Evaluating the critical success factors in for-profit business development

by colleges in rural Canadian communities

By

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Abstract

The Canadian college education system is in the midst of an evolution from a social service provider to a market driven social enterprise in response to decreasing governmental funding paired with an increased demand for educational programs and services. This sectoral paradigm shift is critical for the long-term viability of rural institutions in order to maintain programming and services, as well as continuing to drive local economic development. This dissertation paper researched the critical success factors in developing, implementing, and managing entrepreneurial activities in rural Canadian colleges.

The research involved a two-pronged approach utilizing both quantitative and qualitative research. An initial pilot study was undertaken for both the quantitative research survey and qualitative research interview with three Canadian college senior executives for validation. The research survey was then administered electronically to the presidents and key business development staff of the 32 rural English speaking Canadian colleges. The results quantified the entrepreneurial success of the institutions and identified the most significant challenge for colleges: developing and maintaining an entrepreneurial culture. The presidents of the most entrepreneurial institutions were invited to participate in a qualitative interview to provide insight into the best practices to create and maintain an entrepreneurial culture within the college.
The research surveys identified a significant variance in the expertise and engagement of rural Canadian colleges in entrepreneurial development, as self-generated funding ranged from 10 per cent to 60 per cent of their overall budgets. The analysis of the qualitative interviews identified entrepreneurial culture, institutional leadership, strategic alignment, partnership development, and maximizing opportunities as the critical success factors for entrepreneurial development. This research identified that rural Canadian colleges need to restructure their approaches and business models in order to sustain or improve on their current levels of success.

The findings of this research led to the development of a conceptual framework for entrepreneurial development within the Canadian college system. The recommendations and framework identified in this research will benefit colleges in the implementation and management of a strategic entrepreneurial mandate.
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Chapter 1: Introduction

1.1 Introduction

“With the advent of the post-industrial 21st century knowledge-based economy and the demands of global competitiveness, Canada’s community colleges are under increased pressure to extend their historical mandates of career-related education and regional economic development” (Fisher, 2009, p.1). The Canadian college education system is in the midst of an evolution from a social service provider to a market driven social enterprise. The greatest test colleges face in accepting the challenge of an increased mandate is developing and implementing a sustainable funding model, as provincial government funding has not kept pace with the increased demand for advanced skill training. Higher educational institutions first responded to the decrease in funding by cutting programs; however, it became clear that decreasing provincial funding was becoming a trend and not an anomaly (Eastman, 2007, p.10). Some colleges then implemented a strategic direction to generate new sources of funding while other institutions continued to maintain the traditional funding model of government dependence. In order for colleges to accept, adapt, and succeed in delivering their new mandate, they must understand the critical success factors of for-profit business development in rural Canadian communities and the processes necessary to implement those success factors.
1.2 Background: Canadian Colleges

The educational system in Canada is uniquely decentralized as each province or territory maintains the responsibility for its educational system. While the systems are fundamentally similar, they are not identical, thus creating a somewhat fractured national educational framework (Phillips, 2011, p. 321). The most unique system was implemented in Quebec, while the English speaking provinces share a very similar system. Despite the fractured framework, the foundation and function of Canadian Colleges remains relatively consistent.

The post-World War II baby boom was the catalyst for a rapid expansion of community colleges across Canada. Most public Canadian community colleges can trace their roots to the 1960s and 1970s in response to an increase in demand for education, changing labour market demands, and a desire for greater personal wealth that could be attained through higher education (Kirby, 2008, p.1). In order to meet the growing demand for education from students and businesses, a more responsive vehicle for education was needed. In turn, the community college model was expanded throughout urban and rural areas of Canada. The newly formed community colleges developed specific technical and vocational programs not previously available and helped to satisfy the educational demands for a changing economy, especially in rural Canadian communities.
The public Canadian college network is currently comprised of over 150 institutions (with over 1,000 campus locations) that have traditionally delivered two-year technical vocational programs to approximately 1.5 million full- and part-time students per year (Association of Canadian Community Colleges, 2011, p.1). Community colleges have always focused program delivery based on the needs and demands of their respective regions and are seen as a tool for economic development. However, these institutions are in the midst of an educational evolution to maintain relevance in a global knowledge-based economy. The breadth and scope of academic programming options have expanded to meet the changing demand of the communities and regions that the colleges were established to service. Colleges are tasked with changing their educational approach and adapting to the new economic realities. Colleges are shifting their concentration towards advanced skill development and longer, more specific educational opportunities, which include bachelor degrees and post-graduate education, to maintain their roles as engaged and responsive vehicles for economic development.

1.3 Changing Mandate

“Colleges are the primary education providers for seven of the 10 hardest jobs to fill identified by Canadian employers in a recent survey: skilled tradespersons, sales representatives, technicians, drivers, machinists/machine operators, mechanics and accounting and finance staff” (Association of Canadian Community Colleges, 2011, p.1). According to Human Resources Development
Canada (2002), over 70 per cent of new jobs in Canada will require some form of post-secondary credential, and only 25 per cent of those jobs will require a university degree. The demand for college level programming is steadily increasing and is becoming critical for those seeking employment. In order to satisfy a new mandate for advanced training, colleges require improved physical infrastructure, a clear understanding of the community’s labour demands, and increased funding to meet the current and future educational demands of their communities and students. Insufficient funding is the most significant challenge faced by colleges as they attempt to implement the programs and services to meet their new mandate.

The lack of sufficient government funding has compelled colleges to take a more entrepreneurial approach to increase institutional revenue in order to maintain services and programs, as well as increase opportunities for students and the communities they serve. The practice of academic entrepreneurship, although a growing trend, is still in its infancy for the majority of Canadian colleges. Smaller rural institutions typically lack a systematic or coordinated approach to implementation and project management of non-traditional revenue generating opportunities. The challenge may be compounded through departmentalized (silo) organizational structures which are typically unionized, maintain a culture of risk aversion, and operate within antiquated management policies that do not allow the organization to quickly adapt to new market opportunities.
Educational institutions, especially small and rural colleges, are facing the need to become more self-reliant in order to satisfy their communities’ education and training demands. In order to achieve their mandate, colleges need to focus on the critical success factors of for-profit business development in rural Canadian communities.
Chapter 2: Literature Review

2.1 Background

There is a growing economic challenge within the education system caused by an increased demand for programs and services paired with a decrease in government funding. In addition to that challenge, colleges are being asked to take on a larger role in economic development, which is leading to a necessitated strategic shift towards increased self-reliance (Linstrom, 2002, pp. 24-25).

Roueche and Jones (2005A, p.28) describe the paradigm shift that colleges need to undertake as developing creative solutions, focusing strategic plans, optimizing resources, and generating revenue to maintain current services and fund growth. This shift to a market-like social enterprise has also been dubbed as “Academic Capitalism” (Slaughter and Leslie, 1997, p.209 cited in Zheng, 2010, p.39). The concept of Academic Capitalism is broader than continuing education, strategic planning, or focusing on improving efficiencies or effectiveness (Esters et al., 2008, p.346). The focus has shifted to creating competitive advantages and an entrepreneurial culture that integrates strategic planning and improved efficiencies and effectiveness. However, success depends on the college to take non-traditional risks and opportunities to create its advantage. “Local entrepreneurial activity, private fundraising and partnerships—those are the three things colleges need not just to survive, but to thrive during the economic downturn” (Glenn cited by Ashford, 2011). The challenge for colleges, especially rural colleges, is adapting to and accepting an entrepreneurial business model, which deviates from the traditional social roots of community college education.
Clark (1998, cited in Esters et al., 2008, p.348) constructed a model (Figure 1) of institutional entrepreneurship that focused on five (5) dimensions. The Clark dimensions break down the key organizational approaches to achieve institutional entrepreneurship, which focus on cultural and academic integration, economic and program diversification, and entrepreneurial leadership. Clark’s dimensions were the first widely accepted and quoted conceptual framework for institutional entrepreneurship.

Figure 1 - Clark’s Dimensions

Clark, 1998 cited in Esters et al., 2008, p.348
2.2 Cultural Integration

An entrepreneurial business model requires colleges to align their strategic plans with an entrepreneurial vision and then align human resources with the strategic plan to realize that cultural shift (Esters et al., 2008, p.363; Roueche and Jones, 2005A). In Roueche and Jones’ (2005A, p.28) investigation on how community colleges across North America ventured into an entrepreneurial business model, they found that it started with the vision and mission of the college. Webber and Scott (2008, p.1) came to the same conclusion in their multi-national study (Canada and Australia). However, they added that it goes beyond a statement in the mission and vision of the organization, and that the entrepreneurial culture needs to be absorbed and integrated throughout the entire organization which includes modifying policies and procedures to provide guidance, ensuring long term funding plans are in place, and clearly articulating goals. It is clear from their studies that the entrepreneurial focus needs to be specifically addressed in the strategic plan and ingrained into policies and procedures for the organization to adopt a new culture.

The cultural shift from a career-based (socialistic model) business model to a sustainable capitalistic or social enterprise business model can be extremely challenging for an organization as well as the staff (Fisher, 2009, p.1). In order to integrate an entrepreneurial culture into an organization, it is necessary for the organization to specifically target potential employees with experience in developing new business opportunities (Fugazzotto, 2010, p.311; Clarysse,
Tartari, and Salter, 2011, p.1091). Petridou and Sarri (2011, p.80) agree that successful entrepreneurial activities are a function of people and opportunity. Clarysse, Tartari, and Salter (2011, pp. 1091-1093) looked at the impact of entrepreneurial experience on academic entrepreneurship and found a direct correlation between previous experience and current rates of success. Their study articulated the connection that individual entrepreneurial attributes are positively correlated to the level of institutional entrepreneurship. Fugazzotto (2010, p.307) observed the evolution of colleges from social institutions to competitive market organizations and found that the internal structure (organizational chart and human resources) can act as a barrier for the organizational shift to an entrepreneurial business model. Srivastava and Agrawal (2010, p.163) agree that a collaborative and supportive internal structure is critical in engaging staff to support an entrepreneurial mandate. Many colleges have used individuals or departments to lead the cultural shift; however, the mandate cannot be achieved unless the entire organization becomes engaged.

Downey, Pusser and Turner (2006, p.75) indicate that the continuing education division of colleges (traditionally the most entrepreneurial department in a college) may be in the best position to lead the cultural change as they adapt from a technical vocational social mandate (accessible affordable education) to advanced skills opportunities and revenue driven mandate. Colleges require staff with relevant entrepreneurial experience and a vision to successfully implement the new mandate.
2.3 Institutional Leadership

Esters et al. (2008, p. 345) found that the college president needs to be the initial internal catalyst for adopting the entrepreneurial mandate. Through a qualitative and quantitative survey of American college presidents, they identified that presidents with entrepreneurial traits generated more funding from non-traditional sources. Despite the changing mandate and focus on business development, only 44 per cent of all posted college president positions in Canada between January 1, 2011 and April 30, 2012 specifically indicated entrepreneurial attributes as a desirable skill set (Association of Canadian Community Colleges, 2012). However, 100 per cent of the postings for colleges in rural communities specifically listed entrepreneurship as a desirable asset.

Webber and Scott (2008, p.1) agree that leadership is essential for institutional entrepreneurial success, however adds that leadership may also come from any staff member or student. Leadership has been identified as a critical component of the shift from a social to an entrepreneurial institution. With that shift comes a requirement for a more aggressive approach in identifying and implementing non-traditional revenue generating opportunities. Institutions need to adapt their organizational structure to ensure that departments have the entrepreneurial leadership required. Kleinman (2010, p.1) found that most entrepreneurial units still report to academic vice presidents who typically lack the entrepreneurial background required to successfully create a competitive advantage.
2.4 Competitive Advantage

Roueche and Jones (2005A, pp. 29-30) found that the most successful examples of institutional entrepreneurship came from those colleges that focused on unexplored opportunities or finding “rarified air” where they could create a competitive advantage. Rarified air is a reference to a market opportunity where there is little or no competition, for example, at the peak of a mountain. Kim and Mauborgne (2004, p. 77) created the “blue ocean strategy” approach, which focuses on creating demand through new ideas, products, and businesses where little or no demand currently exists. This strategy is dependent on innovation to support rapid growth and profitability.

An institution’s competitive advantage needs to be a real advantage and not only a perceived or desired area of excellence (Clark, 1998 cited in Esters et al., 2008, p.348). Wangenge-Ouma and Langa (2010, p.750) warn that there is an increase in educational institutions marketing excellence in an attempt to gain an unwarranted competitive advantage.

