ATHABASCA UNIVERSITY

SUCCESSION PLANNING IN LEADERSHIP IN POLYTECHNIC INSTITUTES: FOR STABILITY AND OPERATIONAL RESILIENCE

BY

NEERA ARORA

A DISSERTATION

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF EDUCATION

FACULTY OF HUMANITIES AND SOCIAL SCIENCES

CENTRE FOR DISTANCE EDUCATION

ATHABASCA, ALBERTA

OCTOBER, 2019

Approval Page

Athabasca University
FACULTY OF GRADUATE STUDIES

The future of learning.

Approval of Dissertation

The undersigned certify that they have read the dissertation entitled

SUCCESSION PLANNING IN LEADERSHIP IN POLYTECHNIC INSTITUTES: FOR STABILITY AND OPERATIONAL RESILIENCE

Submitted by:

Neera Arora

In partial fulfillment of the requirements for the degree of

Doctor of Education in Distance Education

The examination committee certifies that the dissertation and the oral examination is approved

Supervisor:
Dr. Martha Cleveland-Innes
Athabasca University

Committee Members:
Dr. Mohamed Ally
Athabasca University

Dr. Alan Davis
Kwantlen Polytechnic University

External Examiner:
Dr. Karen Swan
University of Illinois Springfield

October 25, 2019

1 University Drive, Athabasca, AB, T9S 3A3 Canada
P: 780.675-6821 | Toll-free (CAN/U.S.) 1.800.788.9041 (6821)
fgs@athabascau.ca | fgs.athabascau.ca | athabascau.ca

Dedication

I am dedicating this dissertation to my mother, Santosh Sharma, for being my inspiration and instilling in me the importance of pursuing your passion with hard work, strong work ethic and perseverance while keeping family and relationships at the core of everything. Her selfless and tenacious disposition and endurance throughout her life taught me to navigate my world with confidence and always balance my personal and professional lives.

Acknowledgement

It takes a village to raise a child; I have a village to thank for their unwavering faith and support during my doctoral journey. I would like to thank my husband, Inder Arora, who has been my rock and encouraged me to get on this journey when I was doubting myself. Thank you for being a team player and my biggest supporter as we balanced our lives and celebrated a few memorable family accomplishments. Thank you to our children, Eesha, Dilan and Rahill for being my source of motivation and keeping me in touch with reality; may you continue to excel, be lifelong learners and stay determined to achieve your dreams, for they are achievable when pursued with passion, determination and hard-work. Thank you to my pooch, Dexter, who has been the light in my life and stress-buster during times when I needed it the most. And to our village including all my family and friends for your unconditional love and encouragement.

Thank you to my supervisor, Dr. Marti Cleveland-Innes, for her exemplary guidance and support and for her responsiveness. Every phone conversation with her got me energized and driven to pursue the topic of study that I have been passionate about. I know, I wouldn't have been able to do it without Dr. Marti's encouragement. Thank you to my committee members, Dr. Alan Davis and Dr. Mohamed Ally for their wise counsel, keen interest, and ongoing support and interest in my research. I consider myself very fortunate to have had a chance to work under the guidance of such exemplar scholars and practitioners. Thank you to all the leaders at my institution that have inspired, influenced and supported my research. And it would be a huge miss, if I did not recognize and thank my EdD cohort buddies. You all are key contributors to my success, and I can't thank you enough for your time, genuine support and going the extra mile to be there for each other throughout this journey.

Abstract

This grounded theory study examined succession planning for senior leadership positions within polytechnic institutes. Sixteen senior leaders from three polytechnic institutes in Canada were interviewed about their institutes' existing senior leadership recruitment, retention, and training practices and any alignment between strategic planning and succession planning efforts. Additional data were collected from institutional websites and strategic documents shared by the interviewed leaders. This study explored the role of strategic planning, organizational leadership, and the overall talent management framework in addressing internal and external challenges faced by higher education institutions due to changes in technological; student demographic; and socio-political and economic influences. The findings revealed a desire among senior leaders for succession planning to be a strategic and an ongoing conversation at all levels. Six themes emerged: institutional strategy, accountability, leadership development, talent management, essential leadership skills, and informal succession planning. Through examination of these themes, this study proposed the *4P Model for Succession Planning in Polytechnic Institutes*, centered on Purpose, Progression, Performance, and Persistence.

Keywords: polytechnic institutions, leadership development, strategic plan, talent management, succession planning

Table of Contents

List of Figures

List of Tables

Chapter 1. Introduction

Higher education institutions are faced with the challenges of reduced government funding (Barr & Turner, 2013), the high pace of change, and higher levels of accountability from the key stakeholders (Abadie-Mendia, 2013). In response, these institutions are required to adopt innovative systems and data analytics to enhance learner success, academic integrity and sustainable growth (Green, 2014). These institutions are governed by different levels of government and operate within sophisticated sociotechnical networks of system, regulatory standards, performance metrics, dashboards and data analytics technologies for meeting the reporting accountabilities and to support market reform (Williamson, 2018). Uhl-Bien, Marion, and McKelvey (2007) state that there has been a noteworthy change as we transitioned from the Industrial Era to the Knowledge Era, resulting in a huge focus on the product and process of knowledge creation, storage, and distribution. The subsequent emergence into the Digital Era has led to changes like social media influence; the integration of online, blended, and collaborative learning environments; the importance of data analytics and fact-based decision making systems; and the shift of students from consumers to creators of information (Coccoli, Guercio, Maresca, & Stanganelli, 2014). Finally, reduced government funding, changing student demographics, technological advancements and their impacts on faculty duties within the shifting academic paradigm have made the higher education governance and operating environment highly complex. This has required the leadership bench strength at all levels of the organization, particularly in senior leadership positions, to stay nimble and operationally astute to navigate through current realities and position the organization for long term growth and sustainability (Dickeson, 2010).

Post-secondary institutions have been impacted by the massification and globalization of higher education resulting in significant changes in the numbers and diversity of student populations. Massification is the expansion of higher education due to the greater need and demand for access. "Globalization is a process that encompasses the causes, course, and consequences of transnational and transcultural integration of human and non-human activities" (Al-Rodhan & Stoudmann, 2006, p. 5). Massification and globalization has resulted in an unprecedented growth in the number of international students attending colleges and universities. Due to reduced government funding that limits domestic student enrolments and tuition caps, higher education institutions are gravitating towards expanding the quota for international students, as the international students pay significantly higher fees making internationalization a helpful model for institutional financial stability. While this internationalization has contributed to institutional growth, improved partnerships, global reputation and student diversity on campus, it has also resulted in numerous challenges (Knight, 2015). Usher (2018) cautions higher education executives that the trend can reverse quickly as soon as the demographics of domestic students change in Canada, requiring them to replace the international students. This puts higher education institutions at risk if they are unable to respond to rapid changes in the demographics of students. This will prompt an urgent need for action to change the financial governance of the organization and less reliance on revenue from international students.

Embracing and adapting to this shifting landscape calls for entrepreneurial, innovative, agile and smart governance lead by bold leaders with a strategic vision and clear direction for the organization. While these institutions are striving towards nimble and smart governance and see internationalization critical to support for overall growth and sustainability, they are struggling to hire and maintain executive leadership bench strength that understands various administrative

nuances including the development and implementation of institutional strategy, and have the technical and business competence to build smart operations leveraging digitalization and data analytics.

Higher education in Canada can be classified into two categories; universities and non-universities. Generally, universities grant academic and professional undergraduate and graduate credentials and the non-university cluster (community colleges, polytechnic institutes and private colleges) offer mainly apprenticeship training, grant certificates, diplomas and applied undergraduate degrees (Teichler, 2007). For example, according to the *Alberta Credential Framework* (2018), graduate level credentials include master's and doctoral degrees; graduate certificates and diplomas; post-master's certificates and diplomas; and post-doctoral certificates and diplomas; and undergraduate level credentials include certificates, diplomas, bachelor's degrees, post-diploma certificates, and post-bachelor's certificates. Irrespective of what type of higher education it is, there is an expectation from the government and other funding institutions for accountability and good governance to ensure academic integrity and positive contribution for the economic development and advancement of society. Knowledge and developing human capital are the biggest drivers for productivity and economic development of a country and higher education institutions play a critical role in advancing that mandate and policy reforms (Fuente & Ciccone, 2003). Employers and professional associations advocate that higher education institutions need to be deliberate, nimble, and adaptive to the pace of change and develop a workforce built of highly skilled human capital.

Within the larger higher education ecosystem, this study focuses on polytechnic institutions in Canada and examines the practices for succession planning for senior leaders in these institutions. This study defines polytechnic institutions as "institutions which deliver

career-focused applied education that spans trades through advanced degrees, delivered in an environment where students receive hands-on training that enables them to more readily apply their skills" (Polytechnics Canada, 2007). Additionally, Polytechnics engage in applied research, international activities, and partnerships with businesses as an integral part of the organizational mandates.

Polytechnics are gaining popularity because of their success in maintaining high graduate employment rates that contribute to the growth and economic stability of individuals and communities. Partnerships with industry researchers and employers to develop industry-relevant programs and to hire graduates is fundamental to polytechnics' entrepreneurial operating model that promises industry relevant applied education training with an emphasis on applied research. This supply and demand of higher education cannot be refuted (Youssef & Hunter, 2010). Through their partnerships with industry and government, polytechnics have been successful in addressing the gap between labour shortage and the market demand. Polytechnics focus on their mandate of applied learning and achieve this through a collaborative and consultative effort with industry stakeholders to integrate applied research and learning outcomes relevant for the jobs.

The applied research focus within polytechnics offers the opportunity for these institutions to work with small to medium-sized enterprises (SMEs) on innovative ideas and develop and test prototypes, while the SMEs benefit by using the technical facilities, subject matter experts and students (Luke, 2013). Due to the recent economic downturn in Canada and increased regulatory requirements, industry is relying on innovation and technical interventions to elevate operational efficiency and minimize costs. Partnering with polytechnics to conceptualize, develop, and test new ideas serves the SMEs well because of their low cost testing environment and financial viability. The SMEs and polytechnics share the capital and personnel

costs in order to build and test the prototypes – a win-win partnership. The dominance of innovation and technology advancement makes the applied research mandate critical, requiring the right type of leadership to leverage the partnership opportunities and institutional strengths while garnering increased industry and government support.

Polytechnics are adapting to changes in tuition fee models. Since the mid-1990's, a greater proportion of Canadian post-secondary institution revenue is generated as a result of an increase in student tuition fees (especially international student fees in some provinces) and a decrease in government funding (Kirby, 2011; Canadian Association of University Teachers 2009). Rather than increasing funding to the institutions, the federal and provincial governments have shifted the funds towards students and their families or sponsors instead. In some provinces, growth in international students has been mandated in order to develop revenue streams and support the federal government's decision to attract more international students and achieve a target of 450,000 in Canada by 2022 (Canada's International Education Strategy, 2014). Additionally, there has been a tuition freeze or cap by certain provincial governments restricting that revenue channel for the institutions. This shift has resulted in increased pressure on the institutions to maintain their operations and find new ways of revenue generation to offset the increase in operational costs. This phenomenon requires higher education institutions to be innovative and in-tune with technological advancements to stay competitive for operational effectiveness and find new ways to increase student enrolment and revenue, for example by investing in modalities like distance education and programs with alternative credentials. Fong, Janzow and Peck (2016), posit that employers are seeing more business value out of alternative credentials, which are "competencies, skills, and learning outcomes derived from assessment-based, non-degree activities and align to specific, timely needs in the workforce" (p1). Amirault

and Visser (2010) state that "Today's technological revolution, with its order of magnitude advances that have left little of common life unchanged, presents an open challenge to the University to once again "reinvent" itself. Indeed, it could be argued that the pressure for change placed on the University today is greater than any it has faced in any previous historical epoch" (p. 64). The digital disruption has prompted higher education institutions to reimagine and repurpose their teaching and learning practices to make them more accessible, flexible and fluid and cater to the student diversity, while maintaining business viability. This ever evolving and disruptive new norm has impelled higher education executives to reimagine their strategy and organizational structure (Johnson et. al, 2016). These institutions are being more strategic in allocating their limited funding and aligning institutional policies to support innovation, growth, agility and strong partnerships. It is thus critical for these institutions to recruit and develop senior leaders who are politically astute and have both academic and business acumen to respond to the internal and external environment as described above.

Since early 2000, there has been a recognizable shift in the leadership model in polytechnic colleges from a top-down bureaucratic approach of managing, to one that is adaptive, inclusive and progressive to respond to the pace of change (Dinh, Lord, Gardner, Meuser, Liden, & Hu, 2014). In responding to these changes modern leaders are challenged to maintain a balance between an environment of risk-taking innovation and reliable stable growth. Providing a clear vision and operational framework emphasizes the need for senior leaders to have the right mix of qualifications, experience, and a leadership style that is relevant and adaptable to address higher education evolution (Gayle, Tewarie, & White, 2011). Leaders of the current era need to be creative and innovative with an insight that anticipates and understands changes in multiple socio-economic nuances. This study examined the relationships between

strategic plan, leadership and succession planning practices in polytechnic institutes. Complexity Leadership Theory (Uhl-Bien, Marion & McKelvey, 2007) and Transformational Leadership style (Bass & Riggo, 2006) were studied more closely to identify key leadership attributes required to stay nimble and relevant in the 21st century higher education operating environment of polytechnics in Canada.

Research Problem

As higher education becomes more complex and highly competitive due to internal and external influences such as changes in governmental regulatory policies, socio-political disruptions, economic downturn, learner demographics, technology advancements and regulatory reporting and accountabilities, polytechnics institutions are struggling to recruit and maintain strong executive leadership equipped with the right balance of technical competence and leadership attributes to lead in such dynamic times. There is an urgency for strong leadership in polytechnic institutions to assist the process of navigating the complexity in higher education.

Research Purpose

The role of strategic planning, succession planning practices and organizational systems for talent recruitment and leadership development are the key concepts chosen for the study. The main objective of the study is to examine succession planning in senior leadership positions within polytechnic institutions in Canada. Senior leadership refers to the senior management team including president's direct reports, such as, vice-presidents or division heads responsible for key business units; and deans and directors responsible for key academic and non-academic departments.

