study is _____ and it expires on _____.

Please print or save this consent forms for your records.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By replying to this email with the words, "I consent" I understand that I am agreeing to the terms described above.

Interview Questions

Interview questions have been created to support the research questions for the study. The research questions are listed below followed by related interview/survey items:

1. What were the reasons the community college decided to make a commitment to entrepreneurship in support of local/regional economic development beyond the usual component of workforce training?
2. How has the community college evaluated its efforts to promote entrepreneurship as a method of economic development?
3. What strategies were successful in strengthening the community college's credibility with regional community and economic development partners?

Related items will include the following:

1. Requesting access or copies of course, program, activities information concerning the colleges' entrepreneurship curriculum, and support for entrepreneurship, including involvement with NACCE.
2. Requesting information on use of marketing materials used to make others aware of economic development services of the college, especially related to entrepreneurship.
3. Requesting information linked to the value and viability of the colleges' as a support resource for economic development in their region, including but not limited to engagement with community organizations often aligned with those

activities (Chambers of Commerce, Small Business Administration, state and/or federal agencies and activities).

4. Requesting other information how the colleges' support entrepreneurship for economic development not noted through the research questions or related items as noted.