The majority of innovation and development in the college system focuses on creating a competitive advantage through academic improvement, adapting programs to the changing workforce, and being responsive to the community’s needs (O'Banion, Weidner, and Wilson, 2012, p.5).
Humber College in Canada seeks to create a competitive advantage through unique programs that are not delivered by most colleges. Humber (2012) currently has over 150 one- to four-year program options including:

- Alternative Dispute Resolution
- Business Administration – Professional Golf Management
- Comedy – Writing and Performance
- Copywriting – Advertising
- Emergency Telecommunications
- Fashion Management
- Media Sales
- Urban Arboriculture

Humber maintains a strong competitive market advantage through unique programming and fostering a culture of academic innovation.

Some of the more traditional methods for community colleges to generate supplementary institutional revenue include contract training, accommodation and/or food services, and tuition. Colleges and universities are expanding past the traditional options for revenue generation and are exploring more entrepreneurial and innovative opportunities. This includes contracting staff to other organizations as consultants, property or land investments, applied research and commercialization, and joint private business development/investment to create competitive advantages (Roueche and Jones, 2005A, p.28; Esters et al., 2008, p.365; Gambrell and Chydzinski, 2008, pp. 28-30).
The Australian education system took a proactive approach to a decrease in governmental support and focused on the diversification of revenue sources (de Zilwa, 2005, p.387) as a competitive advantage. Clark (1998 cited in Esters et al., 2008, p.348) agrees that program diversification should be a key competitive advantage and colleges need to expand their portfolios. Clark includes grants, contracts, partnerships, retail services, fees, fundraising, and intellectual property as some of the ways to diversify. De Zilwa’s research (2005, p.407) indicates that the institutions were able to adapt to the market and generate new sources of revenue. However, the author criticizes the Australian system for the lack of institutional reforms to reduce bureaucracy and facilitate profit maximization. The author specifically calls for a structure that not only allows but also encourages calculated risks and networking to develop partnerships between government, industry, and educational institutions to foster innovation and create competitive advantages.

2.5 Partnership Development

The ability to transfer knowledge has been identified as an essential element of innovation that drives competitive advantage in increasingly knowledge-driven economies (Lockett et al., 2009, p. 274). Their research indicates that close partnership between educational institutions and corporate partners, which includes co-location, increases knowledge transfer and the competitive advantages to be gained. Co-location allows for a stronger degree of co-
dependency or trust to foster integration and innovation that would not be possible on their own.

Academic entrepreneurship models have strategically aligned new ventures and partnership development to reduce the risk of the new development and increase the potential positive outcome. Colleges typically use partnerships to leverage development so that the development is designed as per the market demand. However, Wood (2011, pp.155-159) created a process model (Figure 2) for entrepreneurship that develops the intellectual property prior to securing an industry partner or client.

**Figure 2 - Wood’s² Model**

This model may work well for research-intensive universities seeking to develop intellectual property; however, the college approach to entrepreneurship is very different from the one being implemented by universities (Kozeriaki, 1998). Kozeriaki explains that colleges have the traditional role of training students towards employment, which creates closer and more relevant partnerships with

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² Wood, 2011, pp. 155-159
government and industry. Community colleges focus on engaging new students to new programs in higher education, which is one core component of their entrepreneurial spirit (O'Banion, Weidner, and Wilson, 2012, p.13). College entrepreneurial activities are developed in response to the market conditions, whereas university entrepreneurial activities are traditionally in response to developed intellectual property. The college model ensures relevant and applied service delivery to benefit the students, community, and institution, while continuing to support the economic development of their stakeholders.

Colleges, especially small or rural institutions, typically do not have the financial resources to lead innovations without a pre-developed partnership. Smaller colleges are traditionally community oriented and depend on strategic partnerships to guide innovation and ensure local relevance. Despite not being specifically designed for colleges, Wood’s process model does create a template that provides clear understanding of the activities, roles, and expected outcomes at each phase, which may enable more colleges to engage in dynamic entrepreneurial activities. Wood also includes the final phase of spinning off the success into new business entities that can be wholly or partially owned by the institution. The development of spin-off business opportunities is largely missing from other academic entrepreneurship research and models. Spin-off opportunities are especially beneficial for smaller organizations. These opportunities enable the institution to focus on a specific area of competitive
advantage to develop different yet related business opportunities, which allow it to continue to cultivate new revenue streams.

2.6 Impact of Urbanization

Kleinman (2010, p.1) undertook a study of community colleges in the United States to understand the process that colleges took to initiate an entrepreneurial model and the different types of activities in which colleges are active. The results concluded that large rural, suburban, and urban colleges generally follow the same process for implementation with a dedicated focus to generating revenue through corporate partnerships and contract training. Esters et al. (2008, p.361) found that both small and rural institutions tested lower than their larger and urban counterparts when they researched the overall effectiveness of colleges in terms of adopting and implementing entrepreneurial practices. While the difference between rural and urban implementation and success rates may not be drastically different, there are distinct challenges in small and rural communities. Small and rural colleges face significant resource shortages both in terms of human capacity (quantity and available skill sets) and financial resources, which need to be specifically addressed in the implementation strategy. Xaba and Malindi (2010, p.75) found that smaller rural disadvantaged schools unintentionally exhibited a culture of innovation and entrepreneurship as a necessity in response to the lack of resources. However, they also lacked the knowledge and leadership to maximize their opportunities. In order for smaller community colleges to be sustainable despite reduced budgets, limited
opportunities, and increased competition, Xaba and Malindi’s research highlighted that more effective strategic integration of an entrepreneurial culture is required, which may increase potential institutional risk (Esters et al., 2008, p.365).

2.7 Institutional Risk

Pusser et al. (2005, p.28) define entrepreneurship in terms of post-secondary education as “assuming risk.” The more colleges become entrepreneurial, the more risk colleges assume. The challenges and risks associated with for-profit revenue generation do not fall within the traditional level of risk tolerance that colleges, boards of governors, or their governmental funders have accepted in the past. Colleges’ traditional approach of risk aversion requires a deliberate cultural and psychological reform towards adopting an entrepreneurial approach. Roueche and Jones (2005A, p.30) indicate the strategic decision to focus on academic entrepreneurship requires leaders to be responsible risk takers. Wills (2011, p.1) agrees that colleges are facing increased scrutiny and competition for students, donations, and funding, which requires more assessment, prevention and management of risks.

Risk encompasses more than just financial liabilities. Colleges depend on their reputations to recruit students and faculty and to improve their standing with government for funding. Political implications pose a major institutional risk that colleges entering into non-traditional business opportunities face. Webber and
Scott (2008, p.1) noted that institutional entrepreneurship could be self-defeating as the generation of additional revenue may have a negative impact on the level of future governmental funding. Zheng (2010, p.40) highlights a key ethical dilemma in using public funds to support and initiate private enterprise development. They argue that publicly funded institutions have a financial advantage when competing in the open market (subsidized labour and operational costs) which can be especially controversial in small communities that may not be able to sustain multiple competitors. In addition, community colleges also face criticism from the community over its perception of the college entering into high-risk revenue generating opportunities with tax dollars that may or may not have any connection to current curriculum. Zheng’s (2010, p.37) research indicates that the engagement of the community may be a critical factor in the successful implementation of an entrepreneurial strategy. Linstrom (2002, p.30) adds another dimension to the controversy in arguing that private business should not be empowered to influence academics, and that social interests should be held at a higher value than profit so that private funding does not influence the content of education.

Absent from the current research is the impact on the organization from the recommended approaches and best practices for risk management. Entering into non-traditional sources of revenue also includes taking non-traditional risks for educational institutions. These risks can be more significant to smaller institutions which tend to have limited human resource and financial capacity. Smaller
institutions may experience a greater negative organizational impact from an unfavourable result.

2.8 Institutional Entrepreneurship

Colleges all over the world are feeling the same pressures as Canadian colleges with a decline in funding paired with an increase in the demand for programs and services. Institutions large and small are finding innovative entrepreneurial activities to expand learning delivery and increase the institution’s self-generated funds. Some approaches include:

- **Outsourcing Services** (Ashford, 2011) – Colleges can outsource the delivery of a service and in return receive lease or rental income. Roueche and Jones (2005B, p. 5) indicate that some institutions are outsourcing a wide variety of services including food services, bookstores, and even information technology (I.T.) services. In addition to generating income, this approach also reduces operational expenses and limits the college’s exposure to risk.

- **Expanding Program Delivery** (Ashford, 2011) – Colleges can deliver their programs directly to businesses to improve staff skill levels or, as North Essex Community College does, deliver their programs within the local secondary school division. This generates revenue and develops a link between the students and the college, which may lead to further
studies. In addition to whom the programs are delivered, Florida Community College has adopted a 24/7 programming approach. The college is committed to delivering the training when it is demanded, even if that is outside traditional working hours.

➢ **Institutional Fundraising** (Rouche and Jones, 2005B, p. 5) – Fundraising is becoming common practice with most community colleges in the United States. Glenn (cited by Ashford, 2011) indicates that aggressive fundraising should form a major task for all college presidents. Fundraising can generate significant resources for a college. However, it does require a similarly significant investment of time and energy into the cultivation process.

➢ **Adopting a Business Mindset** (Rouche and Jones, 2005B, p.140) – In order for colleges to develop new revenue generating streams and enjoy success in the private business market, colleges need to operate like a for-profit business. This requires a philosophical shift in the approach to education and the desired outcomes. In addition to the philosophical change required, most colleges will need to look at the organizational structure to ensure that business units are empowered to engage, develop, and manage entrepreneurial activities.
These approaches will not ensure the success of new revenue generating activities; however, they do represent potential strategic approaches for the evolving higher education market, and can support the generation of new entrepreneurial innovations.

Some examples of non-traditional activities that colleges across North America have been engaged in include (Adsit and Murdock, 2011, pp.124-132):

- Operating as a regional internet service provider
- Renting of buses with drivers to groups during off hours
- Operating a for-profit fish farm
- Operating a for-profit agricultural farm
- Operating retail outlets to support student and community needs
  - Bookstore
  - Hardware store
  - Seed / farm supplies
- Sponsorship of academic programs
- Selling advertising space
  - Electronically (website)
  - In the college (signage)
  - On vehicles
  - Infrastructure naming rights
- Combining student learning and selling a service
  - Student photographers
  - Business student consultants
  - Information Technology students as support technicians
- Generating power for institutional use and selling excess
- Developing or leasing land
- Adopting a four-day-a-week class schedule
  - Creates infrastructure availability for contract training

Educational institutions are a significant source of intellectual property and human capacity. Colleges that are able to harness this capacity and focus on
innovation, learning, and revenue generation will be better prepared to adjust to decreasing government funding.

2.9 Conclusion

Current literature identifies a number of critically important factors in the development of new revenue generating activities within the education sector. Those factors include integrating an entrepreneurial culture, fostering institutional leadership, identifying competitive advantages, strategically selecting partners, the impact of being located in a rural community, and managing new institutional risks. The effect of these critical factors and their impact on colleges in rural Canadian communities have not been analyzed and evaluated to determine best practices.
Chapter 3: Methodology

The researcher will employ a two-pronged approach utilizing both quantitative and qualitative research methods in order to best understand how entrepreneurship is used within the rural Canadian college system as well as to understand how it is implemented. A quantitative approach will be used to capture entrepreneurial implementation and management strategies, as well as understand the rate of engagement and effectiveness of rural Canadian community colleges. The qualitative approach will capture the process and framework by which the most successful rural college institutional presidents operate.

3.1 Selection of Participants – Quantitative Survey

An online survey will be administered to all presidents of public English speaking Canadian colleges that meet the research criteria of being based in a community with a population of 50,000 or less as per 2011 Canadian census information. In addition to the president, the survey will also be sent to the key business development officers as identified by the institution. These parameters focus the target audience to 66 individuals from 32 institutions.

3.2 Quantitative Survey Design

The quantitative survey design is modeled after Esters et al.’s (2008) research, which utilized the principles of Clark’s (1998) Dimensions. The quantitative survey was piloted with three Canadian college senior executives to assess for
potential validity and reliability. This pilot group identified a redundant question and suggested that one question should be re-worded to clarify the intent. As a result the redundant question was removed and replaced with an open-ended question to gather more insight into current practices, and one question was restructured to improve the comprehension of the question, allowing for a more meaningful response. These changes were implemented prior to soliciting responses from the target audience. The pilot group responses were not included in the survey results.