Recognizing that there are internal and external influences, this study highlights key areas associated with succession planning and recommends a functional model for recruitment,

retention and development of senior leaders to be able to move seamlessly into critical roles, when required. Using multi-case study research methods, this study's findings outlined the current practices that exist in three polytechnic institutes and the way in which these practices support the respective institutional mandates. Interviews with polytechnic presidents and senior leaders elicited perspectives from the executive teams instrumental in spearheading succession planning practices at each institution. By engaging with the leaders in each of the three institutes and reviewing the existing senior leadership recruitment, retention and training practices, this study also examined if there is an alignment between the strategic plan, efforts for leadership development and succession planning within each respective organization.

Research Background

Higher education in Canada is highly decentralized, where the federal government supports research and student funding, while each provincial government implements different systems and regulatory requirements. Despite lacking a national system and regulatory framework for higher education governance, Canada boasts the most educated population with the highest participation rate in the world (Jones, 2014). Jones states that since 1970s there has been a tremendous growth in higher education with an expanded university and non-university sector. For example, British Columbia and Alberta have created community colleges and polytechnics that offered a comprehensive range of specialized vocational programs, as well as offering university transfer programs to allow laddering options into degree programs (Jones, 2014). Provincial governments work closely with task forces constituted of experts from industry, higher education, and government to study provincial needs and to provide recommendations for creating new programs that cater to the required skills within the labor market. Coccoli, Guercio, Maresca, & Stanganelli (2014) advocate higher education institutions

to lead the evolution in higher education due to digital disruption from inescapable social media and other enabling technologies that have transformed the way how information is created, stored, and shared. These institutions play a critical role in driving the change that ensures social, environmental, and safety standards in society through smart and seamless technology interventions.

Polytechnics

Polytechnics are unique within the higher education sector for several reasons. Firstly, they offer highly technical and industry aligned training programs that are regulated by national and provincial accreditation and certifying bodies. Training programs range from apprenticeship, diplomas, and undergraduate degrees in engineering, non-engineering, and business disciplines. To deliver these programs institutions house highly specialized technical training labs and delivery curricula that meet the competency alignment and accreditation requirements. Secondly, polytechnics provide a competency-based, applied education model with high employability rates. Thirdly, they accomplish this while also conducting applied research with an emphasis on innovation (Boggs, 2011). Lastly, these institutions have been successful in leveraging their training capabilities to establish entrepreneurial business arms, which offset diminishing government funding. With their entrepreneurial business model, strong industry partnerships, success in preparing industry-ready graduates that cater to the socio-economic development, Boggs (2011) alludes that polytechnics will be "where the action is" (p. 17). In a time when higher education is faced with declining institutional resources (Barr & Turner, 2013), changing student demographics due to language, ethnicity, gender diversity and varying learning needs and styles (Jepsen, Troske & Coomes, 2014), changing faculty roles due to technology shift (Beetham & Sharpe, 2013) and navigating the complex landscape of the

digital age, polytechnic institutions are taking the time to confirm their identity, mandate, and operational focus to navigate these complexities.

There is an increased pressure to deliver outcome-based education with strong viability factors like student recruitment and retention; graduate employment rates; and cost per full-load-equivalent, a measure for student count within the credential system. Combined these create an urgency for each polytechnic institute to evaluate its business operating model and organizational structure. These institutions are required to be self-reliant with innovative and business-focused strategies to stay nimble and financially sustainable. There is an expectation from higher education to be leaders in knowledge creation and dissemination. Recognizing diverse learner needs, effective technology integration, business intelligence and use of data analytics have become critical to the success of these institutions. Senior executives in polytechnic institutions recognize these factors and realize the need for a unique leadership skillset with a balance of relevant qualification and experience in industry and academia. Hiring and retaining competent leadership talent that aligns with the institutional priorities continues to be the focus within these institutions, leading to the central subject of this study of succession planning practices.

Leadership Recruitment and Retention Challenges

Higher education is challenged to stay nimble and agile without a robust system of building and retaining a leadership pipeline with individuals who possess 21st century skills and attributes to be successful and are committed to upholding the organizational values and mission. In addition to the baby boomers retiring and the growing leadership gap, the need for succession planning and leadership development is prompted by emerging trends. For example, organizational restructuring efforts are successful and seamless when institutions are positioned to place the right talent in specific critical roles (Lamoureux, Campbell, Smith, & Centre for

Creative Leadership 2009). Absence of this planned talent pool can result in disruption, delays and loss of productivity. Lamoreux et al. (2009) also posit that compared to developing an internal talent pool, hiring external candidates to fill critical senior leadership positions is an expensive proposition due to the time and resources required. This has especially been challenging at times during economic downturn when there are many qualified applicants for the same positions. Marshall (2006) points out that leadership development in higher education is 'not a simple process... rather, it is a complex, multifaceted process that must focus on the development of individuals as well as the organizational contexts in which they are called to operate' (p. 5). Sheppard, Sarros and Santora (2013) suggest that with this evolving and complex higher education landscape, there is an urgency for leaders to be politically astute with a fiscally strategic mindset and well-versed with industry relevant business models, in order to create an institutional culture of fiscal and operational excellence and resilience. (Sheppard, Sarros & Santora, 2013).

Recruitment and retention of senior leaders with this desired profile has been a challenge and institutions are faced with quick turnovers in key leadership positions and a constant revolving door to find the right fit (Duree, 2007). The situation of gaps in leadership positions is worsened due to the high retirement rate of baby boomers. A report from Community College Leadership Development Initiative (2000) suggests that in addition to the turnover rates, there was a consistent drop in the pool of qualified applicants for executive positions. Kowalewski, Moretti, and McGee (2011) state that the shrinking talent pool of leaders with the desired academic, business and professional attributes may be due to a number of factors that include: (a) complex position profile and job demand, (b) low salary compensation in comparison to industry, (c) lack of clarity and support around leadership progression within an organization, (d)

organizational culture and leadership governance models, and (e) lack of overall organizational appetite for leaders to be risk-takers, adaptive, and entrepreneurial to embrace the 21st century complexities (Kowalewski, Moretti, & McGee, 2011). Additionally, the work culture has shifted with the influx of millennials and Gen Zs in the workforce. Their desire for flexibility, sense of loyalty, independence, quest for new forms of knowledge and, reliance on technology and social media requires senior leaders to deal with the generational differences and support them in their professional endeavors. Human Resource departments in higher education institutes must revisit their recruitment, onboarding, and performance management and employee development activities to cater to the different generations within institutions.

Leadership Management Considerations

Rothwell suggests that managing leadership talent through a formal, well-planned and strategically focused succession planning effort is of paramount importance for higher education (Rothwell, 2011). Salminen (2003) advocates for higher education institutions to develop professional academic management that responds to the massification effect that was discussed earlier, and complex business decision-making processes. "Management processes are much more complicated than they were previously and that before specific mechanisms of resource allocation are contemplated, an institution must establish that it has effective leadership which is capable of orchestrating a comprehensive institutional planning process" (Salminen, 2003, p. 66). There is an increased awareness of this urgency amongst executives in higher education institutions and they recognize the need to develop their leadership bench-strength through deliberate and strategically aligned recruitment and retention activities that link into the organizational performance management framework.

Salminen (2003) recommends the leadership bench-strength include leaders who are qualified and a good fit for key positions to lead the organization stay on the path of growth and sustainability. This often requires making bold strategic decisions to realign the organizational structure and operations towards the shifting realities. Additionally, due to the complex environment with multiple competing priorities the senior leaders recognize the need for leaders in critical roles to possess a diverse skills set and experience in academic and administrative aspects of core business. The leaders must possess a robust and balanced outlook to lead the organization amidst digital disruption and other external and internal influences. These leaders play a significant role in crafting and executing the institutional vision and strategy by managing change, ensuring operational efficiency, and engaging stakeholders.

Research Framework

Higher education in Canada is regarded as a vehicle for securing national or regional economic objectives, such as increasing economic efficiency, training more productive workers, and facilitating business innovation. This is due to the belief and wide acceptance that higher education contributes to the knowledge society fueled by information, knowledge, and skills. The landscape of public-sector higher education is becoming more diversified and, to some extent, more stratified (Kirby, 2011). Higher education in Canada constitutes universities and non-universities. There is no standard definition for university and it varies from province to province. They offer the traditional bachelors, masters, and doctoral programs and anything in between. Non-universities are clusters of colleges and polytechnics, where polytechnics are hybrid institutions. They have evolved out of the college system, include apprenticeship programs and have become a distinct part of the institutional landscape (Usher, 2018).

According to Usher (2018) polytechnics have strong professional affiliations, are technologically sophisticated, active in applied research areas and equipped to deliver bachelor level programs. They are members of *Polytechnics Canada*, a federal consortium. Due to their diverse domestic and global operations, industry-aligned, technology-integrated and applied-education model, polytechnics require well-established administrative and entrepreneurial systems to co-exist. These concurrent systems have competing drivers. Administrative systems call for creating regulated systems and processes that lead to operational efficiencies and are risk averse, whereas entrepreneurial systems use creativity, innovation and risk-taking as the fundamental principles to explore and create new growth opportunities (Uhl-Bien, Marion, & McKelvey, 2007). The productive tension between the two systems to co-exist and deliver their strategic mandates make polytechnics highly complex organization and require leadership that is well-versed with, not only the institutional strategic and operational nuances, but also in creating culture of collaboration, innovation and accountability. Their success depends on strong executive and senior leadership who have the vision for growth and sustainability, can navigate through internal and external complexities while managing industry, employee and learner engagement. The need to build an adaptive leadership bench strength through formal and informal efforts makes succession planning unique and an urgency for polytechnics.

This study examined five key factors that influence succession planning and leadership development in a Canadian polytechnic setting. These include: (a) clarity of institutional goals and strategic priorities (Kesler, 2002), (b) alignment of organizational priorities and type of leadership required with technical and leadership competencies (Leibman, Bruer, & Maki, 1996), (c) technology infrastructure and systems to track and evaluate succession planning efforts (Fulmer & Conger, 2004; Rothwell, 2011, (d) ongoing communication by leadership to

communicate and participate in the succession planning process (Fulmer & Conger, 2004; Kesler, 2002; Rothwell, 2011) and (e) impact of human resource policies and guidelines.

Succession Planning within the Digital Paradigm

The primary intent of education is to prepare individuals for the workforce and to offer options for lifelong learning for personal growth and development. "As a whole, our structures of learning have become more utilitarian" (Postman, 1995, p. 27). Higher education institutions need to focus on realigning their educational mandate to support increased access to education for the 21st-century learner via current information communication technologies. These learners, being digitally engaged, constantly connected, socially driven, and visually inclined, appreciate digital choices to access learning. This changing learner demographic requires investing in scalable technology platforms, and shifting in design, delivery methods, and purposes of teaching and learning (Irvine, Code & Richards, 2013). Technological advancements and academic research influence discussions of online learning. Higher education institutions, including polytechnics, invest in knowledge ecosystems, such as iSmart campuses which are integrative and intelligent (Ng, Azarmi, Leida, Saffre, Afzal, & Yoo, 2010). These institutions must be equipped to critically rethink their teaching and learning models focused on technology interventions, learning outcomes, and task competencies to enable access and flexible delivery formats and to compete in the global marketplace (Altbach, Reisberg, & Rumbley, 2010).) This forms the fundamental challenge faced by the polytechnics that will be explored throughout this study).

Leaders of these institutions are faced with the demands associated with the technological exploitation such as personalized learning, higher attainment standards, higher completion rates and improved retention and global mobility, all to support our knowledge economy (Beetham &

Sharpe, 2013). These leaders continue to respond to the changes by reimagining and readjusting operations to meet declining budgets for example, " by increasing class sizes, hiring part-time, adjunct, or teaching-stream faculty, freezing salaries and limiting benefits" (Steele, 2010, p.37), resulting in tense unionized environments within higher education institutions. Steele (2010) states that "labour tensions on Canadian campuses grew in 2008, with support staff strikes at a number of the universities and colleges" (p.38). Senior leaders within polytechnics find it extremely challenging to stay the growth and operational efficiency course, amidst provincially supported labour unions as well as faculty associations and so must be strong in managing relationships while being politically astute.

As higher education institutions adapt to the digital revolution, they continue to find ways to create and disseminate new knowledge using digital methods and emerging technologies, apply social media for student, employee and public engagement, and develop and share open education resources for teaching and learning and make huge investments in securing the required technology infrastructure (Weller & Anderson, 2013). Owoc and Marciniak (2013) posit that smart post-secondary institutions strive to invest in smart people, smart building, smart environment, smart governance and a knowledge grid (Owoc and Marciniak (2013). Polytechnics continue to adapt to the changes and invest in technology infrastructure and learning management systems to develop training programs that are customizable and can be delivered in different formats. The applied research and hands-on training mandate requires these institutions to stay abreast with the technical reforms and industry requirements, making curriculum development, training and development a strategic priority. Changes in the online teaching and learning environment is one of many challenges that polytechnic institutions are adapting to. For an organization to respond to these disruptive technologies, adopt a delivery

model and its associated technologies and infrastructural requirements, the senior leadership needs to be well-versed with the supporting pedagogical principles and business model (Beetham & Sharpe, 2013). Senior leadership within these institutions need to be cognizant of these critical drivers, have the appropriate training and accordingly resource and position the institutions for growth and sustainability. The study examines interdependencies between strategic planning and leadership recruitment, retention and development of leaders, and recommends succession planning strategies for organizational stability.

Research Question

The study focuses on the relationship between strategic planning, leadership theories and, systems and processes in place that govern the succession planning process in a polytechnic environment. The key research question for the study is:

What is the role of succession planning in achieving organizational stability for polytechnic institutes in Canada?

Sub-questions include:

1. What is the relationship between the institutional strategic plan and leadership in polytechnic institutes?

2. What type of leadership is required to drive the polytechnic mandate?

3. What organizational features could advance the practice of succession planning in polytechnic institutes?

Together these questions guide the design and deployment of this study.

Significance of the study

Due to economic volatility and cycles of booms and bust, there is a concern that polytechnic institutes will lose a significant number of key positions either due to retirements or

to moves other jobs within the industry. Between 2000 and 2020, the percentage of employees who are 55 years of age or older will shift from 13% to 20% (Meister & Willyerd, 2010). A study done by American Association of Community Colleges (AACC) in 2013 stated that 75% CEOs of community colleges would be retired by 2023. Although succession planning is clearly needed, most educational institutions lack the dedicated resources and targeted planning needed to recruit and develop future leaders (Drew & Ehrich, 2010).