The quantitative online survey (Appendix 1) will empirically quantify the level of rural institutional entrepreneurship engagement, as well as categorize, rank, and compare key factors in the development and management of for-profit business opportunities. The survey will identify the number of institutions engaged in non-traditional entrepreneurial activities and some of the key strategic approaches to new revenue streams. The quantitative feedback will also create an understanding of the frequency of each approach and its relative effectiveness. In addition to the survey information, secondary information will be gathered through the colleges’ annual reports to evaluate the financial progress and investment opportunities undertaken.
3.3 Selection of Participants – Qualitative Survey

The researcher will utilize the data from the quantitative survey to identify the five most entrepreneurial institutions and invite the presidents of those institutions to participate in a process-focused qualitative survey.

3.4 Qualitative Survey Design

The qualitative survey was piloted with three Canadian college senior executives to assess the validity and reliability of the survey. This pilot group suggested only a couple of minor changes to focus the survey and clarify the wording of a question to improve the respondent’s comprehension of the question. Those changes were implemented prior to interviewing the target audience. The pilot group responses were not included in the survey results.

The qualitative survey was designed to allow presidents to elaborate on what their respective institutions consider to be a critical factor, how the activity was implemented, the relative social impact on the institution and community, and to provide an understanding of how the opportunity was identified and implemented. The qualitative interview was also designed to enable the researcher to gain an improved perspective of the most entrepreneurial institutions and how they implemented their entrepreneurial mandates, as well as how they managed the risks associated with a more aggressive funding model.
Chapter 4: Survey Results

4.1 Completion of the Survey – Quantitative Survey

The online survey was personally emailed to all 66 individuals a minimum of three (3) times (unless already completed) over a one-month period. The surveys were not anonymous, however it was clearly stated that the results would be confidential. To encourage participation, respondents were offered a copy of the raw data results where all references to specific institutions or provinces were removed (Appendix 3). This approach yielded 33 responses for a response rate of 50 per cent. Notably, 25 of the 32 institutions had at least one senior administrator complete the survey. Figure 3 provides a geographic breakdown of the respondents.

Figure 3 - Respondents Map (Canada) – Quantitative Survey
The majority of colleges that met the survey requirements are located in the sparsely populated prairie region of Canada. Additionally, the majority of the institutions surveyed share a common trait of being in relatively remote or isolated communities.

4.2 Characteristics of Respondents – Quantitative Survey

Of the 33 respondents, 15 were presidents or chief executive officers and nine were vice-presidents (Figure 4). The remaining respondents were classified as directors, deans, or managers responsible for an entrepreneurial mandate within the institution.

![Characteristics of Respondents](image)

**Figure 4 - Characteristics of Respondents**
4.3 Selection of Participants – Qualitative Survey

Utilizing the data from the quantitative survey, the researcher identified the most entrepreneurial institutions and invited the presidents of those institutions to participate in a process-focused qualitative survey. Personal invitations were sent out to seven (7) presidents, of which five (5) were able to participate in the qualitative survey (Table 1). All five institutions agreed to be named in this survey, however requested that the majority of their comments remain anonymous.

Table 1 - Qualitative Survey Respondents by Province

<table>
<thead>
<tr>
<th>Province</th>
<th>Institutions</th>
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<tbody>
<tr>
<td>British Columbia</td>
<td>• College of the Rockies</td>
</tr>
<tr>
<td>Alberta</td>
<td>• Olds College</td>
</tr>
<tr>
<td></td>
<td>• Lakeland College</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>• Parkland College</td>
</tr>
<tr>
<td>Ontario</td>
<td>• Northern College</td>
</tr>
</tbody>
</table>

Though it was not a controlled factor, the presidents interviewed represented four distinct provinces (British Columbia, Alberta, Saskatchewan, and Ontario).
Alberta was the only province to have multiple colleges represented in the qualitative survey, as both institutions are national leaders in the area of institutional entrepreneurship. The geographic diversity of the respondents (Figure 5) provides a degree of universality to the research results.

Figure 5 - Respondents Map (Canada) – Qualitative Survey
4.4 Completion of the Survey – Qualitative Survey

The qualitative survey (Appendix 2) was conducted individually with each president over the telephone (and in one case in person). The researcher recorded all information and returned the transcript of the interview to the presidents to verify for accuracy and add any additional information that they believed to be relevant. The one-hour surveys were conducted between March 21 and April 13, 2012.

4.5 Survey Results – Generated Revenue

In order to ensure accuracy of the research data, only one response was permitted per institution. In the case of multiple college respondents completing the survey, the most senior position’s response was used. The survey questions were not mandatory, which reduced the number of responses for generated revenue from a maximum of 25 to 22.

The extent and effectiveness of entrepreneurial activities within a college can be presented as a percentage of the college’s overall budget. The greater amount of self-generated revenue, the more entrepreneurial the institution. Figure 6 is a graphic representation of the survey results which indicated a range of 10 per cent to 60 per cent (with an average of 37.5 per cent) of the total college budget not provided directly by the respective province during the budget allocation. Such a range indicates that colleges are not uniformly engaged or dedicated to developing their own revenue sources.
It was unexpected to find that three institutions generate 20 per cent or less (with two institutions generating only 10 per cent) of their budgets. Two of the presidents interviewed predicted that if an institution is not generating a significant portion of its revenues in the near future, it will no longer be considered economically viable, and Canada may see a contraction in the number of educational institutions in the country. It was explained that this is a global trend amplified by Canada’s social healthcare system that will require more public funding as the Baby Boomer generation ages. With more funding required for healthcare, less funding is available for other areas such as
education. As education budgets are further reduced, the need for institutions to generate their own sources of revenue becomes greater.

The colleges surveyed indicated that they are active in developing diverse revenue streams, which include traditional sources such as contract training, government projects, soliciting gifts, rent, or cafeteria food services (Table 2).

Table 2 - Revenue Sources

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>% of Colleges Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contracts with other private or public organizations</td>
<td>96.8%</td>
</tr>
<tr>
<td>Contracts with provincial government agencies</td>
<td>93.3%</td>
</tr>
<tr>
<td>Contracts with federal government agencies</td>
<td>90.3%</td>
</tr>
<tr>
<td>Soliciting gifts and donations from business/industry</td>
<td>90.3%</td>
</tr>
<tr>
<td>Leasing /renting of college facilities</td>
<td>83.9%</td>
</tr>
<tr>
<td>Contracts with local government agencies</td>
<td>77.4%</td>
</tr>
<tr>
<td>Contracts with international agencies</td>
<td>70.0%</td>
</tr>
<tr>
<td>On site food service</td>
<td>67.7%</td>
</tr>
<tr>
<td>Revenues from existing endowments</td>
<td>61.3%</td>
</tr>
<tr>
<td>Recruiting International students</td>
<td>61.3%</td>
</tr>
<tr>
<td>Increasing student tuition /fees</td>
<td>60.0%</td>
</tr>
<tr>
<td>Retail sales</td>
<td>56.7%</td>
</tr>
<tr>
<td>Parking</td>
<td>50.0%</td>
</tr>
<tr>
<td>Revenues from athletic events or sponsorship</td>
<td>48.4%</td>
</tr>
<tr>
<td>Research contracts for private enterprise</td>
<td>41.9%</td>
</tr>
<tr>
<td>Student residence options</td>
<td>38.7%</td>
</tr>
<tr>
<td>Leasing /renting of college equipment</td>
<td>38.7%</td>
</tr>
</tbody>
</table>
Static or decreasing provincial government funding has forced colleges to seek additional sources of revenue to maintain their current academic programs and services. Colleges have been increasingly seeking opportunities to grow revenue, satisfy market demands, and develop specific expertise in profitable business areas with little or no competition. Colleges surveyed identified that they are engaged in innovative non-traditional opportunities including:

- Hotel and conference management services
- Restaurant and catering services
- Operation of a vineyard and brewery
- Purchase and operation of a private vocational institution
- Joint partnership proposal writing with non-profit organizations
- Land development and leasing
- Power co-generation

Lakeland College from Vermillion, Alberta, has created a localized area of expertise in power co-generation. It is actively pursuing ways to not only generate new sources of revenue but also to minimize expenses while developing stronger community partnership opportunities. Through the new power co-generation project, the college is able to produce sufficient energy to power its entire campus and the local community center, while selling the surplus power back to the provincial power grid. This complements an ongoing project whereby the excess energy (heat) created from the student power-engineering
lab is used to heat the community swimming pool located across the street from
the college.

One president indicated an emphasis on ethical revenue generation; colleges are
places of higher education and cannot strictly focus on profits. College
stakeholders are demanding greater corporate social responsibility through
increased transparency, efficiency, and effectiveness; however, they must still
deliver on the social values rooted in higher education. Colleges need to develop
revenue streams that support education and economic and community
development, while aligning with the college’s strategic plan.

4.6 Survey Results – Strategic Alignment
The initial quantitative survey indicated that 74 per cent of colleges surveyed had
incorporated an entrepreneurial goal or focus as part of the institution’s strategic
plan (Figure 7).
Of the five most entrepreneurial institutions interviewed, all five had a clear mandate for entrepreneurship highlighted in their strategic plans.

Pursue collaborative partnerships and entrepreneurial opportunities to better serve all of our communities (Northern College, 2012).

Olds College will maintain a structure that anticipates and responds quickly and effectively to opportunities and demands as a result of changes in industry, governments and technology (Olds College, 2011, p.4).
We value an organizational culture that operates in an open and honest manner, is based on mutual trust and respect, fosters creative and responsible risk taking, encourages innovative strategic thinking and affirms excellence (College of the Rockies, 2012).

The college is committed to strengthening and diversifying its revenue sources - reducing dependency on government funding through expanded enterprise activity (Parkland College, 2012).

Lakeland College values innovative and sustainable solutions to community, economic and environmental challenges (Lakeland College, 2012).

These institutions indicated that the incorporation of an entrepreneurial focus in the strategic plan was imperative; however, the most crucial component of the strategic plan is to ensure accountability through specific measurable outcomes. The most successful institutions not only set the direction of the college, they also provide the organization with a metric for analytically driven decisions. Colleges have now started to include outcomes along with the vision, mission, and values in their strategic plans, holding the institution and staff accountable for the success of the strategic plan.
The following is an example of entrepreneurial outcomes one college surveyed has included in its new strategic plan:

- Increase the percentage of self-generated revenue as a portion of its budget by 12 per cent;
- Increase the revenue generated by the International Department by 380 per cent;
- Ensure strategic partnership agreements are in place with 50 per cent of the largest 50 businesses in the community; and
- Realize a year-over-year increase in philanthropic support.

In addition to those outcomes, the college has defined a number of activities that would support the institution reaching its outcomes, including:

- Provide entrepreneurial training to current staff;
- Include entrepreneurial attributes as an asset for all position descriptions within the college;
- Hire two new positions to increase partnership development;
- Create a virtual training team to respond to emerging business training needs and forecast community labour market trends; and
- Establish a college foundation.

The college expects the new strategic plan to facilitate improved entrepreneurial alignment to develop strategic partnerships, expand programs and services,
continue to meet the demands for programming and services within the region, and entrench a culture of entrepreneurship throughout the organization. All five of the most entrepreneurial college presidents surveyed specified that the outcome or results driven mandate was initiated during their tenures.

4.7 Survey Results – Leadership
The quantitative survey of Canadian colleges found that 80.7 per cent of colleges have been at least somewhat successful in engaging their board of governors in entrepreneurial leadership. The presidents emphasized the importance of having a board of governors that recognizes the role of business development in education and understands its role in enabling and empowering the institution with that mandate. All of the Canadian colleges indicated that at least some of their board members are appointed directly by the provincial government, although each province appoints a different percentage of board positions, ranging from 50 per cent to 100 per cent. Most colleges are able to work closely with their provincial governments to provide recommendations for new board members. The presidents disclosed that their board members typically have a strong business background and are strong supporters of business development initiatives. Interestingly enough, it was also specified that board members with a background in education (primary, secondary, or post-secondary) were not as effective in supporting an entrepreneurial mandate, nor were they supportive of aggressively seeking new sustainable sources of revenue. It was evident that board support is required to develop and adopt an entrepreneurial mandate, but
it is the president who is tasked with driving and implementing the institution’s strategic plan.

Despite the role and influence of the board of governors, presidents were identified as the primary institutional catalyst driving the strategic shift to a more entrepreneurial mandate by 85.2 per cent of colleges (Figure 8). The majority of the presidents surveyed indicated they were directly involved in increasing the entrepreneurial scope and culture of their institutions. Despite not being directly responsible for the execution of the various entrepreneurial ventures, they are responsible for holding college staff accountable in meeting the strategic plan and organizational outcomes.

It was clear throughout the qualitative survey that the most entrepreneurial colleges have been driven by their presidents to be aggressive and focused on revenue generation. The leadership and strategic focus for entrepreneurship needs to come from the office of the president if it is going to be adopted across the college.
In addition to the president, the continuing education department remains as one of the more prominent entrepreneurial departments. The expectation within most colleges is that the Continuing Education Department functions on a full cost recovery business model. The department becomes a profit center within the institution, focused on selling education as a commodity based on local demand.
One of the presidents indicated that this department is considered to be the first adopter of an entrepreneurial mandate as it dovetails education and a profit-driven mandate. The greatest challenge with the entrepreneurial focus being driven by the Continuing Education Department is that the department is traditionally organized as a stand-alone department and not truly entrenched throughout the institution. This creates an isolated pocket of institutional knowledge, which creates difficulties in disseminating that knowledge and skill set throughout the organization.

Despite decreasing government support, provincial governments have not been influential in driving an entrepreneurial mandate into the colleges. In fact, one president indicated that government policies are limiting the college’s ability to develop entrepreneurial activities. This college’s provincial government has eliminated the opportunity to carry over earned revenue from one fiscal period to another. Historically, the college was able to use the previous year’s surplus as seed funding for entrepreneurial innovations. As the funds were already earned, any losses would not have a significant negative impact on that year’s budget; the college only risked funds it had already secured. The inability to carry over funds will force colleges to allocate funds on speculation. If the activity is not successful, the college would have to find new sources of funding within the same fiscal year in order to preserve the institution’s budget. This policy was designed to establish transparent accounting measures, however it has already negatively impacted the college’s ability to engage in higher risk entrepreneurial
activities, which typically offer a higher reward opportunity. Other presidents highlighted an escalating correlation between decreasing funding and increasing operational involvement from their provincial governments, which may hamper institutional entrepreneurship. Colleges indicated they are supportive of greater financial independence if it allows for less government involvement in fiscal operations.

Unsurprisingly, instructors were not considered to be leading the entrepreneurial drive at any of the institutions. As several of the presidents indicated, there is still a difference in definitions and philosophies (especially amongst faculty) between education and the business of education. This philosophical debate pits a socialistic view of education against a capitalistic approach. One president highlighted the challenge as the provincial budget required the college to reduce expenditures by $1 million. Faculty in programs with low enrolment could not understand why their programs were being considered as part of the budget cuts. This president also indicated that many program areas believe the college is solely responsible for student recruitment and ensuring the programs run at capacity. This president indicated that the academic instructional staff has not yet taken a business approach to selling or promoting their programs or departments. It was highlighted that the shift in organizational culture is taking hold amongst the administrative leaders, yet the colleges have not found a meaningful way to engage or encourage academic departments to function as independent business areas while still remaining integrated as an institution.
4.8 Survey Results – Cultural Integration

The most common catalyst for colleges to adopt an entrepreneurial mandate, as identified by the presidents, was ‘necessity’. The demand for programs and services is outpacing the availability of government funding. Colleges are forced to make a choice: either develop their own sources of revenue or reduce the programs and services offered. This shift in mandate requires a college to adapt its culture to the new political and economic realities of delivering educational services.

Olds College was the only college among the most entrepreneurial that did not indicate that necessity was the catalyst. The college identified that its entrepreneurial culture is an institutional philosophy embedded by its founders. The community of Olds was settled by the hunters, trappers, and farmers who settled the West; these were the region’s first entrepreneurs. The college was founded in 1913, almost 50 years before the majority of other Canadian community colleges. The President of Olds College, Dr. H.J. “Tom” Thompson, believes that the college was built by pioneers and that it has maintained their entrepreneurial culture as a philosophical cornerstone of the organization throughout its history.

The current organizational culture is the most prolific challenge, as identified by almost 60 per cent of the colleges surveyed, in terms of developing and
managing revenue generating opportunities in rural institutions. Figure 9 identifies that only 3.2 per cent of institutions surveyed indicated that they are very successful in facilitating college-wide support and appreciation for an entrepreneurial culture.

![Graph showing the percentage of respondents on a scale from 1 to 5, where 1 is not successful and 5 is very successful. The majority of respondents are clustered around 3 and 4, indicating moderate success.]

**Figure 9 - Integration of Entrepreneurial Culture**

Despite the majority of institutions indicating that their organizational culture is the greatest challenge they face, they have been relatively (although not exceptionally) successful in facilitating college-wide support and appreciation for an entrepreneurial culture.
As per figure 10, there is a direct correlation between the assessed level of college-wide support and appreciation for an entrepreneurial culture and the percentage of generated revenue. It shows that more appreciation for an entrepreneurial culture increases the likelihood of increasing generated revenue.

Some institutions marked a clear distinction between their mandate and institutional entrepreneurship and whether the development of entrepreneurial activities would negatively impact their academic integrity. One respondent stated that “there is a potential conflict between providing education as a social responsibility versus making a profit. These are two philosophies that can create a rift with the organization.” The two opposite philosophical ideals can create
challenges in integrating entrepreneurship into academic departments, as only 6.5 per cent of colleges believe they have been very successful and 22.6 per cent believe they have been moderately successful in their integration attempts (Figure 11).

![Bar chart showing success of integrating academic departments into the entrepreneurial philosophy](image)

**Figure 11 - Integrating Academic Departments**

One president addressed the challenge of academics and self-generated revenue, indicating that colleges successful at marrying these two seemingly conflicting philosophies will be the same organizations that lead the education sector in development, both in terms of revenue as well as program and service delivery opportunities.
The majority (45 per cent) of entrepreneurial decisions remains at the executive level in the rural Canadian college system, while approximately 13 per cent of the colleges believe it is a joint effort between the departments and executive team (Figure 12).

**Figure 12 - Entrepreneurial Initiation**

This signifies that the entrepreneurial mandate is still held primarily at the executive level, and has not been fully entrenched throughout most organizations. One institution highlighted the challenge in implementing new decisions that are made at the executive table, as the key to success lies with the front line staff that may or may not be aligned with the entrepreneurial direction of the leadership team.
Despite the clear focus colleges place on industrial and community partnerships, only 10 per cent of the colleges identified those sources as the primary initiator of entrepreneurial ideas. This shows that colleges are not waiting for businesses to approach them; they are being proactive in soliciting partner businesses in their revenue generating pursuits in order to identify and address market needs.

The majority of the most innovative institutions implement a number of simultaneous approaches to entrench the entrepreneurial spirit throughout the organization. One of the colleges has implemented a three level approach:

1. Top Down (Executive)
2. Middle Out (Management)
3. Bottom Up (Front line)

The top down approach starts with the strategic plan, organizational mandate, and institutional outcomes. This ensures high-level sponsorship from the board of governors, president, and executive team. This mandate enables the other approaches to become active. As a result, this college has an extremely focused strategic plan that incorporates entrepreneurship throughout its strategy as well as very clear, measureable outcomes.

The middle out approach is the link between the strategy and the action. It is at this level where activities and strategies are administered and managed to
ensure they are in line with the strategic direction and meet the needs of the end users. This approach must be fully engaged with the executive and front line staff to ensure that the necessary resources and supports are in place to successfully deliver on the expected outcomes. In order to support this approach, the college has invested in training and empowering this group of administrators with the ability to make key decisions, while at the same time holding them accountable for those decisions.

The bottom up approach engages front line staff, students, and partners to initiate and drive institutional innovation and entrepreneurial activities towards addressing priority issues. It is at this level where individuals are stakeholders and can become champions in the development and success of the initiative. The college invests significantly in the required resources to adequately support this approach and seeks to engage and empower individuals to lead the college in developing new opportunities.

The president of this college described a recent example of how this approach has increased the engagement of the college community and generated a significant number of new business development opportunities. The president described the need for the college to be an active supporter of entrepreneurship and stated that “they need to have some skin in the game if they want to win”, meaning that they need to be invested if they want to achieve success. The college leadership team created an institutional challenge, awarding the winner
of the best new business development idea $100,000 towards the implementation of the idea. The winner would be determined by a college-wide vote, emulating the growing trend of reality television.

This challenge engaged staff at all levels and all departments to actively seek new opportunities. The challenge resulted in 29 new opportunities being presented to the executive team. The executive team and management team reduced the number of entries to 12, which then were presented in various formats and venues to further reduce the number of projects to three. The college then used its theatre for the final presentations and allowed the entire college community to vote on the contest winner. The final college community decision was the establishment of the Canadian Centre for Rural High Performance, an athletic training centre that will support college athletics as well as generate revenue as a sporting venue and training site. This initiative was not only successful in generating new ideas for opportunities; it also engaged college community members at all levels in the development and adoption of a new opportunity.

The process generated a significant amount of interest around the college and attention from the media, in addition to identifying a new source of revenue. As a positive secondary spin-off, the college retained the right to support the development of any of the other submissions, and expects to implement two or three of the non-winning entries in the upcoming year. The college believes by
engaging staff in the development and decision making process, it is building trust and creating the organizational culture it needs for future success.

Roughly 45 per cent (Figure 13) of the respondents believe that their institution has been successful or very successful in developing a culture that embraces change. The consensus among presidents was that the challenge of creating an organizational culture willing and able to change is one of, if not the greatest challenge as it has the most significant impact on the success of the college.

How successful have you been at developing an organizational culture that embraces change?

Figure 13 - Embracing Change

It would be expected that organizations with a high degree of acceptance of change would be able to easily adopt a new entrepreneurial mandate. However, 45.2 per cent of colleges indicated they are successful (options 4 and 5) in
developing an organizational culture that embraces change (Figure 13), while only 32.2 per cent of colleges indicated the same degree of success in facilitating college-wide support for an entrepreneurial culture (Figure 9). This discrepancy indicates that change is accepted however, there is still a gap within college staff to accept a culture of entrepreneurship and a philosophical change in the approach to education.

The college presidents indicated that measures have been taken to allow staff to be more entrepreneurial, such as increased scope of responsibilities, development of full self-funded departments such as contract training, international and continuing education, as well as a bottom up leadership approach. However, there was a consensus that the majority of entrepreneurial activities are isolated to specific departments or staff within the organization, and efforts still need to be increased to expand measures to create a college-wide culture.

In order for colleges to change the organization’s culture, there must be a dedicated focus on hiring employees with an appreciation for the desired culture.
Of the colleges surveyed, only 25 per cent actively seek entrepreneurial qualities in new hires to entrench an entrepreneurial culture throughout the organization (Figure 14). The challenge of integrating a new culture in a system when only one in four new hires is sought with a background in the desired culture will be a major challenge for colleges. There is a strong correlation between institutions that have implemented this hiring process and their relative entrepreneurial success. The mean percentage of self-generated revenue increases from 39.5 per cent to 55 per cent for those institutions which seek entrepreneurial skill sets. It is clear that institutions that focus on developing and attracting entrepreneurial talent are also the most successful in achieving results.

Figure 14 - Focus on Entrepreneurial Skill Sets
4.9 Survey Results – Partnership Development

It was evident in the survey of the presidents that partnership development was a critical factor in the success of entrepreneurial activities. All of the presidents indicated their major entrepreneurial efforts were leveraged with a community or business partner to reduce potential risks to the organization as well as bring content expertise to the projects.

One college identified its mission as “success for all through learning and partnerships.” The president stated that “the reference to partnerships in their mission is more than just words; it is part of their DNA.” The college believes in partnership development as a core competency of entrepreneurship and growth. The college typically attempts to have a minimum of three partners on every project, even if it means a lower return on investment in the short term. From the college’s experience, strong partnerships lead to much greater opportunities and returns in the long term.

This college stated that it is willing to support or write funding proposals for partners with the intention that the college will be the trainer of choice if the project is successful. This arrangement has worked well for this particular college, as many of the non-governmental organizations and Aboriginal communities in its region do not have the skill sets or resources to prepare a quality funding proposal. Another college contracts a staff member to a partner organization on a full-time basis to facilitate the two organizations in working
closer together and to avoid missing key opportunities. These types of partnerships create strong linkages and trust between partners, and produce opportunities the individual organizations would not have been able to realize independently.

All of the presidents surveyed agree that partnerships are one of the critical factors for success, and dedicate significant resources and their own time to develop and manage the relationships.