The significance of this study is two-fold. First, this study examines various internal and external factors that impact the overall operational success of polytechnics and highlights the urgency and uniqueness of succession planning. It considers the importance of institutional strategy and leadership within the organization, and if these play a part in the institutions' stability and sustainability. Second, this study focuses on key considerations for recruitment, retention, and development of senior leadership positions in polytechnics and how these support their distance education portfolios. It examines which type of leadership traits complement the senior leadership succession planning efforts within polytechnic institutions. Complexity and transformational leadership theories were explored for the study. Furthermore, the study presents how these polytechnics, each with a strong distance education portfolio, build their leadership pool and plan for succession in key positions. The three polytechnics chosen to participate in the study were selected based on their geographic location, size and student diversity within the Canadian context.

Remainder of the Study

Chapter 2 is a review of the literature of relevant research strategies, polytechnic governance, succession planning, strategic planning, and leadership development prevalent in 21st century. The review covers the origins of succession planning and the influence of social

changes, technological advances, economic conditions, new political environments, and the changing demographics of the workforce; all of which has ultimately led to an evolution of succession planning strategies. The literature review also includes the impact of globalization and massification in higher education leading to shifting of internal culture, need for academic leadership to strengthen its position in distance education and how leadership bench strength matters when making decisions around succession planning. The literature forms the fabric of the research and carries through into later chapters describing the processes of data collection, analysis, and conclusions.

Chapter 3 presents the research methodology for the study, including the research question, design, data collection, analysis, ethical issues, limitations, and validity techniques that were used to realize the significance of succession planning efforts for senior leadership within higher education institutions. More specifically, the chapter includes how the study was carried out including the data collection and analysis processes and tools. A multi-case study including a thorough analysis using open, axial coding and selective coding was used to provide more comprehensive perspectives and recommendations. Finally, the chapter includes a brief description of the research instruments used for the study. These include an interview guide, summary notes from information gathered from the websites and a checklist of planned research activities and deliverables.

Chapter 4 provides the findings of the study following data collection and analysis. The chapter includes detailed descriptions of the participating institutions, restates the research questions and then shares how various themes emerged from information gathered from the websites of each polytechnic, as well as the interviews with the senior leaders. Each of the

themes is then further detailed with supporting quotes from participants. Finally, the chapter summarizes the alignment between the themes and the research questions.

Chapter 5 includes the discussion, i.e. the interpretation and highlighting the significance of the findings recognizing the facts already known from the literature review about the research problem being investigated. The chapter also includes an explanation of new insights that emerged during the study and how the study advanced the researcher's understanding of the research problem following the literature review.

Chapter 6 presents the conclusion and recommendations of the study. This chapter includes researcher's subjective summarization of key points drawn from the discussions and recommendations for new areas for future research. The chapter links the interpretation of the findings of the study about current succession planning practices in polytechnics with the results drawn and how these lend themselves to the research questions. The researcher offers recommendations for institutions that may want to address leadership development through deliberate and systemic succession planning processes and acknowledges the study's strengths and limitations. Finally, the chapter concludes with future research considerations in the area of succession planning.

Summary

Higher education massification, globalization, and the significance of digitalization, knowledge and data analytics to make education more relevant and learner centered are a few 21st century nuances impacting the higher education landscape (Kouzes & Posner, 2006; Altbach, Reisberg, & Rumbley, 2010). Higher education institutions without deliberate strategies for attracting, developing and retaining existing or new talent could suffer leadership shortages in the future. Succession planning is about developing employees and supporting them

in their careers to ensure the organization has the right talent for key positions. Effective succession management enables institutions to react and adapt quickly to the changing environment. Succession planning has evolved from being replacement planning to a more diligent and rigorous process, with a much broader scope from making strategic talent acquisition choices while recruiting for senior leadership positions. This strategic approach includes evaluation of the organizational effectiveness of these positions and accordingly aligning the institutional systems and processes to support their development (Hartnell, Ou, & Kinicki, 2011).

The current research around succession planning suggests a few factors that may impact the desire and extent of succession planning efforts within an organization. These factors include government funding, economy, competition with other post-secondary institutions, critical positions requiring backups on a temporary or permanent basis, required leadership and job competencies for these positions, training and development of high-potential employees for advancement by narrowing developmental gaps between present performance and future potential and systems, and tools required to keep succession planning sustainable (Groves, 2007; Rothwell, 2010).

Chapter 2. Review of the Literature

Polytechnics

Polytechnics are not-for-profit, degree-granting, post-secondary institutions that offer programs that are multi-skilled, multi-disciplined and industry-responsive (https://www.polytechnicscanada.ca). Youssef and Hunter posit, polytechnic education embodies professional education through an applied learning process of knowledge-sharing and skill development through cooperative and blended learning opportunities. Industry partnerships are fundamental to advise, mentor and support during various stages of design and delivery of technical training and applied research offerings (Youssef & Hunter, 2016). Polytechnic education is "career-focused" with an emphasis on applied education that spans trades through advanced degrees, delivered in an environment where students receive hands-on training that enables them to more readily apply their skills" (Polytechnics Canada). With their applied research mandate and focus, polytechnics have become an integral part of Canada's innovation environment, supported at the federal and/or provincial level. Through their applied research facilities / centers, these institutions "offer one-stop-shop for industry liaison, research services, technology diffusion and knowledge transfer – and can offer practical, timely and cost-effective solutions" (CARA, 2017). Due to their strong fiscal and strategic governance and success in graduate placements, these institutions are gaining popularity as the future model of higher education. Leveraging their lab facilities, government and industry networks and program specializations, polytechnics have demonstrated high program completion and graduate employment rates while providing solutions to address labor demands for a job-ready workforce.

It is noteworthy that while polytechnics have this profile and performance attributes, like other higher education organizations, they are constantly maneuvering their strategic and

operational focus to adapt to changing norms. Polytechnics receive their operational funding from provincial governments and tuition fees, as well from the federal government through transfer payments, research grants, and student assistance through loans, grants and tax credits (Usher, 2018). These institutes are faced with the challenge of reduced government funding and their reliance on tuition revenue, and therefore continue to exploit new ways of enrolment growth and revenue generating opportunities. The Boards and executives at the polytechnics recognize the urgency to develop the leadership bench strength that can balance operational governance and entrepreneurial endeavors amidst all the technological changes and economic volatility.

Barnett (1998) alludes to the polytechnic model of educating as a successful one in which 'individual learning and development are to be welcomed ... for their contribution to the growth of economic capital' (p. 15). This model caters to the 'growing clamor from industry for the graduates it employs to have more work-related skills' (Barnett, 1998, p. 158). The model resembles the triple helix model of university - industry – government where the institutions are replacing the old models where internal institutional relationships, economy and policies predominated the governance with one that supports creation of knowledge base and program competencies in consultation with the industry experts (Etzkowitz, Webster, Gebhardt, & Terra, 2000). As higher education adjusts to the new norm of industrial innovation, the triple helix model, a collaborative dynamic between government, industry and academic institutions, highlights the role of higher education institutions as knowledge producing and disseminating organizations. This model has been instrumental in the success of polytechnics in developing and leveraging entrepreneurial partnerships to successfully create and deliver knowledge and benefit all stakeholders including the industry, learners and government.

Polytechnics benefit from the applied research focus of the technical support for innovation from small and medium enterprises, and the training of highly qualified and skilled personnel, who gain innovation skills complimentary to their program outcomes. The applied research services offered by polytechnics offer a strong platform on which to collaborate with industry and government to develop and leverage the innovation skills that ultimately enhances the research capability of the organization and strengthens the innovation capacity of Canada. The learning outcomes associated with college education, as augmented by experiential learning such as applied research, will lead to greater innovation capacity in partner firms, as well as those firms that employ graduates equipped with innovation literacy.

In the current knowledge economy with unprecedented information technology evolution, governments, industry and higher education institutions are impacted worldwide and require leaders with unique set of attributes and experience. As the current higher education landscape evolves, institutions will require innovative, inter-disciplinary approaches and solutions to overcome the challenges and maximize opportunities (Jacob, 2015). For example, with changing learner and faculty demographics and the need for education to be more accessible anytime, anywhere, technology interventions and teaching shifts have helped faculty members from different fields of study and even different universities collaborate through a variety of co-instruction approaches. Use of mobile technology, Open Education Resources, online and hybrid delivery mediums quickly becoming the global norm for higher education instructional practices (Ehrenberg, 2012). Moore and Kearsly (2011) state, “as institutions become more understanding about the benefits of adopting a total systems approach to distance education, there will be impact on teachers, learners, administrators, and policymakers and significant changes in the way that education is conceptualized, funded, designed and delivered.

As polytechnics continue to adapt to the changing environment particularly due to the funding challenges, they are exploring innovative ways of managing enrolment growth that is sustainable. Distance education is a critical approach to addressing the growth challenges by providing access to education to large number of learners irrespective of geographical location, time and place. In order for this approach to be successful institutions need to invest in resources that support various aspects of distance education, including, identifying and understanding the needs of target audience, system and technology infrastructure to deliver the content, recruitment, retention and training of instructional staff, confirming curriculum design and assessment frameworks and data analytics to measure learner success and program completion. For distance education portfolios to be successful, robust management of operations and the role of strategic planning and leadership has been extremely important to stay abreast with the rapidly evolving field of distance education (Beaudoin, 2004). Polytechnics are gravitating towards a systems-view of distance education by establishing an integrated model of technology infrastructure, learning management systems, curriculum design and development processes, and teaching and learning resources to support distance education and blended learning for diverse learners. This integrated approach has allowed them to leverage their curricula and technical labs for training on and off-campus and contributing to the institutional growth and reputation. The transition from fully on-campus, instructor-led training to distance education and blended learning capabilities has resulted from the vision and strategic efforts of leaders in these institutions. Polytechnics need to continue to invest in sustainable leadership development and succession planning initiatives, and require commitment from senior executives, including the investment of personnel, time and physical space (McCoy & Gardner, 2012). The sections

below elaborate on the concepts of strategic planning and leadership and highlight their alignment within the succession planning context.

Strategic Planning

The key success drivers for polytechnics and colleges alike are investing the time and resources to define themselves, have a key differentiator and establish a niche (Kyvik & Lepori, 2010). Sporn (2007) stresses the importance of strong governance and administration in an institution's ability to adapt to its environment. Polytechnics, like other successful institutions, need to ensure they are guided by a well-defined strategic plan that provides the framework to achieve their institutional priorities by being fiscally responsible and working with limited resources; while staying nimble and abreast of the changes in government, technological, industrial and cultural arenas. Strategic planning and management must evolve by predicting and positioning for the future and allocating resources with strategic priorities (Anderson, 2010). Salminen proposes the need for higher education institutions to develop professional academic management, and states that "because of the increased complexity of university decision-making, management processes are much more complicated, requiring leaders to have academic and administration experience. Performance indicators, personnel policies and strategic choices have to be integrated in new ways into management processes and practices in each university" (Salminen 2003, p. 66). Salminen goes on to suggest that it is imperative that an institution have effective leadership capable of designing and executing a strategic plan and then allocating resources, all within a disciplined approach in order to manage the environmental influences and stay strategically nimble and operationally efficient.

Polytechnics are publicly funded higher education institutes that have a different organizational make-up from businesses and are required to follow much more rigorous

operational governance (Barden, 2008). Their missions, governance structures, and collaborative culture requires the colleges and universities to operate differently than businesses. Collins (2005) examined the characteristics of great institutions and suggests that "in the social sectors, money is only an input, and not a measure of greatness" (p. 5). Instead of measuring financial returns, social sector institutions, including institutions of higher education, tend to measure their performance relative to how well they are meeting their mission (Collins, 2005). While there is an increased emphasis in hiring the right leaders and aligning systems and processes to knowledge creation and distribution, leadership models at polytechnics are struggling with internal and external changes to accordingly position the institutions with the pace of change. In the absence of a deliberate succession planning effort, this challenge takes a different dimension and often impacts the growth trajectory. The polytechnic institutes need to recognize that leadership recruitment, training and development is fundamental to the success of the organization as such must have a key place in the institutional strategic plan.

Leadership

Along with a well-defined strategic plan, institutional success is dependent on the leadership bench strength. Sporn (1996) advocates better committed leadership being essential to institution adaptability and leaders' needs to step up and make proactive decisions about the direction institutions should take and the goals they should strive to achieve. Twenty-first century leadership needs to be innovative and in tune with technological advancements to stay competitive and operationally efficient. Modern leaders are struggling with embracing innovation and failing to create the governance model that encourages an environment of risk-taking and innovation while providing a clear vision and operational framework for growth and success.

Leadership roles within the polytechnic institutions resemble those in private and public sector institutions with demanding portfolios, organizational mandates and increased accountability, and their leadership decisions have a far-reaching impact on their respective institutions and community (Vaughan & Weisman, 2002). As the higher education landscape has evolved, so has the need to examine the leadership styles and attributes. Leaders of the current era need to be creative, and innovative with the insight to anticipate what is going to happen next and understand the multiple socio-economic nuances and influencers. To stay progressive, senior leaders within polytechnics must be open to change and adaptable to the changing organizational landscape, sponsor technological advancements and promote knowledge-centered business models (Uhl-Bien, Marion, & McKelvey, 2007).

Leadership Theories

The previous sections of this study presented the challenge that polytechnics face due to the dynamic changes in the higher education sector. This has prompted them to adopt the "entrepreneurial university mindset" (Etzkowitz, 2004) to manage and leverage industry and government partnerships while striving for academic integrity through innovation and commercialization of knowledge (Gibb, Haskins, Hannon & Robertson, 2012). This calls for building the leadership capacity that supports innovation and research at all levels, to navigate through the complex environment. More specifically, the leaders at polytechnics must be administratively competent and skilled in the areas of academics to challenge the status quo and adopt progressive teaching and learning practices through innovation and research. The leaders must also have a tolerance for ambiguity while managing activities associated with fundraising, strategic planning, diversity and multiculturalism, relationship management, employee engagement and government advocacy (McClenney, 2001; Shults, 2001). The leadership style

and philosophy of today‘s leaders are the direct result of influence, mentoring, and training by leaders of the 1960s and 1970s (Vaughan & Weisman, 2002). Vickers (2007) agreed that the success and reputation of today‘s community colleges are the result of the leadership provided to institutions by their earlier leaders.