Olds College in Alberta is one of the premier rural post-secondary institutions in Canada. The College’s strategic partnership development focus allows the institution to bring education and opportunities to rural Canada that are typically only found in larger urban centers. Olds College used a collaborative approach to develop its Community Learning Campus, an innovative alliance of over 300 business and community partnerships – in a community with less than 9,000 people. The campus is the first of its kind, and brings together education, business, government, and community in a way that has never been done before. “These partners have combined intellect, ideals, and spirit to shape a new path for rural education delivery” (Olds College, n.d). The $70 million facility was a major shift in the approach to education through the demolition of a high school, building a new high school within a college campus, changing the curriculum, creating a model of personal learning, and sharing facilities. The community understood the opportunity and the college created the ability for
partners to participate. One of those partners was Bell Canada, which invested over $3 million in the facility as a rural incubation center to further develop e-learning and distance delivery technology. The Community Learning Campus was one of the most innovative and partner-intense entrepreneurial undertakings of all the colleges surveyed, and not surprisingly was also one of the most impactful developments.

Olds College indicated that it employs John Nash’s “Game Theory” to identify the most advantageous partnership model for all stakeholders. President Thompson described game theory as a model based on the expectations of each partner and a method to find the best possible outcomes for all partners. The theory was developed as a mathematical theory however Jie (2010, p.45) found that “game theory is of direct relevance for inter-organizational relations between educational institutions.” Jie describes game theory as a focus on mutual interests over self-interest, which allows the organizations to collaborate: “the more partners value shared outcomes over self-interest, the more likely the collaborative program will be sustained and continue to be successful” (2010, p.45).
Table 3 - Example of Nash Game Theory

|                  | Organizational A                      | Organizational B               |
|------------------|---------------------------------------|
| **Self-Interest**|                                        | Lose / Lose                     |
| **Mutual Interest**|                                      | Win / Lose                      |
| **Lose / Win**   | Lose / Win                             | Win / Win                       |
| **Win / Win**    |                                       |                                |

In the simplified example shown in Table 3, the only scenario in which both organizations can win is when they both focus on their mutual interests. If one or both organizations focus on their own interests there will be at least one loser.

Dr. Thompson believes in, and implements, this approach for all of the college’s partnership opportunities. He indicated the challenge can be in finding and managing the mutual interests especially on large projects that involve numerous partners with different perspectives. However, he has found that especially in smaller communities, partnerships need to create win/win opportunities for all parties in order to reach the expected outcome and have the project well supported. Dr. Thompson has effectively implemented game theory throughout the college, which has led to the college being a unified and driving force behind the community.
Despite partnerships being listed as a critical factor in the success of entrepreneurial activities, 58.1 per cent of the surveyed colleges either do not employ or are unsuccessful in engaging a foundation to raise funds in support of college programs or services (Figure 15). Still, over 90 per cent of colleges engage in soliciting gifts and donations from businesses and industry (Table 2). This indicates there is a disconnect between actions and processes, and represents an opportunity for an integrated approach to maximize the opportunities.

One of the most entrepreneurial colleges indicated that, prior to 2011, it was not engaged in fundraising for the institution. The College initiated a fundraising campaign in response to a new government funding model whereby the college must commit a fixed percentage of the cost for any new capital projects. The college found that the community, once engaged, was very supportive of its expansion plans and was very forthcoming with financial support. The development of an educational foundation created new opportunities for the college to engage with partners and improve its visibility in the community.
One institution identified its Advancement department as one of the institution’s leaders in developing and maintaining successful, innovative partnerships. The president of this college stated that it spends “an uncommon amount of time in identification and nurturing relationships.” As a clear indication of the value of the time spent, they see key donors making multiple large donations to the college. The college believes that by engaging the community, businesses, and alumni, it can create an investment-rich environment.

The majority of rural colleges are currently not successful in engaging their alumni associations to raise funds in support of college programs or services. Only 19.3 per cent indicated any level of success (Figure 16).
Colleges clearly indicated that they do not receive the same alumni support as universities. Some colleges indicated it was the amount of time spent on campus (up to two years, compared to four years at university), while other institutions indicated that they are a pathway to university, which confers the final certification and receives the majority of the recognition.

Parkland College described its unique education model, which unfortunately disconnects students from the college through a brokering system. The college’s education delivery model is based on brokering programs from other colleges and universities to be delivered in response to a local demand for skilled labour. This approach eliminates the cost of designing or maintaining curriculum.
because the brokering institution controls all aspects of the quality assurance, allowing the college to effectively spend the majority of its funding on the delivery of relevant courses for the economic development of the region. This model allows Parkland College to deliver programs from colleges and universities from all over Canada to local students, who in turn do not need to leave the community to receive high quality education. It also enables the college to match programming (and graduates) with the current labour market and community needs. President Dr. Fay Myers indicated that the college is able to continually adapt the programming mix to best meet the needs of the local communities. She explained that Parkland College has the ability to deliver one or two cohorts of specialty programs to deliver the skilled work force needed in the local communities. Once the demand is satisfied, that program is shelved in lieu of another needed program. The most significant drawback of this model is that students receive certification from the brokering institution, creating disconnect between the graduates and the college. Parkland College has not yet been successful in creating a meaningful strategy to encourage alumni philanthropy; however, it is focusing on new strategies for alumni engagement.

Foundation and alumni giving represent two areas that are underutilized in rural Canadian colleges.
4.10 Survey Results – Urbanization

The survey produced an unexpected consensus that the critical factors or fundamental principles for entrepreneurship are the same for colleges in urban and rural communities. However, it was identified in the qualitative survey that the approach and philosophy of conducting business in small rural communities is different than in large urban centers.

Respondents generally indicated that opportunities in smaller communities tend to be smaller in scale with a lower risk tolerance and subsequently a lower expected return. Despite the consensus among the majority, one president indicated that if his institution, which is located in an extremely small community, can continually deliver successful multi-million dollar ventures, then any college can. The president added that this is only possible if the college has the full support of the community. All of the colleges agreed that local engagement in smaller communities is a key to success, as the institutions are much more visible in their decisions, approaches, and results than their urban counterparts, requiring them to be more diligent and cognizant of the college’s image while managing activities.

Several presidents indicated that colleges in small communities have advantages over colleges in larger centers, as it is easier to implement change and adapt the culture to the new economic realities in a smaller community. In order to do so, colleges need to not only collaborate with local businesses and communities, but
also cultivate meaningful partnerships for shared success. Of the colleges surveyed, 96.8 per cent of respondents indicated they are active in contracts with other public and private organizations (Table 2). One college actively seeks partners with experience working and developing business opportunities in small communities. As they have found that organizations with experience in rural communities understand how important it is to engage and work with the community (relationship building) throughout all stages of development.

Colleges clearly identified that hiring staff with the required skill set can be a significant challenge in small or rural communities. Forty-eight per cent of the colleges surveyed consider limited staff resources as one of the three most significant challenges in developing and managing entrepreneurial activities. Most of the smaller institutions do not have the resources or infrastructure to have staff dedicated to one project or area. It is typical for staff in smaller colleges to have large, diverse portfolios. As such, finding employees that have the breadth and scope of experience to effectively integrate entrepreneurial development can be difficult.

4.11 Survey Results – Organizational trends

The survey clearly identified that colleges take many different approaches to generate new streams of revenue. There is a strong relationship between the most entrepreneurial institutions and development of non-traditional business opportunities.
There was a distinct correlation between the four most entrepreneurial institutions and real estate development / investment, which was the least common form of the revenue generation from the options presented in the survey. Only the most entrepreneurial institutions have created the necessary infrastructure to be able to engage in land development. The presidents from these institutions were able to leverage their physical resources to generate new streams of revenue. One of the institutions indicated that it acquired a 1,500-acre parcel of land, with which it was able to create a student-run farm. This training space engages students in multiple programs (such as animal science technology and crop technology) with a singular goal of running a profitable and sustainable agri-business. In addition to establishing a new applied research facility and training space, the farm engages industrial partners to supply seeds, fertilizer, equipment, and the other resources needed to operate. In 2011 the farm realized a profit of over $70,000 (Canadian dollars), the highest in the school’s history (Biber, 2012).

One of the other presidents surveyed described a recent real estate development on campus: a new hotel and conference center. The college is a minority shareholder (40 per cent) in the operation, and the facility creates a new training space for many of its programs. It is expected that the hotel will provide students in tourism, culinary arts, hospitality, business, landscaping, and many others with an applied learning space. As a significant shareholder the college increases its
risk exposure, however at the same time increases its potential return on investment. The college believes that this opportunity will maximize profitability and create revenue streams that can be reinvested in the college and its programs.

Another college purchased a private vocational institute that has a provincial mandate and contract for the apprenticeship training of one specific trade. The college operates the private vocational institute as a separate entity (with the college as the majority shareholder), which allows the training to take place outside the college’s limited geographic region. The college implemented an aggressive business model that allowed it to recuperate its investment in half the expected time period. This private vocational institute continues to operate as a separate entity and the profits are transferred to the college at the end of each fiscal year.
Figure 17 - Forms of Revenue Generation
The organizational trends (Figure 17) demonstrate that revenue generating opportunities that require up front partners are more prevalent than any other type of opportunity. Colleges have developed strong abilities to partner with public and private organizations for project- or contract-specific funding, especially with provincial and federal governments. As per figure 17, over 90 per cent of colleges are engaged in contracted work with the provincial (93.3 per cent) and federal (90.3 per cent) levels of government. Colleges have not been as successful in working with municipal levels of government, as the percentage of colleges engaged slips down to 77.4 per cent. Colleges are even less engaged in international contracts, with only 70 per cent of institutions involved.

Kunin and Associates (2009, p. iii) found that in “2008, international students in Canada spent in excess of $6.5 billion on tuition, accommodation and discretionary spending; created over 83,000 jobs; and generated more than $291 million in government revenue.” They also concluded that only 23.4 per cent of the international student population is attending college (2009, p. 18) while the majority is attending university (53.5 per cent). The impact of international education on Canadian college can be extrapolated as a $1.5 billion industry (23 per cent of $6.5 billion), which represents a significant opportunity for colleges. However just over 60 per cent of institutions surveyed indicated they were actively recruiting international students. In addition, 24 per cent of the colleges listed international educational activities under examples of non-traditional activities. Rural Canadian colleges have neither fully accepted nor realized the
potential of this opportunity and embraced it as a core activity. Canadian college programs are subsidized by the provincial government; as such, international students are subject to a differential tuition fee, which is typically three to four times the Canadian student rate. International education represents a significant opportunity for rural colleges to generate additional revenues and maximize classroom utilization rates.

Many colleges are increasing revenue through increasing fee-based services such as student fees (50 per cent), resident fees (40 per cent) and food services (24.1 per cent) (Figure 17). In addition, 60 per cent of the institutions surveyed increased tuition. All of these revenue increases are directly passed on to the student. It was clear through the president’s survey that creating an entrepreneurial focus and increasing revenue cannot be centralized around simply increasing the cost to the student. The province of Quebec recently proposed increasing tuition fees closer to the national average, and the students have responded with political protests that sometimes turn violent. The entrepreneurial mandate needs to be driven through effective partnerships to create opportunities with little to no competition and clear demand.

4.12 Survey Results – Challenges

Colleges identified a long list of institutional challenges in developing and managing revenue generating opportunities, which could be categorized into four general areas: cultural, social, political, and economic challenges (Figure 18).
Challenges

**Cultural**
- Developing and empowering an entrepreneurial culture within the organization
- Leadership
- Lack of human resource capacity and required skillsets

**Social**
- Maintaining academic integrity
- Managing perceptions - general public, students, private sector, employees
- Rural market limitations

**Political**
- Bureaucratic policies and processes
- Risk of reduced government funding
- Unionized environments

**Economic**
- Availability of seed funding
- Cost of required infrastructure
- Additional operating expenses with no guarantee of revenue

**Figure 18 - Challenges**

**Cultural**

The most difficult challenge as identified by the colleges was developing and maintaining a culture that engages and empowers the college community in entrepreneurial activities. Colleges have found that some of the departments have difficulty with the transition from a socially motivated service provider to a social enterprise. The college survey indicates that roughly 45 per cent (Figure 13) of all colleges identify as being successful or very successful in developing a culture that embraces change. However, only 32 per cent indicate the same levels of success for facilitating college-wide support for an entrepreneurial culture (Figure 9). The success rate falls to less than 30 per cent when looking at the college’s success rate in integrating academic departments into the entrepreneurial philosophy (Figure 19).
Several of the colleges listed leadership as a challenge in the implementation of an entrepreneurial strategy and culture within the institution. For institutions new to entrepreneurship, it can be difficult to understand the role of each level of administration and how they interact. The majority of presidents surveyed indicated that they brought a new philosophy and mandate for accountability and growth, centralized around entrepreneurial activities. The most successful
entrepreneurial colleges had their presidents step forward as institutional leaders and were successful in holding their institutions accountable in achieving their mandates. The survey found that 58.1 per cent of colleges actively engaged their boards of governors in the leadership of an entrepreneurial strategy. One president highlighted the leadership role that the board of governors plays in developing the policies and processes to enable the college to deliver on a new mandate. For all of the colleges surveyed the provincial government appoints some, if not all, of the members of the board of governors. The presidents articulated that they work with their provincial governments to identify and suggest candidate board members who understand and can support the cultural shift within the college.

Rural communities have always faced a challenge in attracting a skilled workforce that matches the needs of the community; there is a clear correlation between small populations and limited available skill sets. Many of the colleges identified a challenge in hiring staff with the background and experience of entrepreneurial development. One of the presidents indicated that an “entrepreneurial mindset is an asset that cannot be taught; it must be nurtured.” The challenge of finding the right set of skills is not new for rural colleges as they routinely face difficulties finding and hiring key institutional positions. In addition to finding staff with an appropriate skill set, colleges identified that current staff do not have the capacity to take on new duties. This requires colleges to invest in
the development of the existing staff and restructure the organization to improve workflow and support innovative development.

All of the presidents indicated that in order to accommodate a growing entrepreneurial mandate, they needed to create new positions with a specific focus on business development and institutional growth. Examples of some of the positions created by the surveyed presidents include:

- Vice–President Advancement
- Vice–President Community, Business Development & Employment Services
- Director of Land Development
- Director of International
- Director of Research
- Director of Advancement
- Contract Training Consultants
- Grant Writers
- Business Development Officers

The presidents agreed that in order to achieve success with the current economic and political challenges, colleges need to be restructured, allowing them to respond to new market opportunities and maximize their potential.

Social

Colleges indicated in a number of different ways that protecting academic integrity is a significant challenge as they attempt to balance educational delivery
and revenue generation. The presidents indicated that staying true to their mandates can be difficult without the required revenue; however, in some cases, a focus on revenue generation diverts them from their academic mandates. The presidents were clear in articulating that colleges must align their academic and entrepreneurial mandates and create accountability around the outcomes.

In addition to the challenge of maintaining academic integrity, there can be internal and external challenges regarding the perception of the institution. The college survey indicated that several institutions are concerned with how a focus on revenue generation might be perceived by the public, students, and private businesses. Educational institutions need to be viewed as a neutral learning environment; however, there is a growing commercialization within the institutions in order to generate revenue. The presidents indicated this challenge can be magnified in smaller communities as the college may be perceived as infringing on the local business community’s opportunities. The consensus amongst presidents was that colleges need to work hand-in-hand with local partners on projects and opportunities to generate and maintain support.

It was noted that no matter the situation or how colleges generate funds, any expenditures by the institution are perceived to be public funds. This can lead to controversy when perceived public funds are subsidizing a business opportunity (example: student labour) that competes with a local non-subsidized business.
One institution developed a restaurant on campus to provide students an applied learning environment. The culinary arts students are responsible for all aspects of operating the campus’ high-end restaurant, including ordering, menu design, cooking, bartending, cleaning, and many other duties. As the campus is located in a small town, there were concerns from the local restaurant community as the college option provided gourmet meals at a fraction of the competition’s rate.

The college invited the local restaurant community for an open forum before the development of the college restaurant and sought their input, suggestions, and support. One of the key outputs was the restaurant would only be open three nights a week that coincide with the three quietest nights for the industry. In addition, the college engaged the different restaurant owners as guest instructors so that they could engage and evaluate the students for potential future employment. This partnership was found to work for the college, students, and the community.

**Political**

Colleges have been challenged with government funding not keeping pace with the needs and demands of the college. The majority of the colleges are looking at opportunities to generate their own sources of sustainable revenue. However, two of the institutions indicated they are concerned that if they generate their own revenue, their governments may make further funding cuts. The presidents indicated that they have not seen increased cuts to the more entrepreneurial institutions; however, it is a potential risk as colleges still rely heavily on
governmental support. One president viewed the dilemma as just a matter of time, whether the funding is cut due to the college becoming more financially independent or due to cutbacks in government. This president said, “We need to be leading our own future.”

One of the most entrepreneurial presidents indicated that higher education and colleges in particular maintain a dependency mentality that becomes “a crutch that limits educational institutions’ innovation and development.” It was articulated that colleges need to change their philosophical and business practices to be relevant and viable over the coming decades. One president predicts that a number of Canadian colleges will be shut down within the next decade if they are not able to better leverage government funding and maximize the government’s investment. It was clear that colleges need to take more of a for-profit business approach to education for long-term success and growth.

One of the colleges surveyed specifically focused on the challenges of adopting a market-based entrepreneurial approach within a unionized environment. It was stated that union wages and collective bargaining restrictions (such as the maximum number of teaching hours per week) can price college services out of the market. One president indicated that all contract training (short-term customized training) is done through non-unionized contractors. The number differed slightly between institutions (collective bargaining agreements) however; most colleges are able to utilize up to 24 days per year with an individual
contractor before they enter the union agreement. This provides the college the ability to determine a fair market value for the services offered and compete with the other open market suppliers. It was clear that this is a challenge colleges are struggling with, and no institution indicated it has a long-term sustainable solution. The advice from two of the presidents was to maintain all of the entrepreneurial activities out of union scope, if possible.

Most institutions stated they were not officially limited to a geographic area; however, they do respect the proprietary rights of their neighboring institutions. One institution indicated it is limited in educational scope (programs) and in geographic boundaries by the provincial legislation that governs the college. These limitations have a significant impact on the college’s ability to leverage the current economic situation in the province into new business opportunities as it is required to deliver programs and services only within and for its mandated region. The college indicated that the provincial ministry is setting the overall direction and leading the entire provincial college system, however innovations and entrepreneurial approaches by this college have positioned it as a provincial leader and trendsetter. The college has been demonstrating its ability to develop and lead new opportunities that do not fit the traditional educational mold, which is leading to a potential reform of the provincial legislation.

The presidents clearly noted that provincial governments could enable strategic shifts as well as stifle the engagement of the college in entrepreneurial activities.
through policy and funding models. The most entrepreneurial presidents were actively engaged in working with their provincial governments to realign strategies and funding models to support a more entrepreneurial and sustainable education sector and improve the return on investment to the provinces’ taxpayers.

**Economic**

The college survey indicated a challenge in securing the seed funding to launch entrepreneurial opportunities. Despite this challenge, all of the most entrepreneurial institutions have established a specific fund for innovation and development. One of the institutions views the innovation fund the same way an investor would: it expects significant growth; the ability to recoup its investment in three to five years; and to realize a profit (above the repayment of the initial investment). This institution indicated that it focuses a significant amount of time and energy in its due diligence process quantifying and verifying the potential return on investment. All project and innovation funding is based on the business case and expected return for the college.

The colleges identified that in rural communities, access to appropriate facilities and the necessary physical infrastructure is a challenge in developing and initializing new entrepreneurial efforts. As colleges expand their breadth to increase specialized training and new revenue generating activities, the required infrastructure becomes more specialized as well. Smaller colleges are limited in
capital investment dollars to pursue potential new revenue streams. This compels colleges to be more innovative in maximizing available resources, and more selective of the infrastructural investments they do pursue. One of the colleges described several innovative entrepreneurial opportunities that were presented to the executive team. However, the college was not able to pursue a number of them due to the high cost of infrastructure required.

In addition to the physical infrastructure, one college found that the cost of human resources is rarely accounted for properly in the college system. The college found that variable costs (instructor, room rental, supplies) were easily accounted for; however, the organizational overhead costs to earning and processing a contract were not. Organizational overhead costs were identified as the salaries, resources, and infrastructure for the account manager earning the contract, human resources time to hire instructors, and the financial department to review the contract and process the invoicing. The college has since adopted a contract pricing model that requires all contracts to cover the variable costs plus 50 per cent. This was found to be sufficient to cover fixed costs per contract in addition to providing a profit margin. The college indicated that the majority of college contract training departments do not adequately account for the full cost of procuring and delivering contracts, which can pose a significant challenge if the college expects to expand its efforts and profit margins.
Colleges identified investing significant resources and incurring substantial expenses prior to seeing a return on investment as a major challenge. College budgets are traditionally managed on a year-by-year basis without the ability to properly carry over revenue and expenses. Additionally, colleges are traditionally risk averse, and developing entrepreneurial business activities that have no guarantee of success can be a significant hurdle for colleges and their boards of governors. The most noteworthy and rewarding entrepreneurial opportunities undertaken by the colleges surveyed were the ones that assumed the most amount of risk. As one president indicated, the college could have taken the safe route and leased land to a hotel developer and garnished a risk-free monthly rent. Instead, it chose to be a minority (40 per cent) investor, allowing the college to maximize profitability and achieve its vision and outcomes. This investment positions the college to generate long-term revenue. In order to earn a greater return on investment the college had to assume a higher degree of risk. As one president stated, "not all projects are bound for success – you need to look and understand the investment and be realistic with expected outcomes. It may not be easy, and tough decisions have to be made for the good of the organization."

4.13 Survey Results – Risk Assessment and Mitigation

One president stated, “Entrepreneurship is about taking risks,” yet the majority of presidents acknowledged that colleges are not naturally risk-takers. In order for colleges to adopt a more entrepreneurial approach, which requires assuming increased risk, the presidents noted that colleges need a more structured
approach in assessing and mitigating institutional risk. All of the most entrepreneurial presidents highlighted the significant effort invested into a formal due diligence process for new entrepreneurial activities. They were also quick to identify that it may take a significant amount of effort and due diligence, but it cannot take a lot of time. It is critical to the success of the institutions to realize an opportunity in a timely manner in order to maximize that opportunity. In addition, despite each of the surveyed colleges taking a slightly different approach to risk management, two common themes were apparent: the need for well trained and engaged staff, and developing strategic public and private partnerships.

Two of the college presidents specifically spoke about the skill sets of their staff as an approach to mitigating the institution’s risk. Both presidents agreed that colleges need to invest in lifelong learning and ensure their employees have the skills required to do their jobs today and in the future. Despite conflicting views on whether entrepreneurial qualities are innate or can be taught, the presidents agreed that college staff and their skills are a significant determinant of success. One president clearly articulated that employees are the greatest asset a college has, and that “having the right people in the right role” is the best way to mitigate the risk of new business activities.
One college has identified a working understanding of three core competencies required in every new hire (regardless of the position):

- Marketing;
- Entrepreneurship; and
- Philanthropy.

In addition to believing in these skills for all new hires, the college has incorporated these skills into the core curriculum for every program delivered, which it has termed as a “talent management approach.” The college believes if staff and students bring these skills to their jobs or to the classroom, it greatly reduces the risk of failure, and will continually push innovation.

All of the most entrepreneurial institutions indicated that they can mitigate the impact of risk (along with maximizing the return) by taking a proactive approach in developing strategic public and private partners. One college stated that it typically looks for a minimum of three partners on every project, and that it is willing to sacrifice short-term financial gains for a stronger relationship with another partner that could decrease the risk of the project and lead to long-term strategic growth. All of the non-traditional revenue generating activities discussed by the most entrepreneurial institutions were developed with one or more strategic partner(s), and the majority of the partners were private (or publically traded) businesses. As one president indicated, partners are a reflection of the organization, and colleges should always be looking to work with the highest quality partners possible to bring out the best in each organization.
One president clearly articulated the opinion that “the higher education system of tomorrow cannot be risk averse; if they remain averse to risk they will likely not be economically viable in the future.” There was a consensus agreement that colleges need to change their business model if they expect to survive the challenges of the coming decades.
Chapter 5: Conclusions and Recommendations

5.1 Introduction

The objective of this dissertation paper is to evaluate the success factors in for-profit business development by colleges in rural Canadian communities. The research concluded that the most significant and challenging success factor in for-profit business development is creating and managing an entrepreneurial culture within the college. This factor is by no means an isolated characteristic as there are many inputs required to realize its success including leadership, partnership development, strategic alignment, and maximizing opportunities.

Colleges have initiated a sectorial paradigm shift in response to reoccurring funding shortages. This evolution has created a mandate for colleges to pursue and deliver non-traditional revenue generating opportunities that exist within their communities. These new opportunities extend well beyond the traditional program delivery, food service, student accommodations, and bookstore revenue generators. The most successful institutions are cultivating new innovations to better serve their communities and increase revenues through entrepreneurial projects such as power co-generation, hotel and conference center services, operation of vineyards and breweries, highly specialized educational opportunities, and land development initiatives.