Furthermore, due to the diversity of students and employees, leaders must be proficient in dealing with the employee engagement, the social and humanistic aspects of the business and have the technical and business acumen. The researcher proposes to examine the Complexity leadership and Transformational leadership theories within an entrepreneurial higher education setup as these seem to align with the required business and operational focus and the need to empower and engage the employee group. The following sections elaborate on the two theories and their relevance to the current circumstances and operating environment.

Complexity Leadership Theory

Complexity Leadership, a model developed by Uhl-Bien and Marion (2007), represents the behaviors that leaders of 21st century institutions exhibit. Unlike the industrial age when the goals of institutions used to be to maximize production while being resource efficient in a highly structured top-down hierarchical system, the focus now has shifted to continuous growth by staying abreast of, and adapting to changes triggered by socio-political, economic and technological innovations. Due to the external and internal influences, these institutions have become highly complex and operate like systems with lot more interdependencies and interconnectivities and requiring leadership well-versed with realities, leading the institution towards a sustainable future (Scharmer & Senge, 2009). Uhl-Bien, Marion,and McKelvey (2007) posit that complexity leadership helps in transforming the context and culture of institutions to achieve the desired administrative and adaptive changes within the organization.

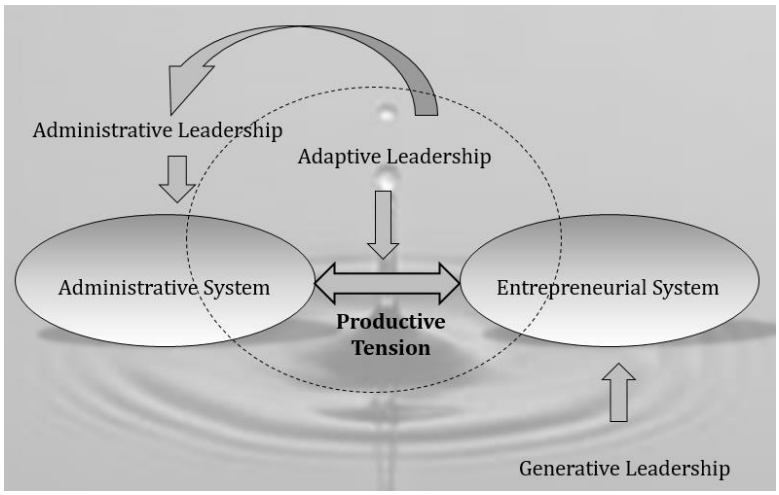

Figure 1. Complexity Leadership. Adapted from Uhl-Bien, Marion, and McCelvey (2007).

Complexity Leadership Theory (CLT) is a framework for leadership that enables the learning, creative, and adaptive capacity of complex adaptive systems (CAS) in knowledge-producing institutions or organizational units. CLT can be conceptualized in three broad categories – 1) Administrative leadership based on traditional, hierarchical bureaucracy, 2) Adaptive leadership, on which emergent change activities depend, and 3) Generative leadership, which structures and enables conditions that allow CAS to address creative problem-solving, adaptability, and learning (Uhl-Bien, Marion, & McKelvey 2008).

CLT seems appropriate for required leadership reform and success in the complex polytechnic environment. The environment has become highly complex with multiple competing priorities like addressing student and employee recruitment and retention, creating leading edge and future oriented training programs, staying competitive and strengthening industry relationships including global and national partnerships for growth and sustainability. Complexity leadership centers on developing leaders who are bold to challenge the status quo, and who are creative and innovative with insight to anticipate what is going to happen next and understand the multiple socio-economic nuances and influencers.

Transformational Leadership Theory

James MacGregor Burns (1998), the father of transformational leadership theory, defined transformational leadership as when "one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality" (p. 20). Transformational leadership is proactive where the leaders stimulate and inspire followers to achieve extra-ordinary outcomes. Transformational leaders develop a vision for the organization, drive commitment and trust among workers, and facilitate organizational learning while providing opportunities for personal and professional growth for each employee. Transformational leadership (Bass & Riggio 2006) has been the most well-known and frequently researched theory of leadership over the last 20 years. Leadership is recognized as an interactive process, which transforms both leaders and followers resulting in positive organizational outcomes. Transformational leaders act as role models, provide mentorship and encourage learning and development of their followers. Transformational leadership has four dimensions including idealized influence, individual consideration, inspirational motivation, and intellectual stimulation (Bass & Avolio, 1997). Idealized influence refers to whether the leader is confident and authentic enough to model the desired organizational values and principles. Individualized consideration refers to being a visible leader and being present for followers to guide them with their ongoing needs and inculcate confidence. Inspirational motivation refers to leaders inspiring their followers to have stretch goals and create an environment to support their efforts in achievement of those goals. Intellectual stimulation refers the ability to create an environment where the followers feel empowered to think out of the box and challenge the status-quo to achieve the personal and institutional objectives. To summarize Bass and Avolio (1997), transformational leaders behave according to high moral and ethical standards and so inspires

confidence and loyalty in followers. As leaders they hold a strong vision for the future, create enthusiasm, build confidence and inspire followers. These leaders also offer intellectual stimulation by challenging the organizational norms and encouraging the subordinates to be creative and innovative. Most importantly these leaders believe in personal and professional development of the subordinates on their team, and act as mentor or coach and constantly consult with subordinates to reach consensus on key initiatives. These characteristics make transformational leadership an appropriate choice and desired leadership style in polytechnics.

Due to the disruptive landscape with the lack of predictability of future developments, polytechnics require leaders who have the intellectual caliber and experience, and whoalso have strong emotional intelligence and transformational leadership qualities to stimulate and inspire followers to achieve extra-ordinary outcomes (Harms & Credé, 2010). Transformational leaders develop a vision for the organization, drive commitment and trust among workers, and facilitate organizational learning while providing opportunities for personal and professional growth for each employee.

Succession Planning Definition

A strong leadership with a clear vision and strategy, disciplined approach, proactive planning and a progressive and engaged workforce are all contributing factors that help an organization advance and stay productive and sustainable in a highly competitive environment (Miller, 2001). Because leaders play a vital role in advancing the institution's strategy and mandate, recruitment and retention of leaders is fundamental to the growth and sustainability of an organization. As stated earlier, leaders need to be well-rounded with the right balance of technical competence, business acumen and leadership attributes. Rothwell (2010) suggest that while hiring the right talent, with the right fit and skills set is important, it is equally important

for institutions to plan for talent to assume key leadership positions or backup positions on a temporary or permanent basis. This process of making sure of continued effective performance at all levels and ensuring organizational stability by making provision for the replacement and development of key people is termed Succession Planning (Rothwell, 2010).

Succession planning and leadership development share a common goal of getting the right skills in the right place. There have been numerous studies done on succession planning leading to various perspectives and eventually leading to various definitions. Heuer (2003) simply defines succession planning as “preparing people for leadership positions” (p. 3). Succession planning is also defined as "any effort designed to ensure the continued effective performance of an organization, division, department, or work group by making provisions for the development and replacement of key people for key positions and work activities over time" (Rothwell, 1994, p. 5). Rothwell (2007) shared a subsequent definition of succession planning as “a deliberate and systematic effort by an organization to ensure leadership continuity in key positions, retain and develop intellectual and knowledge capital for the future, and encourage individual advancement” (Rothwell, 2007, p. 29). For polytechnics that are governed by publicly appointed boards during such unpredictable times, developing and retaining senior leadership talent is seen as an area of considerable risk and requires a deliberate and systematic effort. For the purpose of this study, succession planning will be defined using this last definition from Rothwell.

Succession Planning Evolution

Fayol (1949), a pioneer in leadership management, classified the key functions of an organization into six areas (1) Technical activities (2) Commercial activities (3) Financial activities (4) Security activities (5) Accounting activities and (6) Managerial activities (p.3). He

believed systematic leadership planning must include identifying the key responsibilities for leadership roles, hiring the individuals with required the competencies for the desired role and providing training and development support for individuals being considered for succession. Estedadi and Hamidi (2015) posit that "any succession plan will have the following functional objectives: (1) identify and select best fit candidates for leadership positions; (2) assure effective leadership development; (3) preserve organizational knowledge and intellectual capital, and (4) maximize retention and minimize turnover of top-performing employees" (p. 45).

Due to the challenges faced by polytechnics, there is an urgency to build a leadership bench strength and a significant interest in succession planning that focuses on diversity and depth of talent rather than relying on a single emergency successor. The process of succession planning has subsequently evolved from a simple back of the envelope planning process in the 1960s to the desired model that is highly strategic, objective, and formalized to develop broad talent pools (Byham, 2002). Employee recruitment and succession planning has advanced from being replacement planning to a more diligent and rigorous process with a much broader scope from making strategic talent acquisition choices to evaluating organizational effectiveness of these positions leading to leadership development decisions (Groves, 2007). Wolfe (1996) posits that "replacement planning mode focuses on risk management" whereas the "succession planning mode works toward continued leadership and talent building" (p. 16).

Senior leaders within institutions realize that "the continued survival of the organization depends on having the right people in the right places at the right time" (Rothwell, Jackson, Ressler & Jones, 2015, p. 8). The impact on organizational continuity would be extremely disruptive if a successor was suddenly required and none had been identified. Leadership

replacement planning is required of management to ensure organizational effectiveness and avoid putting persons in positions for which they were not ready (Rothwell, 2011).

Depending on the need and circumstances, an organization may choose replacement planning versus succession planning. The shift from replacement planning to strategic succession planning has led to the phenomenon of talent management, which essentially shifts the focus from single succession candidates to groups of candidates who become part of the organization's talent pool (Rothwell, 2005). According to Schiemnn, "talent is the collective knowledge, skills, abilities, experiences, values, habits and behaviors of all labor that is brought to bear on the organization's mission" (Schiemann, 2014, p. 2). Talent management, also seen as smart succession planning, is a function that manages critical talent and associated activities and responsibilities within an organization. It includes the complete lifecycle of activities for recruitment, onboarding, training and development to performance management of critical hires.

Conger and Fulmer explain succession planning and talent management that "Great leaders at the top of an organization actually begins in the middle, where the high-potential managers acquire the broad range of skills they need to succeed in more senior roles; combining succession planning and leadership development in a comprehensive process for finding and grooming future leaders at all levels of organization" (Conger & Fulmer, 2003, p. 76). Groves posits that best practices in successful institutions include exposing middle-managers and senior leaders to action-learning projects that are delivered through organizational-wide forums. In addition to enhancing high potentials' visibility across the organization and developing their networks, these forums are created to simultaneously develop high potential managers, expose them to multiple organizational stakeholders and develop their understanding of operational activities of the organization (Groves, 2007).

Succession Planning Strategies

Following the recession from 2007-2009, larger institutions with sound financial balance-sheets were in a stronger position to hire by poaching employees from smaller, less productive and lower-paying competitors (Moscarini & Postel-Vinay, 2016). They clearly took advantage of the upswing in the economy to hire the desired talent at higher salaries. The same employers during the downturn had major workforce reductions without a huge negative impact on their operations. This scenario poses challenges for smaller institutions, who at the time of the upswing are less capable of poaching from other institutions and downsize less in the recession. This limits their ability to revitalize their leadership bench strength during times when larger companies are able to. As public funded institutions, the economic volatility poses similar challenges for polytechnics as well. Polytechnics must be deliberate with sound talent management strategies to be able to navigate the economic volatility without losing the leadership bench strength and operational productivity.

To address leadership recruitment and retention challenges, various strategies are being considered by executives, one of which is the concept of an acceleration pool, a popular option for institutions to develop executive talent (Byham, 2002). Byham suggests that through an acceleration pool, the institutions develop candidates for all the executive level positions rather than targeting one or two hand-picked people for each executive position. They invest in developing a talent pool that can be leveraged when a leadership position becomes vacant. “Pool members are assigned to stretch jobs and task forces that offer the best learning and highest visibility, have an assigned mentor, receive more feedback, coaching and training, and participate in special developmental experiences such as university executive programs and in-company action learning sessions” (Byham, 2002, p.11).

Polytechnic institutions focus on hiring leaders that have a good blend of technical, business and leadership skills. Their reliance on labor market and economic volatility has led the polytechnics to look at multiple ways to build their bench strength. While succession planning is a more deliberate process of managing talent within an organization, Human Resource (HR) or Talent Management (TM) departments are adopting flexible recruitment and retention strategies to align with institutional mandate and cater to the changing employee demographics (Bidwell, 2011). Figure 2 shows popular strategies used by institutions to hire, develop and manage their talent pool. External hiring and internal progression are two such strategies that continue to be the focus of many research studies.

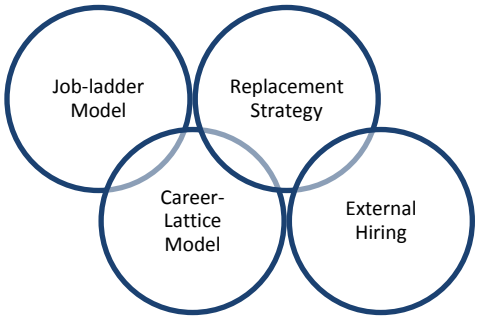

Figure 2. Human Capital Management Variables.

Job-ladder model. Job-ladder model refers to the traditional internal progression model within an organization that uses a series of jobs from the ones with the least responsibility to those with the most responsibility that someone can do within an organization or profession. This model also is closely related to occupation and industry-specific human capital which requires individuals with task-specific competencies and experience (Gibbons & Waldman, 2004). For example, power engineers in Canada need to undergo five specific levels of training and attain associated credentials to be qualified to work in this highly regulated industry. The hiring managers follow a job-ladder model to measure the competence of the individuals and

help them through internal progression. This seems like a viable model that meets the safety, accreditation and other regulatory requirements.

Replacement strategy. Replacement strategy includes a process where institutions identify people who can replace key positions during emergencies. The replacement could be for the short-term or long-term depending on the position and its requirement to ensure the institution is able to maintain its operational responsibilities. Replacement opportunities are not treated as promotions, rather an interim solution that enables institutions to invest the time and resources for a formal search for the permanent position. It is also not an outcome of succession planning, which is a more deliberate and a strategic effort to hire, train and prepare people for key positions based on the required competencies, leadership attributes and experience.