There was a clear theme that growth of the rural Canadian college sector is shifting with more financial responsibility falling to the individual colleges. The
Canadian higher education system needs to restructure its approach and business model if it is going to sustain or improve on its current level of success.

5.2 Implications of the Survey Results

The survey results identify emerging best practices in implementing entrepreneurial business development activities within rural Canadian colleges.

The most critical factor as determined by the colleges was creating and maintaining a culture of institutional entrepreneurship which requires leadership, strategic alignment, partnership development, and maximizing opportunities. Figure 20 is a visual representation of the interactions of the various influencing factors in creating an entrepreneurial culture as interpreted through this survey.
It was evident that the driving force behind the colleges’ shift to a more entrepreneurial culture was “necessity.” Colleges have identified a declining funding trend, forcing them to increase their self-sufficiency if they want to maintain or expand program and service delivery. The challenge colleges face with this new reality is changing their organization’s (and the education sector’s) philosophical approach to education. The traditional social mandate of providing education has transformed into a new philosophy of a social enterprise that must
not only continue to deliver programs and services to meet its stakeholders’
demands, but must also focus on effectively managing its financial resources in
light of the declining support from provincial governments. Despite this shift, only
3.2 per cent of colleges surveyed indicated that they are very successful in
facilitating college-wide support and appreciation for an entrepreneurial culture.
As one president indicated, colleges that can marry these two seemingly
conflicting philosophies will be the same organizations that lead the education
sector in development, both in terms of revenue as well as program and service
opportunities.

In order to influence the organization’s culture, college presidents are expected
to drive the entrepreneurial change efforts, as identified by 85.2 per cent of
colleges (Figure 8). College presidents are considered the institutional leader;
however, they require support from the board of governors and must elicit
support and buy-in from their staff. The most successful approaches to increase
entrepreneurial activities were led by the president, with all levels of the
organization engaged and empowered. A clear correlation emerged in the
quantitative survey, which identified that colleges which seek entrepreneurial
character traits in all new employees increase their mean percentage of self-
generated revenue from 39.5 per cent to 55 per cent.

In order for colleges to adopt an entrepreneurial culture, they need a strategic
decision that is embedded in their strategic plan, vision, mission, values, and
most importantly, in their outcomes. Seventy-four per cent of the institutions surveyed had incorporated an entrepreneurial focus as part of the institution’s strategic plan (Figure 7). Of the five most entrepreneurial institutions surveyed, 100 per cent have incorporated a clear mandate for entrepreneurship in their strategic documents, in addition to using measurable outcomes, which instill accountability and qualify their successes.

A trend emerged from the survey that partnership development is a critical component of the college’s entrepreneurial approach. Of the colleges surveyed, 96.8 per cent of respondents indicated they are active in contracts with other public and private organizations (Table 2). Partnerships increase the ability of the college to enter new revenue generating opportunities, while simultaneously reducing the overall risk to the college. Colleges, especially those in smaller communities, are dependent on their partners and need to create opportunities for win/win partnership scenarios, such as Olds College’s use of game theory. The college survey also identified an area of weakness in terms of partnership development for rural Canadian colleges; both foundation and alumni giving represent two under-engaged areas for development.

The higher education sector is traditionally averse to risk; however, college presidents were clear that in order for colleges to succeed with an entrepreneurial mandate, they need to maximize opportunities when the opportunity is presented. Colleges need to streamline their due diligence and
bureaucratic processes while encouraging entrepreneurial development at all levels of the organization to reduce response time and capitalize on available opportunities. The process is even more critical for rural colleges as the scope and magnitude of opportunities presented tend to be on a smaller scale.

These factors can also be categorized into three spheres of influences (governmental, institutional, and operational) that need to be specifically addressed in order to achieve an entrepreneurial institutional culture (Figure 20).

Governmental influences include ensuring the entrepreneurial mandate is in line with government expectations and their vision, engaging the college’s board of governors, and creating a strategic plan that focuses on entrepreneurial activities with clear accountable outcomes.

Institutional influences include the president engaging college staff as entrepreneurial leaders, developing and implementing policies that enable the entrepreneurial mandate, and holding staff accountable for the implementation and success of the strategic plan.

Operational influences include ensuring that staff have the skills and support needed to develop new entrepreneurial activities, seeking employees with an entrepreneurial focus for all positions, engaging academic instructors in the
development of new revenue generating activities, and ensuring staff have a clear understanding of the college’s goals and expectations.

![Diagram: Spheres of Influence]

**Figure 21 - Spheres of Influence**

It is expected that if the three levels of influences are engaged and aligned with the critical factors in developing an entrepreneurial culture, then the organization will be in a favourable position to adopt, implement, and succeed in developing entrepreneurial innovations and an entrepreneurial culture (Figure 21).

### 5.3 Areas for Further Research

One factor that was not extensively examined in this research was the economic impact of entrepreneurial activities by educational institutions on the private sector market. Despite the most entrepreneurial institutions all indicating that...
they have not observed any significant backlash from their communities due to their engagement in revenue generating activities, analysis could be conducted on the economic impact to the private sector. If colleges continue to expand into the traditionally private sector business market, it could be expected that private sector businesses would be negatively impacted by the competition and government subsidization of colleges.

Sub-analysis could be conducted on how entrepreneurial programs are funded, which would quantify any potential conflicts of government subsidized labour or resources in a competitive open market. If the higher education sector is going to continue its growth pattern into the private sector, particular analysis could be conducted on ethical business practices and corporate social responsibility of education as a community and economic development tool.

Another area for potential research is to conduct an analysis of the risk tolerance levels for entrepreneurial development throughout the higher educational sector. The optimal level of risk for higher education institutions could be determined by comparing institutions based on their level of tolerable risk and their level of revenue generation (such as dollars generated per full-time student). This information could be used at the institutional level for creating benchmarks and outcome-based institutional goals. The results would also allow for a comparison in entrepreneurial approaches between universities and colleges to categorize effectiveness.
An additional area for research that was not specifically addressed in this study could look at impact of Collective Bargaining Agreements on a college's ability to generate revenue and compete with the private sector market. Special focus would be applied to the ability of a college to effectively match skill sets with roles, the impact of academic instruction student contact hours, financial and non-monetary benefits which limit participation, and a cost analysis of internal and external labour supply. The results could have significant impact on future collective bargaining processes and the overall strategic direction of a college.

The final area for future research could focus on the impact of an entrepreneurial college system on provincial government funding models. The survey and interviews identified mixed perspectives on how increasing self-generated funds will impact provincial funding. One perspective indicates that increasing self-generated funds will allow provincial governments to reduce their financial contribution to the college. The other perspective suggests that provincial governments will increase investments in the colleges that maximize the utilization of their base grants, and discontinue funding to colleges that are not economically viable.
5.4 Recommendations

This study identified the critical success factors influencing revenue generating business development as an entrepreneurial culture, institutional leadership, strategic alignment, partnership development, and maximizing opportunities (Figure 20).

The critical factors form a co-dependent relationship in that each factor requires the support of the other factors to improve the success rate. Colleges need to ensure a balanced approach to implementation in order to maximize the potential positive impact.

5.5 Conceptual Framework

The following best practices were identified through this research and form a conceptual framework for entrepreneurial implementation in rural Canadian colleges:
Entrepreneurial Culture

1. Adopt a market-driven business approach to education and educational services;
2. Mandate that all positions within the college, regardless of the role, require entrepreneurial attributes as a desired core competency;
3. Invest in ongoing entrepreneurial training for all staff; and
4. Create empowering policies and processes to improve workflow at all levels and maximize entrepreneurial engagement.

Institutional Leadership

5. The president needs to be the institutional leader driving entrepreneurism throughout the organization and empowering staff at all levels to initiate revenue generating activities;
6. The college board of governors needs to understand and fully support an entrepreneurial mandate;
7. The president needs to actively recruit business-focused individuals for the board of governors and make specific recommendations to the province for appointment; and
8. Specific measures should be taken to engage academic instructors in development and delivery of entrepreneurial activities.
Strategic Alignment

9. Strategic plans should clearly articulate specific measurable outcomes related to revenue generation and entrepreneurial innovation;

10. Entrepreneurial activities should be based on ethical revenue generation and meeting both college and community needs;

11. Partnerships need to be strategically aligned with the college’s mission and should support the college’s expected outcomes; and

12. Investigate options for co-location to align the college and partners in order to build trust and foster organizational integration and innovation.

Partnership Development

13. Partnerships should emphasize long-term returns over short-term benefits;

14. Adopt Nash’s “Game Theory” approach, focusing on mutual interests when working with partners;

15. Develop strong public and private sector partnerships to support collaborative strategic development; and

16. Invest time and resources in developing strong donor and alumni stewardship programs.
Maximizing Opportunities

17. Focus on creating competitive advantages through non-traditional or “blue ocean” opportunities;

18. Identify potential complementary opportunities to leverage additional revenue generation from existing successes;

19. Create an internal fund to support the implementation of new entrepreneurial ideas, evaluated on the potential for return on investment; and

20. Adopt a balanced perspective of risk and risk management approaches to make timely decisions.

Institutional entrepreneurship is only achieved when all organizational levels within the college are aligned and engaged in the development and delivery of new revenue generating activities. Rural colleges that fail to set clear outcomes and instill an entrepreneurial culture within the institution could soon fail to be considered economically viable and risk becoming obsolete in a more dynamic market-based education sector. Colleges now, more than ever, need to be strategically focused on the critical success factors of educational entrepreneurship in order to develop new revenue generating opportunities and assume responsibility for their own growth and development.
References


Appendices
Appendix 1- Quantitative Survey

Dear [Name]

My name is William Litchfield, Director Advancement at Parkland College in Yorkton Saskatchewan. I am currently completing my Master’s Degree in Project Management from the University of Liverpool.

I have completed my course work and now I am in the final thesis stage of my program. I have chosen to study how entrepreneurial activities are implemented and managed in the Canadian College system with a primary focus on smaller communities.

The research I am conducting is strictly academic in nature and no specific institutional information from this study will be released without consent from the respective institution.

The demand and expectations for programs and services on colleges has significantly increased over the years, however in most jurisdictions provincial funding has not kept pace. In order for colleges to meet the needs of their students and communities, colleges must be proactive in developing and implementing innovative and profitable business activities.

It is my hope that through this research I will be able to identify and evaluate the critical success factors in developing and implementing profit-generating activities. I believe this information will yield the development of a replicable management framework designed specifically for the Canadian College environment.

This survey has been designed so that it should take no more than ten minutes to complete; in exchange for your time and support in completing the survey I will provide you a copy of the aggregate data.

The survey can be accessed at http://www.surveymonkey.com/s/RLWJJ6Z

I would like to thank you in advance for contributing to my research study if you have any questions, comments, or concerns please do not hesitate to contact me.

Thank you,

William Litchfield
MSc Project Management – University of Liverpool
Business Development for Rural Canadian Colleges – Survey

1. Please provide some background information:
   - What is the name of your college:
   - What is your name:
   - What is your title:
   - What percentage of your overall budget is not provided directly by the province during the budget allocation (i.e. percentage of revenue generated by the college):

2. Has your college integrated a formal entrepreneurial goal or focus in the organization’s strategic plan?
   - Yes
   - No
   - Not sure
3. Please rate on a scale from 1-5 (1 being not successful and 5 being very successful) the following efforts in your institution:

<table>
<thead>
<tr>
<th>How successful has your institution been in creating new revenue generating programs or services that are aligned with your strategic plan?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>How successful have you been in engaging your college board to the concept of entrepreneurial leadership?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>How successful have you been at contracting out college employees to provide training programs and or workshops with business / industry?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>How successful have you been at using your college staff to write grants on a full-time or part-time basis?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>How successful have you been in securing research grant funding?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>How successful have you been at accessing special funds for innovation development?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>How successful have you been at using a college foundation to raise funds in support of college programs/services?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>How successfully have you used an alumni association to raise funds in support of college programs and/or services?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
<tr>
<td>How successful have you been in developing non-traditional forms of revenue generation?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>N/A</td>
</tr>
</tbody>
</table>

4. What are some of the examples of non-traditional revenue generating opportunities that your college has explored:
5. Has you college incorporated entrepreneurship as a key character asset when seeking new employees (regardless of the position)?
   □ Yes
   □ No
   □ Not Sure

6. Who is leading the drive to become a more entrepreneurial college?
   □ Government Mandate
   □ Board Member
   □ President
   □ Development Office
   □ Continuing Education Department
   □ Research Department
   □ Academic Department
   □ Instructor
   □ Students
   □ No One
   □ Other (please specify):

7. Are the majority of entrepreneurial ideas initiated at the department or executive level of the college?
   □ Department Level
   □ Executive Level
   □ Other (please explain)
8. Is your college engaged in generating revenue through:

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Yes</th>
<th>No</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contracts with local government agencies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contracts with provincial government agencies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contracts with federal government agencies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contracts with international agencies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contracts with other private or public organizations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research contracts for private enterprise</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real estate development / investment</td>
<td></td>
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<tr>
<td>Student residence options</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soliciting gifts and donations from business/industry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenues from philanthropic resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenues from existing endowments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenues from athletic events or sponsorship</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Leasing /renting of college facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leasing /renting of college equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail sales</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On site food service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increasing student tuition /fees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increasing student residence fees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increasing laboratory, supplies or other service fees</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. Please rate on a scale from 1-5 (1 being not successful and 5 being very successful) the following efforts in you institution:

<table>
<thead>
<tr>
<th>Effort</th>
<th>Yes</th>
<th>No</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing costs of college food services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increasing government appropriations/grants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recruiting International students?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. What are the three most significant challenges in developing and managing revenue generating opportunities at your institution?
Appendix 2 - Qualitative Survey

Thank you [Name] for participating in both the initial online survey and this telephone survey, I know your time is very valuable and I greatly appreciate you setting this time aside for this research.