Career lattice. The career lattice model is a popular model used in corporate institutions (Benko & Anderson 2010). It provides multiple paths for advancement and development resulting from vertical and horizontal links among the jobs within an organization. The lattice model is seen as an alternative to traditional succession planning in which, rather than developing employees to specific jobs, it develops broad competencies in employees, and in which lateral moves increasingly replace vertical moves as a form of development (Heijde & Van Der Heijden, 2006). The lattice model is gaining popularity as it focusses on developing leaders with broader sets of competencies and positions the organization with an internal talent pool that is adaptable and nimble to meet the strategic needs of the organization.

External hiring. Depending on the need and urgency to fill vacant positions, a lot of institutions are looking to hire externally either using external recruiters or in conjunction with

them. External hiring has become preferred talent management strategy and a substitute for workforce development and succession planning (Cappelli & Keller, 2014).

While this strategy has helped in addressing just-in-time needs, it poses a couple of challenges like the cost to hire, onboard and train the successful candidates before they can be productive. There is also a reliance on the labor market to generate the desired talent pool to pick from.

As stated earlier, in response to the pace and extent of change both nationally and globally, polytechnics are becoming entrepreneurial, rethinking their governance, organizational structure, operations and talent management systems to be more adaptable and nimbler in meeting the same goals as they did a decade ago (Roueche & Jones, 2005). These institutions are using innovation and technology meet the quality mandate and do more with less. While there seems to be a trend in higher education to use multiple modes e.g. external hiring, replacement strategies, job-ladder and career lattice models to hire and develop their leadership bench-strength, this study examines the talent management strategies that exist in the participating polytechnics. Succession planning is seen as a critical human capital optimization and sustainability factor in higher education and polytechnic institutions continue to position themselves to embed this within their operating model. Despite the urgency, it faces many challenges for streamlined integration. The section below highlights only a few of many factors that influence succession planning.

Factors Influencing Succession Planning

David Turpin, president of the University of Alberta conducted research among Canadian universities and noted that due to complex roles, varying stakeholder expectations and increased accountability, the average length of service for university presidents has decreased from14 years in the early 60s to a five-year average in 2010, and their years of experience have also decreased

from eight years in the early 60s to 3.6 years in 2010 (Turpin, De Decker & Boyd, 2014). There are a few underlying internal factors that contribute to senior leadership crisis in polytechnic institutions: the high retirement rate of polytechnic presidents (Shults, 2001), the declining number of potential internal successors in the institutions (Shults, 2001), the desired mix of leadership skills and attributes resulting in a small pool of external applicants and the significant difference in job accountabilities versus salary compensation between public and private sectors, leading to inadequate interest from potentially strong candidates. As the number of potential candidates in the internal leadership pipeline reduces, institutions will need to explore options (Shults, 2001) to increase the number of internal candidates.

Market conditions including labor demand and funding to support public funded higher education institutes are a couple of critical external factors that influence the governance model in an organization. For example, based on the economy and available funding, institutions have adjusted their employee development plans. Leadership experts endorse the positive correlation between strong leadership and long-term business productivity (Bennis, 1989; Gardner, 1990; Kouzes & Posner, 2006).

Organizational strategic mandates and priorities can be other key factors that influence the decision whether succession planning is seen as a critical long-term investment. Although, there is a shift in the executive mindset now due to the growing competition within higher education organization, higher levels of accountability for government, employees and industry, todays ‘organizational leaders recognize that it is wiser to focus beyond replacement planning to succession planning to build the long-term sustainability and viability of the organization” (Rothwell, 2007, p. 3).

Academic governance and organizational culture are internal factors that play a huge role in succession planning and leadership development efforts. The college, institute and polytechnic governance models have evolved considerably since very early days. While in early days, "college presidents were the unquestioned authority" (A. M. Cohen, 2007, p. 43) by 1960s the "governance structures shifted notably in the direction of administrative hierarchies and bureaucratic management systems when the faculty gained power and administrators became business managers" (p. 151). The current most prevalent higher education governance model includes multiple internal and external stakeholders like government, unions, accreditation bodies, employers, students, faculty, senior executives and Boards, with the final authority being with the board of trustees with the legal authority for the institution (Kaplin & Lee, 2007). Unless managed by a strong leader, this dependency on multiple stakeholders can be extremely challenging and influence the extent of succession planning efforts in an organization. Leadership is an enabling factor in building a culture of succession planning.

Public higher education institutions are also heavily unionized- this requires the executive leadership to be well-versed with labour relations and to be able manage relationships with unions. With numerous external and internal influences on academia like funding cutbacks, adjusting faculty workload and workforce adjustments to align with organizational realities, unionization in higher education is on the rise (DeCew, 2003). Wickens posits that the collective bargaining units influence organizational context and key performance indicators due to the direct and indirect impact on many key relationships like faculty-management, faculty-faculty, and faculty students (Wickens, 2008). Depending on bargaining discussions and outcomes, these relationships impact employee performance, job satisfaction, productivity, and overall organizational morale. This makes it extremely important for senior leadership within higher

education to develop and nurture a culture of trust, collaboration and shared responsibility to meet organizational goals. As institutions strive to develop leaders with diverse skills in both the administrative and academic sides of the business, there is often capable and committed faculty who have the potential for internal progression. For a successful and seamless transition of individuals from faculty roles to administrative roles, there needs to be trustworthy and supportive relationships between the management and unions. This also makes the leadership role more complex, demanding, and requires specific attributes to stay connected with institutional realities and to develop an engaged work environment.

Finally, the issue of actual or perceived cronyism is also seen as a factor that impacts the succession planning agenda. Cronyism defined as "giving preference to politicians, particularly to cronies, which means close friends, especially as evidenced in the appointment of "hangers-on" office without regard to their qualifications" (Arasli & Tumer, 2008, p. 1239). It is a type of favoritism shown by the supervisor to subordinates based on their relationship by offering special privileges and over-riding the need to assess qualifications and merits in hiring, staffing, and career development decisions (Fu, 2015). Such practices break the confidence of employees, have negative effects on human resource management practices in recruitment and selection and compromise the validity of talent management and succession planning models. To ensure ethical governance, the issue of cronyism must be addressed through well-executed Human Resource policy.

Senior executives at polytechnic institutions recognize the importance of diversity, including gender and ethnicity/race, as well diversity of experience, such as a global mindset and cultural fluency. Hunt, Layton, and Prince (2015) state that "more diverse companies are better able to win top talent and improve their customer orientation, employee satisfaction, and

decision making, leading to a virtuous cycle of increasing returns" (p. 1). However, integrating diversity into workplace is not a straightforward process and requires institutions to be deliberate and strategically invest in authentic talent management practices to attract, develop, mentor, sponsor, and retain diverse leaders at all levels.

Role of Strategic Planning and Leadership Development

Rothwell (2005) explains that effective succession plans needs to be an important strategic priority requiring commitment from top management, a thoughtful communication strategy, systematic identification of those with requisite talent, and organizational commitment to develop leaders. Furthermore, the strategy must include identifying key positions both in senior leadership as well those requiring specialized technical expertise and identifying and codifying the existing talent pool for further succession planning development. This should lead to identification of required competencies for the training and development of potential candidates. This allows depth in all levels of leadership positions, continuity of business operations and consistency of organizational mission and culture even during personnel transitions.

This interdependence of strategic planning, leadership development and training towards succession planning is critical and of significance in higher education institutions. Because of the range of highly specialized technical training programs and credentials, entrepreneurial business models, limited funding, complex global and domestic operations that cater to diverse learner needs, polytechnics institutes must be guided by well-defined strategic plans with leadership development and training as one of the strategic priorities. Collins (2005) suggests that sustainable institutions with a track record of growth and stable operations are those that build "deep and strong executive teams" (p. 45). Senior leadership succession planning needs to

be a deliberate and systematic effort and must have the long-time commitment with the required financial and business approval from executives and board.

Leadership development programs have been implemented in academic institutions since the 1970s, with institutions recognizing the need for employee development for their long-term viability and effectiveness. There is lack of evidence however of how many have adopted formal succession planning strategies that are both strategic and deliberate and encompass the full spectrum of succession planning activities. This is partly because of these institutions becoming increasingly complex due to the model of shared governance, multiple internal stakeholders, and public accountability and, partly because of lack of systems and expertise to integrate succession planning in their existing talent management framework. While these influences explain why there is lack of formal succession planning in academic institutions, the changing political, economic and corporate landscape requires a more disciplined and strategically planned effort for leadership hiring, retention and engagement practices (Pynes, 2008).

Best Practices in Succession Planning

It is more important than ever to develop a leadership talent pool to fulfill critical leadership functions (Lamoureux et al., 2009, p. 3). While the issue of baby boomer retirement and the increasing talent gap for critical positions is faced by every organization, there are a few that have adopted models that are positioning them for success. In 2007, Berstein & Associate (cited in Rothwell, 2010) conducted a survey of 775 institutions that had sophisticated succession plans. They stated there was a "600 percent increase in overall business impact from leadership development" and "480 percent improvement in leadership bench strength" (p. 28).

Schiemann (2014) introduced People Equity as a talent management framework, also defined as the collective state of Alignment, Capabilities, and Engagement (ACE) in an organization. It offers the roadmap to manage recruit, develop and retain talent.

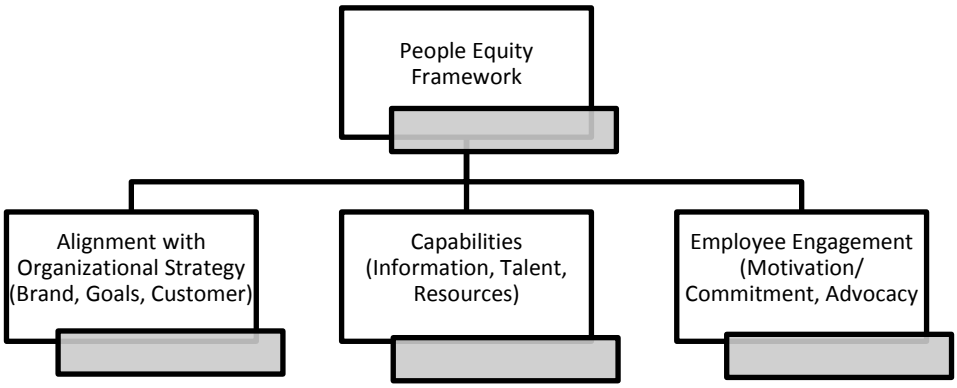

Figure 3. People Equity - ACE Model by Schiemann, Seibert, and Morgan, 2013.

For example, Ralph Izzo, CEO of Public Service Enterprise Group (PSEG), suggests "To be successful, you need great leaders who know how to optimize their talent by focusing it, developing the right capabilities, and creating engagement" (Schiemann, Seibert, & Morgan, 2013, p. 2). The ACE model resonates with the key concepts of this study as it focusses on strategic alignment, identifying leadership competencies and establishing systems and processes for leadership training, development and progression.

Research studies show that depending on the organizational focus, a mix of sequential activities and recommended best practices for succession planning and human resource optimization investments may be adopted; e.g. planning for recruitment, hiring potential leaders, providing leadership education and leadership opportunities, mentoring, promoting internal candidates, and assessing the succession process (Schiemann, Seibert, & Morgan, 2013). Cornell University has developed three models to explain its Talent Management Framework, including Succession Management Model, Internal, Talent Identification Framework, and

Talent Development Roadmap (Cornell University, Talent Management Model). The succession planning model follows a five-step model that seems to be a continuous process of analyzing institutional needs, identifying critical positions and internal talent, hiring, training and developing talent for critical positions The model follows a few key principles; i.e. 1) Succession planning must be part of the strategy and business planning process, not a separate Human Resource plan; 2) It must have Board and President endorsement and support; 3) It must start with strategy, identify critical roles, and confirm leadership competencies; 4) It must assess existing talent pool and identify gaps and potential candidates; and 5) It must include training, development and ongoing assessment.

Literature Review Strategy

The interpretive nature of the study led the researcher to choose pragmatism as the research paradigm because it is not committed to any single philosophy or reality; rather, in this paradigm the researcher has the freedom of choice to select a method, technique, and procedure of research that best meets her needs and purposes (Creswell, 2013). Creswell describes pragmatism as "an interpretive paradigm that focuses on the outcomes of the research – the actions, situations, and consequences of inquiry – rather than antecedent conditions" (p. 299). The pragmatic approach feeds into the researcher's belief system of maintaining a disciplined approach to reviewing and assessing situations and ensuring a people-centered solution to further the institutional mandate of growth and operational efficiency. Key concepts for this study are drawn from the literature on strategic planning, succession planning, leadership development, polytechnic institutes and talent management. Literature reviewed included dissertations and scholarly journal articles through various online databases. When searching for dissertations and

journal articles, the researcher used the terms including leadership, strategic planning, higher education, higher learning, talent management, and succession planning.

Succession Planning Components: Conceptual Framework

The conceptual framework in Figure 4 summarizes the components that became evident in the literature review and are central to the study. These components suggest key areas that emerged from the review of various studies and literature around succession planning in higher education. These include strategic plan, leadership development and, internal and external influences impacting higher education. These external and internal influences emerge from social changes, technological advancements, economic conditions, political environments, the increase of knowledge and information, and the changing demographics and workforce. The key areas of focus were used in designing the interview questions, and the researcher anticipated additional concepts emerging during data collection phase.

Leadership is critical to organizational growth and sustainability; hence the study

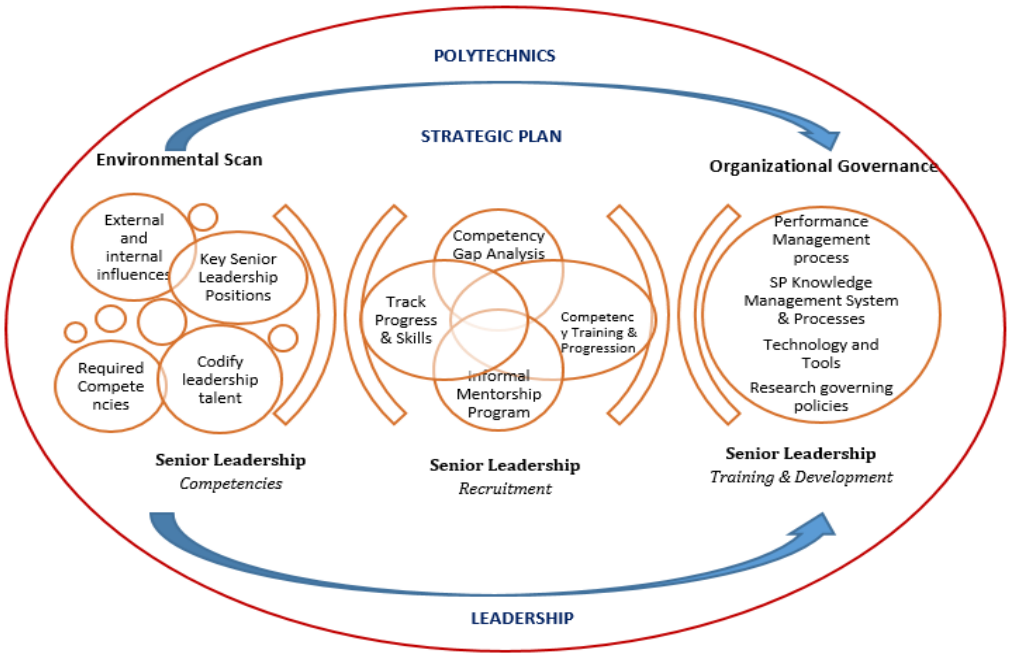

Figure 4. Succession planning components generated from literature review.

included identification of key positions, associated required leadership competencies and training

and development model to plan for succession planning. Additionally, the study highlights the inter-dependence of succession planning with talent management within an organizational context. The arrows above and below the key concepts suggest succession planning to be long-term and ongoing leadership and financial commitment to position the organization for sustainable growth and develop the desired senior leadership pool. The section below elaborates on the key components of conceptual framework and starts with polytechnics- a subset of the overall Higher Education system, as the primary focus.

Polytechnic Institutions. Polytechnics are publicly-funded colleges and institutes of technology that offer a full suite of credentials with programs that are skills-intensive and technology-based, encompassing hands-on and experiential learning. They also offer a range of research and development and innovation services. (Komesc, 2017). As described in the previous section, polytechnics have earned the reputation to be learning-institutions that are designed to address the shortage of skilled workers, addressing the labour demand among Canadian industries for applied research and innovation,. Doern (2008) also noted that polytechnics foster academic mobility through a Pan-Canadian Accreditation system and address skills shortages. In the current environment of economic instability, reduced government funding, the changing needs of 21st century learner and the demand for job-ready graduates, polytechnic institutes are the answer to the desired higher education reforms. Polytechnics are unique and different from the universities, primarily because of their unicameral system governed by publicly appointed Boards of Governors versus the bicameral system in the universities where governance is shared between the academic and governing bodies and is coordinated by the university executive (Taylor, 2013). This provides polytechnics autonomy and flexibility in managing the organizational structure, industry partnerships, and their

entrepreneurial revenue-generating training model towards self-reliance while addressing labour demands.

Strategic Planning. The Strategic Planning domain suggests that the leadership in polytechnics take a holistic approach, be cognizant of external and internal influences and accordingly align its employee recruitment, retention and succession planning model with its strategic priorities. For example, due to the current economic socio-economic turmoil, higher education institutions are becoming more entrepreneurial and not relying entirely on government funding. Due to the digital evolution and adoption of educational technology, a vital organizational requirement, these institutions are focused on advancing cultures of innovation and an increase in cross-institution collaboration (Becker et. al, 2018). Becker et al (2018) posit that higher education is undergoing a few movements to embrace the digital evolution including expanding access, authentic learning, leveraging data, spurring innovation, improving teaching practices and digital fluency (p.6).

Embracing change and positioning for sustainable future requires senior leadership in higher education institutions to have a clear vision and a strategy for integrating emerging themes like building a culture of innovation, enabling cross-institution and cross-sector collaboration, using open education resources, measuring learning success, redesigning learning spaces and interdisciplinary studies (Becker et. al, 2018, p.8). The organizational governance model, stakeholder engagement and advocacy must play a critical role in establishing organizational strategy. Leaders leading these strategic development efforts are board-gauged executives who have a holistic view and understand the complexities of running multiple business units and think in terms of community, industry, and government engagement activities (Charan, Drotter & Noel, 2011). Having a strategic plan that clearly articulates the vision,

strategic direction and road-map for achieving the objectives is fundamental for employee engagement and overall success of an institution.

Leadership. Succession planning is not just about finding replacements. It is also about developing talent and building enough bench strength. Leadership bench strength is the availability of strong and deep pools of talent able to assume several varied leadership roles at various institutional levels (Kesler, 2002, Long, Johnson, Faught, & Street, 2013). Talent Management models continue to gain momentum to help manage and optimize leadership bench strength and human capital within institutions (Scheimaen, 2014).

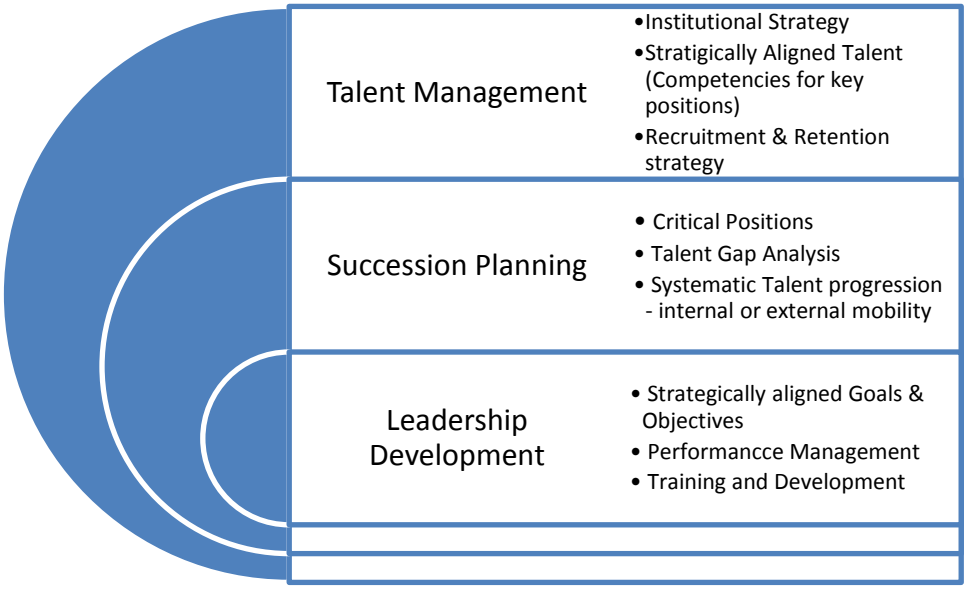

Figure 5. Talent Management, Succession Planning and Leadership Development Interdependencies.

While the focus of the study is succession planning for senior leadership positions, it will explore the relationship between talent management and succession planning and how these complement each other in developing the leadership pool. Figure 5 illustrates Scheimann's(2014) position that talent management is an organizational function that "integrates all of the activities

and responsibilities associated with the management of the talent lifecycle regardless of geography—from attracting and acquiring talent to developing and retaining it" (p. 2). While there is a huge need for institutions to invest in leadership and employee recruitment, it is equally important to support training and the development of leaders within a succession planning agenda.

Leadership Core Competencies and Recruitment. These domains of the conceptual framework are interrelated and focus on identifying 1) key positions both in senior leadership as well those requiring specializing technical expertise, 2) the required competencies that should be achieved through training and development of potential candidates, 3) conducting a gap analysis of existing talent, 4) codifying the existing talent pool for further development, and 5) the required competencies and associated training and development for succession planning. Rothwell (2007) suggests that unlike direct replacement planning, effective succession planning takes into account the development of many people, such that the result is a "deep bench strength throughout the organization so that, whenever a vacancy occurs, the organization has many qualified candidates internally that may be considered for advancement" (p. 3). This requires leadership commitment and resource investment to establish required competencies and career paths for each key position and develop associated competency development and training plans. This approach of conducting competency gap-analysis to inform the competency development plans is more deliberate, future oriented, and based on developing competencies of multiple individuals rather than a single individual, and it shifts the focus from single succession candidates to groups of candidates who become part of the organization's talent pool. This approach underlines the need for a thoughtful strategy for recruiting and retaining competent

leaders, to manage organization's human capital and total workforce (Fulmer & Conger, 2004; Tripathi & Agrawal, 2014).

Leadership Training and Development. This concept highlights the importance of having robust systems, processes and tools to support the succession planning strategy, training and development. It highlights the need for well-defined administrative guidelines, policies and processes that guide the effort and capital investment in creating a more comprehensive human resources planning system. A truly effective employee development program should include learning, career planning, goal setting, and evaluation (Mone & London, 2014). These areas help the program to be beneficial to the employees who utilize it and to the institutions that provide it. Without them, employee development reverts to being simply training (Shelton, 2001). This domain also suggests the need to have human resource and administration teams in place to operationalize succession planning training and development including coaching, mentoring and performance management. A robust training and development strategy for succession planning ensures methods to address external social, political, economic and technological changes in our society and integrate internal organizational expectations and levels of readiness of employees or potential successors of key positions.

Summary

Polytechnics which do not have deliberate strategies for attracting, developing and retaining existing or new talent could suffer leadership shortages in the future. Succession planning is about developing employees and supporting them in their careers to ensure an organization has the right talent for key positions. Succession planning has evolved from being replacement planning to a more diligent and rigorous process, with a much broader scope of making strategic talent acquisition choices while recruiting for senior leadership positions. This

strategic approach has led to evaluation of organizational effectiveness of these leadership positions with increased accountability and leading to leadership development decisions (Brundrett & Rhodes, 2010). Leadership development and succession planning strategies must focus on external influences like levels of government funding, the changing economy, and competition with other post-secondary institutions. Additionally, institutions must be cognizant of internal influencers like critical post-secondary positions requiring backups on a temporary or permanent basis, leadership and job competencies for these positions, training and development of high-potential employees, unions relationships, and the systems and tools required to keep succession planning sustainable (Groves, 2007; Rothwell, 2010).

Chapter 3. Theoretical Framework

Introduction

Higher education massification, globalization, and the significance of digitalization, knowledge and data analytics to make education more relevant and learner centered are a few 21st century nuances impacting the higher education landscape (Kouzes & Posner, 2006; Altbach, Reisberg, & Rumbley, 2010). Higher education institutions without deliberate strategies for attracting, developing and retaining existing or new talent could suffer leadership shortages in the future.

Statement of the Problem

As higher education becomes more complex and highly competitive due to internal and external influences such as changes in governmental regulatory policies, socio-political disruptions, economic downturn, learner demographics, technology advancements and regulatory reporting and accountabilities, polytechnics institutions are struggling to recruit and maintain strong executive leadership equipped with the right balance of technical competence and leadership attributes to lead in such dynamic times. There is an urgency for strong leadership in polytechnic institutions to assist the process of navigating the complexity in higher education.

Research Purpose

The role of strategic planning, succession planning practices and organizational systems for talent recruitment and leadership development are the key concepts chosen for the study. The main objective of the study is to examine succession planning in senior leadership positions within polytechnic institutions in Canada. Senior leadership refers to the senior management team including president's direct reports, such as, vice-presidents or division heads responsible

for key business units; and deans and directors responsible for key academic and non-academic departments.

Chapter 4. Methods

Introduction

Creswell & Creswell posit "qualitative research study is one in which the inquirer often makes knowledge claims based primarily on constructivist perspectives or advocacy/participatory perspectives or both" (Creswell & Creswell, 2017). They further elaborate that qualitative research uses various data collection strategies such as narratives, phenomenologies, ethnographies, grounded theory studies, or case studies to collect emerging data with the primary intent of developing themes from the data. To better understand qualitative research and its applicability to the study of succession planning in higher education, the researcher used grounded theory and further elaborates on the approach for qualitative research as described in the work of Creswell (2017).

Theoretical Position

Our beliefs about the fundamental nature of reality are reflected by our ontological views and how we determine truth is reflected by our epistemological views (Willis & Just, 2007). Charmaz (2011) believes that we create our own realities based on our perceptions suggesting a relativist ontology. Furthermore, a constructivist epistemology posits that what we take to be objective knowledge and truth is the result of our perspectives and our perceptions of reality. Because this study involves understanding social influences, integrates human interest, appreciates differences and reviews existing data in order to reflect different aspects of succession planning, it reflects relativist ontology throughout the data-collection and analysis stages.

Recognizing that the research did not start with a set theory and would rely upon the participants' views, throughout the research, a constructivist approach is used to generate or

inductively develop a theory. Although the constructions may not be true and alter as do the associated realities, the researcher recognizes that the realities are understood in the form of multiple, intangible mental constructions, socially and experientially based elements and dependent on the individual persons holding the constructions (Guba & Lincoln, 1994). This paradigm fits well within the construct of this study, as the data collection method included interviews with the senior executives of three different polytechnics.

Grounded Theory Approach

Creswell (2014) suggests that "research methods involve the forms and data collection, analysis, and interpretation that researches propose for their studies" (p. 247). Within the qualitative research paradigm, case studies are used primarily when researchers wish to obtain an in-depth understanding of a relatively small number of individuals, problems, or situations (Patton, 1990). The qualitative case study design using grounded theory approach was selected for this study because of its controlled methodology for analyzing data and constant comparative analysis. This aligned with researcher's interest in gaining an in-depth understanding of succession planning practices in the three polytechnics, through the lens of sixteen senior executives at these institutions.

The grounded theory approach was jointly developed by Glaser and Strauss (1967) as a methodology to develop theory from data systematically obtained from social research (Buscher, 2007). Furthermore, Corbin and Strauss (2008) suggest that the grounded theory needs to be observed from a subjectivist and interpretative view, in which researcher's work and interpretation are fundamental to the process of building both data and theory. The qualitative analysis performed through grounded theory is described by the application of a set of procedures based on codification processes and theoretical sampling, which are useful in order to

study and think about social realities. According to Corbin and Strauss (2008) grounded theory represents a set of well-developed categories that are systematically interrelated through declarations of relations in order to form a theoretical structure that explains a particular, relevant phenomenon (p. 35). This lends itself to a deduction process as the data are interpreted and conceptualized, suggesting that data, previous experience and knowledge play a part in the final analysis (Corbin & Strauss, 2008). Data collection methods typically includes interviews, although other forms of data may also be collected, such as observations, documents, and audiovisual materials. (Creswell & Poth, 2017, p. 66).