The information collected here will be used strictly for academic purposes toward the completion of my Master Degree in Project Management.

I have a few questions that I would like focus a conversation around. I will be recording this conversation so that I can best capture the information. I will send you a copy of the survey notes prior to finalizing them so that you can review and make any additions, edits, or corrections in order to ensure that your information has been interpreted correctly.

1. When did your organization begin to implement an entrepreneurial strategy?
2. Was there a specific catalyst?
3. What has been the involvement of your local board of governors in your entrepreneurial efforts?
4. How have you developed an entrepreneurial culture in your college?
5. How do you ensure that new entrepreneurial opportunities are developed in line with your college’s vision, mission, and values?
6. What impacts has the implementation of an entrepreneurial focus had on your organizational structure, strategy and management approach?
7. How does your organizational structure allow staff to be more entrepreneurial?
8. Do you have any special funding dedicated to new revenue generating opportunities?
9. How has your college engaged the community in the development of new revenue generating opportunities?

10. Has there been any public reaction to your efforts (positive or negative)?

11. In your opinion, what are the critical factors in developing and managing entrepreneurial opportunities in Canadian colleges?

12. Do you think that those factors are different for rural and urban institutions?

13. What are some of the ways you have been able to mitigate the risks associated with an entrepreneurial approach?

14. What has been your college’s most outstanding entrepreneurial accomplishment?

15. What would you consider to be your most outstanding non-traditional entrepreneurial activity?

16. Do you have an issue with being identified as an institution in my thesis?
Appendix 3 - Aggregate Quantitative Research Results

Dear [Name],

This survey was only sent to Canadian English speaking colleges (or universities that maintain membership in Association of Canadian Community Colleges), which are based in a community with a population of approximately 50,000 or less (according to census data). This yielded 32 eligible institutions – of which 25 distinct institutions responded.

This data, in addition to five (5) qualitative interviews from the sample group, will provide the research necessary to complete my thesis:

   Evaluating the Critical Success Factors in For-Profit Business Development by Colleges in Rural Canadian Communities

I greatly appreciate the support you have provided in completing this survey, and as promised please find below a copy of the aggregate quantitative research data collected between January 15, 2012 and February 20, 2012.

Thank you,

William Litchfield
Master of Science – Project Management Candidate – University of Liverpool
Question 1

The average percentage of generated revenue is: 37.5%

The mean percentage of generated revenue is: 39.5%

What percentage of your overall budget is not provided directly by the province during the budget allocation? (i.e. percentage of revenue generated by the College)

Question 2

Has your College integrated a formal entrepreneurial goal or focus in the organization's strategic plan?

- Yes: 74%
- No: 23%
- Not Sure: 3%
Question 3

Please rate on a scale from 1-5 (1 being not successful and 5 being very successful) the following efforts in your institution:

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>1 (%)</th>
<th>2 (%)</th>
<th>3 (%)</th>
<th>4 (%)</th>
<th>5 (%)</th>
<th>N/A (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How successful has your institution been in creating new revenue generating programs or services that are aligned with your strategic plan?</td>
<td>3.2</td>
<td>0</td>
<td>29</td>
<td>48.4</td>
<td>16.1</td>
<td>3.2</td>
</tr>
<tr>
<td>How successful have you been in engaging your College board to the concept of entrepreneurial leadership?</td>
<td>0</td>
<td>6.5</td>
<td>22.6</td>
<td>32.3</td>
<td>25.8</td>
<td>12.9</td>
</tr>
<tr>
<td>How successful have you been at contracting out college employees to provide training programs and or workshops with business / industry?</td>
<td>19.4</td>
<td>19.4</td>
<td>35.5</td>
<td>16.1</td>
<td>9.7</td>
<td>0</td>
</tr>
<tr>
<td>How successful have you been at using your college staff to write grants on a full-time or part-time basis?</td>
<td>3.2</td>
<td>32.3</td>
<td>22.6</td>
<td>25.8</td>
<td>16.1</td>
<td>0</td>
</tr>
<tr>
<td>How successful have you been in securing research grant funding?</td>
<td>22.6</td>
<td>19.4</td>
<td>19.4</td>
<td>12.9</td>
<td>16.1</td>
<td>9.7</td>
</tr>
<tr>
<td>How successful have you been at accessing special funds for innovation development?</td>
<td>12.9</td>
<td>19.4</td>
<td>22.6</td>
<td>32.3</td>
<td>9.7</td>
<td>3.2</td>
</tr>
<tr>
<td>How successful have you been at using a college foundation to raise funds in support of college programs/services?</td>
<td>22.6</td>
<td>9.7</td>
<td>19.4</td>
<td>6.5</td>
<td>16.1</td>
<td>25.8</td>
</tr>
<tr>
<td>How successfully have you used an alumni association to raise funds in support of college programs and/or services?</td>
<td>38.7</td>
<td>25.8</td>
<td>3.2</td>
<td>3.2</td>
<td>12.9</td>
<td>16.1</td>
</tr>
<tr>
<td>How successful have you been in developing non-traditional forms of revenue generation?</td>
<td>16.1</td>
<td>22.6</td>
<td>32.3</td>
<td>19.4</td>
<td>9.7</td>
<td>0</td>
</tr>
</tbody>
</table>
Question 4

What are some examples of non-traditional revenue generating opportunities that your College has explored?

- Conference / event management services
- International projects / student recruitment
- Industry partnership in program delivery
- Government contracts
- Research grants
- Catering / restaurant services
- Contract training
- Joint partnership proposal writing with non-profit organizations
- Hotel / residence management
- Cost recovery based training
- Vineyard / brewery
- Power co-generation
- Land lease
- Distance / video corporate training
- Partnerships with community, school division, First Nation Bands, and all levels of government
- Purchase and operation of a private vocational institution
- Canada’s smartest kitchen
- Rural entrepreneurship center

Question 5

Has your College incorporated entrepreneurship as a key character asset when seeking new employees (regardless of the position)?

- Yes: 25%
- No: 61%
- Not Sure: 14%
Question 6

Who is leading the drive to become a more entrepreneurial College?

Note: Interviewees could select more than one option; as such percentages do not add up to 100%

Question 7

Are the majority of entrepreneurial ideas initiated at the department or executive level of the College?

Note: Other – includes:
- At both department and executive levels (4)
- At the managers level
- It is person specific
- Initiated by contract training (2)
**Question 8**

Is your college engaged in generating revenue through:

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Not Sure (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contracts with local government agencies</td>
<td>77.4</td>
<td>19.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Contracts with provincial government agencies</td>
<td>93.3</td>
<td>6.7</td>
<td>0</td>
</tr>
<tr>
<td>Contracts with federal government agencies</td>
<td>90.3</td>
<td>9.7</td>
<td>0</td>
</tr>
<tr>
<td>Contracts with international agencies</td>
<td>70</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>Contracts with other private or public organizations</td>
<td>96.8</td>
<td>3.2</td>
<td>0</td>
</tr>
<tr>
<td>Research contracts for private enterprise</td>
<td>41.9</td>
<td>54.8</td>
<td>1</td>
</tr>
<tr>
<td>Real estate development / investment</td>
<td>12.9</td>
<td>74.2</td>
<td>4</td>
</tr>
<tr>
<td>Student residence options</td>
<td>38.7</td>
<td>51.6</td>
<td>9.7</td>
</tr>
<tr>
<td>Soliciting gifts and donations from business/industry</td>
<td>90.3</td>
<td>9.7</td>
<td>0</td>
</tr>
<tr>
<td>Revenues from philanthropic resources</td>
<td>61.3</td>
<td>29</td>
<td>9.7</td>
</tr>
<tr>
<td>Revenues from existing endowments</td>
<td>61.3</td>
<td>35.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Revenues from athletic events or sponsorship</td>
<td>48.4</td>
<td>41.9</td>
<td>9.7</td>
</tr>
<tr>
<td>Leasing /renting of college facilities</td>
<td>83.9</td>
<td>16.1</td>
<td>0</td>
</tr>
<tr>
<td>Leasing /renting of college equipment</td>
<td>38.7</td>
<td>54.8</td>
<td>6.5</td>
</tr>
<tr>
<td>Retail sales</td>
<td>56.7</td>
<td>40</td>
<td>3.3</td>
</tr>
<tr>
<td>Parking</td>
<td>50</td>
<td>43.3</td>
<td>6.7</td>
</tr>
<tr>
<td>On site food service</td>
<td>67.7</td>
<td>32.3</td>
<td>0</td>
</tr>
<tr>
<td>Increasing student tuition /fees</td>
<td>60</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>Increasing student residence fees</td>
<td>40</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>Increasing laboratory, supplies or other service fees</td>
<td>50</td>
<td>43.3</td>
<td>6.7</td>
</tr>
<tr>
<td>Increasing costs of college food services</td>
<td>24.1</td>
<td>55.2</td>
<td>20.7</td>
</tr>
<tr>
<td>Increasing government appropriations/grants</td>
<td>58.6</td>
<td>34.5</td>
<td>6.9</td>
</tr>
<tr>
<td>Recruiting International students?</td>
<td>61.3</td>
<td>38.7</td>
<td>0</td>
</tr>
</tbody>
</table>
**Question 9**

Please rate on a scale from 1-5 (1 being not successful and 5 being very successful) the following efforts in your institution:

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>How successful have you been in integrating academic departments into the entrepreneurial philosophy?</td>
<td>9.7</td>
<td>19.4</td>
<td><strong>41.9</strong></td>
<td>22.6</td>
<td>6.5</td>
<td>0</td>
</tr>
<tr>
<td>How successful have you been at developing an organizational culture that embraces change?</td>
<td>0</td>
<td>19.4</td>
<td>35.5</td>
<td><strong>38.7</strong></td>
<td>6.5</td>
<td>0</td>
</tr>
<tr>
<td>How successful have you been at facilitating college-wide support and appreciation for an entrepreneurial culture?</td>
<td>6.5</td>
<td>16.1</td>
<td><strong>45.2</strong></td>
<td>29.0</td>
<td>3.2</td>
<td>0</td>
</tr>
</tbody>
</table>
Question 10

What are the three most significant challenges in developing and managing revenue generating opportunities at your institution?

- Developing an entrepreneurial culture / empowerment
- Bureaucratic processes
- Collective Agreement conflicts / challenges
- Risk of taking on new expenses
- Socialistic vs. Capitalistic philosophies of education
- Limited human resource capacity / no dedicated department
- Required human resource skillsets
- Required infrastructure / lack of seed funding
- Risk of government cutting back support
- Risk of being seen as competing with private industry
- Breaking the historic reliance on government support
- Small market – low population density
- Identifying opportunities in a tight economy
- Leadership - Mandate revenue generation as an institutional priority
- Student resistance
- Government restrictions to geographic scope of operations
- Maintaining academic integrity
- Public perceptions
- Misaligned funding criteria
- Ability to generate sustainable opportunities in a boom/bust economy
- Following college mandate

Note: The most common response was the challenge of developing and maintaining an organizational culture of entrepreneurship.