Due to the nature of the study, the researcher found the qualitative methodology appropriate for its ability to provide complex textual descriptions of how people experience this phenomenon. It provided information about the "human" side of the issue and ensued the constructivist world view was captured through narrative data using open-ended procedures. Grounded theory methodology complemented the research paradigm and while much case study research focuses on a single case, because of its unique characteristics, the multiple–case studies design was chosen to explore the phenomenon of succession planning, to identify intangible factors and drivers for succession planning and to understand interdependencies that influence the current practices within each of the three institutions. In addition to recognizing the practical, ethical and philosophical implications on this study, the researcher examines the alignment of the institutional strategic plan with succession planning practices and if these align with transformational and complexity leadership theories and various organizational challenges.

Creswell (2003) describes grounded theory as appropriate strategy to "explore processes, activities, and events" (p. 183) and to "derive a general, abstract theory of a process, action or interaction grounded in the views of the participants" (p. 14). The data collection happened in

two phases. As strategic planning and leadership development are the underpinnings of this study, phase 1 of the study included reviewing the strategic plans and business plans for each of the polytechnics on their respective organization website. The purpose of studying the strategic plans was to examine the institutional focus and practices regarding leadership development. Phase 2 included interviews with college presidents and senior management as these were optimal for collecting data on individuals' personal histories, perspectives, and experiences for the critical yet sensitive topic of succession planning. The process of data collection and analysis by taking notes, coding themes and using memos as means to compare themes for each interview was beneficial in determining emerging themes and inter-dependencies. This later helped the researcher in developing the theory and exploring any current theories from the literature.

Grounded Theory Design

To blend the various elements of study, the researcher used Crotty's (1998) framework for confirming the research plan, captured in the illustration in figure 6. Creswell (2017) suggests the researcher focus on three elements when deciding a research approach: 1) philosophical assumptions about what constitutes knowledge claims, 2) general procedures for the research (i.e. strategies of inquiry), and 3) detailed procedures of data collection, analysis, and writing, called methods.

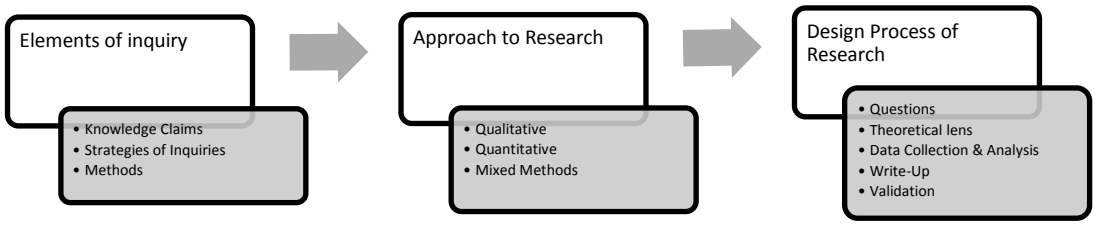

Figure 6. Research Approaches and Design Process - adapted from Research Design - Creswell 2017.

This design section below and illustrated in figure 7 is drawn based on Creswell's suggested framework. The exploratory study uses the constructivism research paradigm using inductive and deductive approaches to examine key domains, factors and areas of focus associated with succession planning in higher education. Funding reductions, need for leadership development and technology advancements are real challenges in higher education. Given the fact that these challenges are grounded in a practical reality, the pragmatic approach seemed to fit as it also aligned with the researcher's constructivist epistemological perspective.

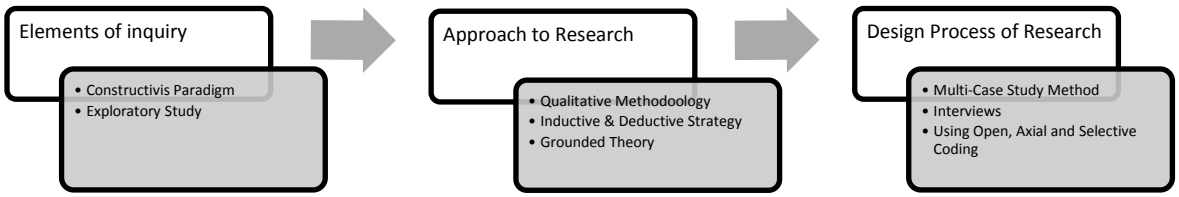

Figure 7. Researcher's Approach- adapted from Research Design - Creswell 2017.

The exploratory research design involved getting a feel for the organizational environment within polytechnic institutions through interviews with the senior executives and reviewing the information available on their website. The researcher believed this led to a discovery of possible insights that may help in confirming key factors that were considered while designing the recommended succession planning model. Multi-case study methodology including a thorough analysis using open, axial coding and selective coding provided more comprehensive insight and understanding of perspectives.

Furthermore, the researcher made sure practical, ethical, and philosophical issues around succession planning were considered throughout the research journey: prior to the study commencing, at the beginning of the study, during the study, when analyzing and reporting findings, and when publishing results. Potential issues identified during research were factored

in while making recommendations for a succession planning model that promises viability and sustainability of leadership in higher education.

Research Questions

Pragmatism considers the research questions to be more important than either the method or paradigm that underlies the method. It presents a practical & applied philosophy (Teddlie & Tashakkori, 2003). As stated by L. Cohen, Manion, & Morrison (2011), "research questions turn a general purpose or aim into specific questions to which specific, data-driven, concrete answers can be given" (p.126). The researcher used the following key question and sub-questions to study the practical implications of succession planning, as these encapsulated her belief around pragmatism.

What is the role of succession planning in achieving organizational stability for polytechnic institutes in Canada?

Sub-questions

1. What is the relationship between institutional strategic plan and leadership in polytechnic institutes?

2. What type of leadership is required to drive the polytechnic mandate?

3. What organizational features could advance the practice of succession planning in polytechnic institutes?

Each question was carefully phrased with the goal of solving a practical problem related to succession planning in Higher Education. As constructivism is seen as a practical and applied philosophy, the researcher was looking for the *what* and the *how* of research based on its intended consequences (Creswell, 2013).

Research Instrument

The design of research instrument, which was an interview questionnaire, focused on a few key considerations that have prompted successful businesses and institutions to realize the importance of strong leadership to maintain, grow and sustain long-term business productivity and viability (Richards, 2009). Key considerations included:

- If the institutions had a talent management strategy and it fit into its overall strategy?
- Exploring key elements/strategies needed for a succession plan to be implemented in polytechnics?
- What external and internal factors have contributed to institutional decisions around succession planning?
- What are the characteristics and required skills sets of the executive team / senior management team in polytechnics?
- Do these institutions prefer internal hiring or external and why?

These formed the basis to develop the full set of interview script documented in Appendix C.

Participating Institutes and Research Participants

The study includes researcher's description of each polytechnic and their organizational attributes. The sample of executive participants was selected following initial interview and approval from the president of each of the polytechnic institute. The selection was based on their portfolios and position in the executive leadership team to gain multiple perspectives, given their critical roles in the leadership development process.

The researcher interviewed the senior leaders of the polytechnics and used structured questions followed by probing questions to arrive at some initial themes. Data were collected from the sixteen executives over a six-month period, although after the transcription of

interviews with the first few executives, the researcher made several revisions to the order and nature of questions to probe deeper into each emerging theme. While most of the responses seemed relevant and revolved around the themes, perspectives based on the individual experience and years of service within the organization enabled the researcher to form categories for further exploration.

Sample Group

The sample group included sixteen senior experienced executives including the presidents of the three polytechnics. Access to the executives was gained through formal ethics approval from each of the polytechnics and following discussion with the presidents. The institutions included polytechnics – that are publicly-funded colleges or institutes of technology that offers a wide range of advanced education credentials - four-year bachelor's degrees, advanced diplomas, and certificates, as well as in-class training for apprenticeship programs (Polytechnics Canada).

The researcher shared the summary of the research plan including the interview process, data storage, confidentiality and an opt-out option in the event the participants didn't want to continue. Most of the participants agreed to participate in the study by indicating an interest in the idea of succession planning in higher education. While the researcher had to seek permission from the president of each institute to reach out to other executives, the researcher was careful in ensuring the pool of participants represented the overall executive bench strength within the institutions.

Data Collection

Qualitative case study design using a grounded theory approach formed the framework for data collection. For the purpose of this study, a "case" is defined as a single, in-depth

interview with an executive or senior leader. This allowed the researcher to collect and later analyze the individual narratives through sequential means of coding and observe the emergence of themes following each case. Additionally, the researcher reviewed the strategic plans and any other relevant information from the websites of each of the polytechnic institutes.

Prior to collecting data, the researcher e-mailed each participant a summary of the proposed study and obtained a signed informed consent. Following the Institutional Research Ethics approval, the researcher contacted the presidents of the participating polytechnics to solicit their participation in the interviews. The researcher contacted the president first and upon approval to proceed, the researcher contacted the other executives. The purpose of the first contact was to explain the intent of the research study and requested agreement to participate. The participants were informed about the Research Ethics Board and relevant Institutional Research Ethics Board approvals received and invited to participate in the study. Upon verbal agreement to participate, the researcher scheduled a time for the 60-minute interview with each participant. Informed consent was emailed to each participant and was received prior to each interview. The researcher began each interview with setting the boundaries for the study, ensuing that the purpose and goal were clearly documented and understood by all participants.

Data were collected from the sixteen executives over a six-month period using a pre-tested interview protocol that included thirteen questions and each question was mapped to one or more of the main research questions. The researcher used interviews as one of the key methods for data collection. The preference was for an in-depth and unstructured interview in the beginning and semi-structured interview during the theoretical sampling. After the interview with the first few executives was conducted, the results were transcribed and analyzed before the next group of interviews was scheduled. This provided some idea of theoretical sampling and

accordingly the next set of interviewees were selected. All interviews were recorded using digital recorder. During the first five interviews with the executives, several slight revisions were made to regroup and reorder questions as the interviewees found some repetition in the questions or provided a response that covered a combination of questions. The ability to adjust the data collection as a result of insights obtained during the early phases of the research process is one of the key advantages of the multiple–case studies design as it provides a rigorous approach for collecting and analyzing data.

Data Analysis

As described earlier in the section, data analysis in grounded theory studies follows a prescribed protocol whereby researchers analyze data through a series of systematic coding exercises until a saturation point has been reached and no further analysis is required. Creswell (2014) proposes three distinct and sequential means of coding data: open coding, axial coding, and selective coding. Another significant aspect of grounded theory is the process of note-taking, coding and memoing - an iterative and cyclic process as the researcher goes through each interview. The cyclic process allows the researcher to identify the theory (Dick, 2003).

Figure 8 in the section below includes illustration of the formation of grounded theory, and a brief explanation of open, axial and selective coding that is fundamental to Grounded Theory. In the subsequent section including figure 10, the researcher explains the approach used to investigate the data and form three types of codes: open, axial and selective codes.

Open coding. In grounded theory, open coding happens at the onset of data analysis where it requires the data to be read a few times to identify chunks of data that can be labeled based on the general meaning. Gidey, Marmsoler, and Eckhardt (2017) in their research on software architecture using grounded theory state, “Open coding is used to investigate,

decompose and categorize the raw data into concepts and categories" (p. 11). As a result, there are numerous concepts and associated relationships that emerge though out the open coding process. Researchers capture actual words spoken by the participants to explain the labels.

Writing of memos. This is an essential step following open coding that requires the researcher to make notes and describe the codes and the associated phenomenon in his or her own words. This helps at a later stage to connect the dots and supports theory generation. Essentially grounded theory methodology requires the coding process to go through multiple iterations including the writing of memos. Glaser and Strauss (1967) advise researchers to "stop coding and record a memo on your ideas" (p. 113).

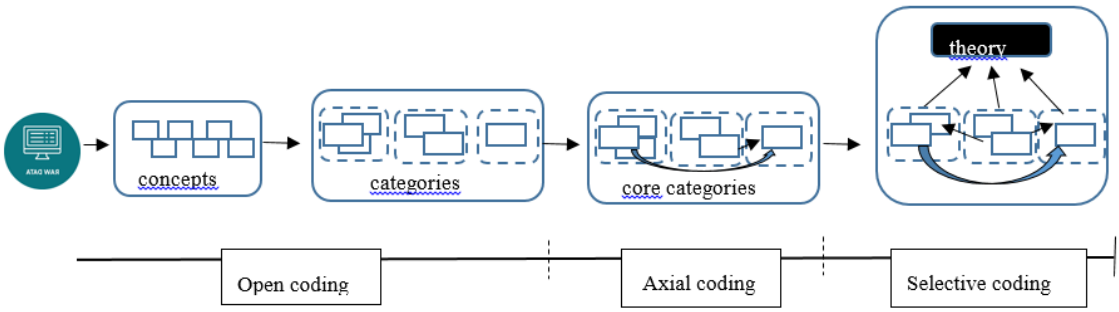

Figure 8. Levels of Abstraction Grounded Theory; Adapted from Gidey, Marmsoler and Eckhardt (2017).

Axial coding. The next step in grounded theory involves reviewing the open codes to identify any connections and dependencies. These clusters of open codes with some similarity or relationship form a category. Essentially, each cluster of open codes within a category aligns with an over-arching core category labeled as an axial codes. Throughout the data analysis, the researcher reviews the similarities or dependencies between the categories to further refine the axial codes. Axial codes result in short textual segments to explain the category.

Selective coding. Following formation of axial codes, the researcher continues to examine and narrows down all categories into one unified category that helps in generalization of

a theory. In the final stages of data analysis, selective code becomes the common link between all the concepts and categories created throughout the open and axial coding phases (Gidey, Marmsoler, & Eckhardt, 2017). The goal of selective coding is to integrate the different categories into one core category. Throughout the data analysis process, the researcher is driving to identify core categories that become the "guide to further theoretical sampling and data collection" (Corbin and Strauss 1990, p. 15). As research progresses, the process is governed by selective code as it moves toward the generation of theory. Once selective code and the associated phenomenon is identified, the researcher can move towards generation of theory to answer the research questions. Corbin and Strauss (1990) posited that the repeated review of the data and the linkages among categories from axial coding "eventually" leads to identification of the "core" category (pp. 16-17). LaRossa (2005) referred to the core category as the research study's "main story" (p. 850). According to him the core category shows maximum links to the other categories. The core category then forms the focal point for generation of theory. Essentially, through the core category, the researcher looked for "that special something that ties together all of different categories to create a coherent story" (p. 104). Once the core category, also referred to as selective coding, has been identified, it becomes the center of concentration for the researcher's analysis, and it becomes the "guide to further theoretical sampling and data collection" (p. 33). As research progresses, integration of concepts and categories results generation of theory.

The researcher gravitated to the grounded theory approach for data collection and analysis because of its inductive paradigm, rigorous iterative process and opportunity to refine the interview questions throughout the analysis phase until the process reaches saturation and no new ideas and themes are emerging. Additionally, it required the researcher to work without any

pre-conceived notions and hypothesis. Because of the established process and inter-dependencies of open, axial and selective coding, it elevates the validity of the grounded theory approach to qualitative research.

The analysis of data started first by transcribing the interviews and whenever possible, it was done in between interviews as it supported the next phase. The researcher used two sources to gather and analyze the data: (a) from the websites to do a comparative analysis of the strategic plans and priorities for each polytechnic and to see if there was any alignment with the information gathered during interviews, particularly around talent management and succession planning, and (b) the combination of manual and software application to analyze the codes that emerged from the interviews.

The researcher reviewed the transcripts a few times during which each interview was reviewed several times to create tentative codes for chunks of data that summarized the open codes. Next, the researcher studied the open codes to identify relationships and noticed the emergence of categories and sub-categories from codes grouped by similarity of meaning. These categories resulted in the creation of axial codes that also helped in narrowing down the interview questions for more focused responses (Appendix 5). Software Dadoose was used to analyze the data whereby the researcher populated the software with the open codes and tagged each code with the relevant section of the interviews (Appendix 6). Through the software the researcher was able to extract various forms of analysis extracts like word-clouds showing the frequency of codes and tables including open and axial codes.

The researcher compared the models and perspectives among the three institutions and examined the alignment of the strategic plan to the actual succession planning practices. Based on data gathered from the interviews and strategic plans available on the websites of each

organization, the researcher also examined how complexity and transformational leadership styles fit with the findings of the study and research participants. Additionally, the researcher delved into understanding the organizational challenges that were common or unique to each polytechnic institute. Finally, the researcher made recommendations for a model that is supported by literature and seems like a good fit for the three participating institutes under the emerging and constantly changing higher education landscape.

Anticipated Results

The impact of digital disruption and the pace at which the higher education landscape is changing are matters that the researcher is unclear about within the context of leadership bench strength in polytechnics. Emergence of digital technology in every sphere of society has raised many questions and positions around the relationship between education and the digital era, and how institutions of higher education must position themselves to the fast-changing new reality (Selwyn, 2013). As per the grounded theory position, while the researcher did not enter the study with preconceived ideas about what the results may say, she did anticipate themes and inter-dependencies that would result in new ideas about leadership development and succession planning. The researcher hoped to understand various institutional attributes that contribute in planning for senior leadership, particularly in the fast-changing external environment, and anticipated that this study would extend the literature on succession planning strategies in higher education and provide opportunities for additional research to be conducted in the future.

Limitations and Delimitations

Creswell (2014) noted that not all interviewees can articulate their thoughts and perspectives equally and sometimes may be influenced by their personal biases; thereby the interviewers need to interpret responses which may not be an actual reflection of the

perspectives. The other consideration was the setting for the actual interview. Given that the research participants were from three different polytechnics and the majority of the interviews were conducted on the phone, the researcher may have missed any nuances that are possible in face to face interviews. For example, whether or not the interviewees were multi-tasking while responding to the questions or were fully committed to the interviews.

Ethical and Credibility Considerations and other Dilemmas

Every research journey has many ethical and credibility considerations, and other dilemmas inherent within a project. As cited by Creswell 2014, "researchers need to protect their research participants; develop a trust with them; promote the integrity of research; guard against misconduct and impropriety that might reflect on their institutions or institutions; and cope with new, challenging problems" (Israel & Hay, 2006, p. 92).

Conducting research within a higher education environment has its own set of considerations. For example, there is a resistance to sharing data for the purposes of research in fear of the information being misused or incorrectly referenced. Since the research involved feedback from senior executives, appropriate consent was gained from each participant before conducting the interviews. To ensure participation and clarity regarding the purpose and scope of the study, the researcher prepared a comprehensive research proposal that outlined the purpose, intent, plan, and a clear indication of what was required to solicit participation from all stakeholders. Special consideration was given to data collection, privacy, and dissemination, to ensure institutional policies around Freedom of Information Policy and other specific policy around discrimination and intellectual property are adhered to. Given the bureaucratic academic environment, there could be potential power imbalances that needed to be carefully considered and addressed.

During the interviews, the researcher protected the anonymity of all participants by recording information on paper and recorded tapes as Executive 1, Executive 2, and so on. This allowed participants to speak candidly and disclose confidential or private insights about the succession planning practices of their institution. While interviews were recorded, the anonymity of respondents was safeguarded throughout the data collection process by transcribing and coding using the alpha-codes A-C. The researcher stored all documents in a secure location at her home and laptop using a secured log-in. Furthermore, all published documents, including drafts, referred to respondents through alpha-codes A-C and did not disclose the identity of individuals interviewed. Finally, the data that was collected is stored with the utmost of care and consideration.

As noted by Creswell (2014), understanding who owns the data once collected is an issue that needs to be addressed upfront. Following the data collection stage, the researcher paid special attention to any potential of conflict of interest when analyzing the data. It was important to set aside personal biases, refrain from taking sides, or only reporting positive results or outcomes. One of the most important considerations was to ensure that the privacy and anonymity of the employees was always maintained (Creswell, 2013). When reporting the data, the researcher ensured anonymity was maintained. Furthermore, throughout the study, the research ensured proper citations were included in the report.

Summary

Senior leaders within institutions realize that "the continued survival of the organization depends on sound succession planning strategy, of having the right people in the right places at the right time" (Rothwell, 2010, p. 8). Rothwell (2010) suggests that a strategic and deliberate effort by these institutions to prepare for succession planning for key positions in senior

leadership, is not an option but a requirement for higher education. More than ever before, leadership now requires a greater focus on unrelenting changes in technology, market conditions, organizational alliances, increased global competitiveness, growing diversity in the workplace, and the need for continuous resizing of institutions and repurposing of systems and processes to align with evolving realities (Kouzes & Posner, 2006). Businesses that approach leadership development and talent management with a focus on developing the future competencies of multiple individuals, any one of whom could be positioned to lead the company, demonstrate this connection between strong leadership and business productivity (Bennis, 1989; Gardner, 1990; Kouzes & Posner, 2006; Rothwell, 2007). This chapter summarizes the methodology used for conducting the study, including the series of interactions with key stakeholders from polytechnic institutions selected for the study.

Chapter 5. Findings

Introduction

The purpose of the study is to understand the role of strategic planning and organizational systems for leadership development that support succession planning amongst senior leadership within polytechnic institutes in Canada. Senior leadership refers to senior management team including President's direct reports, i.e. vice-presidents or division heads responsible for key business units for key academic and non-academic departments. Findings of the study are explained in the following two sections: Section One includes an analysis of the strategic plans and other associated documents such as Comprehensive Institution Plans and Business Plans on the respective websites, and Section Two includes analyses of information gathered via the interviews with senior leaders of the polytechnics.

Section One: Websites

Upon review of the websites for each of the polytechnics, the researcher gained a better understanding of the demographic and mandate of polytechnic institutes that resonated with the general description presented in the literature review. As noted in chapter 1, polytechnics are publicly funded institutes of technology that work closely with the industry and government to address the demand and supply equation of labour market by creating industry relevant programs and that lead to strong graduate employment.

Each of the participating institutes offer applied education in industry relevant skills, in intensive and technology integrated programs offering a range of credentials. They are equipped with the lab facilities that support the applied learning and business model to offer credentials ranging from four-year bachelor's degrees, advanced diplomas, certificates, as well as in-class training for apprenticeship programs. Each polytechnic took pride in their strong industry

relations to stay current and relevant as they are mandated to have an applied research focus that offers opportunities to solve real Research and Development and commercialization problems for Canadian industry (Polytechnics Canada, 2017). Watts-Rynard and Amyot (2019) posit, "it is at polytechnics and colleges where businesses experiment with new technology, processes, and software. These institutions often put students to work on real-world business challenges" (para. 1). All three institutions operate under the jurisdiction of the provincial *Post-Secondary Learning Act* and are board-governed technical institutes that operate as polytechnics.

It was clear that each institute used an open, collaborative, and transparent process to engage the community to develop their respective strategic plans that are well presented on the websites and have the executive endorsement from the Board Chair and President of each of the polytechnics. The researcher noted that while the currency of the strategic plan may vary for each institute, the strategic plans are aligned with the mandate of polytechnics and the overall emphasis on applied / hands-on learning and applied research. Additionally, Comprehensive Institution and Business Plans are used interchangeably and do have the same purpose, ithat is to provide an action plan for the strategic plan and a guided pathway to how the priorities will be met.

The section below elaborates several concepts and areas of focus that were evident in the strategic and business plans for these polytechnics. Elements such as the performance management framework, alignment with goals and outcomes, personal development and focus on budget to support long-term planning were further emergent from the interviews with the senior leaders in which are explored Section Two.

Polytechnic A. This is one of nine polytechnics in Canada. It is a large institute with student population ranging between 40,000 - 50,000 including 15% international students and

over 130 programs designed and setup to meet the demands of Canadian industries within the region. The institute has a high employment rate of approximately 95%. The institute has an established applied research unit that works closely with industry and government to support the applied education mandate. Data and quotes from this institution are noted as "PolyA Exec Num#". The institute has a well-articulated strategic plan with clearly defined focus areas, strategies, desired outcomes and metrics for measuring success. While vision and support for advancing the interests of students, employers, community and employees is evident, and a mention is made of enhancing talent recruitment and development strategies, there is nothing specifically mentioned for leadership development. The 3-Year Comprehensive Institutional Plan was readily accessible online and is a comprehensive document with a proposed plan and a commitment from the polytechnic to the government for meeting its organizational mandate and goals. The plan boasts about its position as key contributor in advancing the economic growth of the province by preparing work-ready graduates in various areas of industry. Additionally, it recognizes the challenge of balancing the need to grow strategically in the programs of the greatest industry demand while managing fiscal and operational sustainability. It was noted that while the strategic plan has a special focus on students, employees and industry, there was no evidence of leadership development or succession planning focus in the list of priorities or the tactical plan in both the source documents.

Polytechnic B. This is a medium size institute that belongs to *Polytechnics Canada* consortium. It serves close to 30,000 distinct students including a large percentage of apprentices through applied learning opportunities at a few campuses within the province. It offers a range of programs including certificate, diploma and degree programs, and apprenticeship training; and engages in applied research, drawing on faculty expertise to support

innovation by employers, and providing students the opportunity to develop critical thinking skills. The employment rate for polytechnic B is 90%. Data and quotes from this institution are noted as "PolyB Exec Num#". Polytechnic B takes pride in being a leader in providing industry relevant education to prepare industry ready graduates both locally and globally. The strategic plan for polytechnic B showed that the plan was a result of a highly inclusive and consultative process that had gone through several iterations to adapt to the changing landscape of higher education, economic and political environment. Students, employers and stakeholders were a critical part of the success proposition, although the researcher found it challenging to find the alignment between the key focus areas and a broad set of goals with undefined metrics for success. The researcher noted that although the strategic plan did not specify the desired outcomes and measures of success, the 3-year business plan was reasonably well laid out including tactical strategies to meet the overarching goals. For example, leadership development, diversity and inclusion, and internal progression was part of a strategy to support the people and leadership mandate. Overall analysis of the strategic plan and the business plan confirmed some of the findings following the interviews with the senior leaders of the organization. These will be elaborated in section two below.

Polytechnic C. A large size polytechnic in a different province from polytechnic A and B, Polytechnic C delivers more than 160 full-time programs, and serves a student population in the range of 40,000-50,000 students. It offers industry-relevant, career-focused credentials that balance in-depth theoretical knowledge with hands-on applied learning. The institute has multiple locations and the program offerings include degrees, diplomas, certificates and apprenticeship. The employment statistics for this institute are in the range of 80%—85%. Data and quotes from this institution are noted as "PolyC Exec Num#". The strategic plan for PolyC

was developed following a comprehensive and consultative process with input from all key stakeholders that aligns with current realities and is geared to take a "bold and aspirational" approach to higher education evolution. The strategic plan clearly articulates strategies for talent management that were also echoed in comments from the interviews with the senior leaders. Section two below will include specific quotes from senior leaders that endorse the deliberate effort and philosophy for leadership development and succession planning.

Section Two: Interviews

The findings in this section reveal a more structured and concise thematic framework than that of section one. Through information gathered during interviews with senior leaders, the researcher noted a strong refinement and condensing of the key categories that demonstrates the reality of talent management and succession planning efforts within these three polytechnics. While there were more questions asked during the interviews and modifications to the questions were made as required, as the interviews progressed the questions were grouped to align with the key concepts and research questions under exploration. Key concepts explored were strategic planning, talent management, leadership development, leadership characteristics and succession planning. The associated grouping of the questions was: 1) How do you operationalize your strategic plan and how does talent management fit into your organization's strategic plan?, 2) How does succession planning fit into your organization's overall talent management strategy?, 3) What type of leadership is required to drive the polytechnic mandate? (Probing question - what are the characteristics and required attributes for senior management and executive team working in a polytechnic?), 4) What organizational features could advance the practice of succession planning in polytechnic institutes?, 5) What is the relationship between strategic planning, leadership and succession planning in polytechnic institutes?

Following the initial round of interviews, the researcher had to modify the questions for specificity and focused responses. The responses resulted in clusters of open codes that had similarities. These clusters were grouped under categories and each unique cluster of open codes was assigned an axial code.

Table 1 below provides results of content review of interviews and a snapshot of open and axial codes generated. In order to avoid duplication, not all codes are included. Appendix 5 has the detailed capture of all the codes that were generated from the interviews.

Table 1

Snapshot of Open Codes Concepts

Open Code	Properties	Examples of participants' words
Alignment; Outcome Based	Alignment of goals and targets with strategic priorities; Targets and Metrics; Strategic lens to evaluate all business opportunities	- Incredible alignment through our performance management plans; core business plans and business strategies and accountability is fully in line with those strategic imperatives; All leaders are accountable to those broad based outcomes and promises; Executive decisions made through the lens of our priorities and values.
Leadership Bench strength	Informal ongoing discussions to identify potential talent; Mechanism of assessing leadership bench strength	- No solid evidence of formal succession planning; many ongoing informal conversations regarding talent recognition and creating opportunities for them; not clear on pathways or scaffolding between different areas; Be deliberate about understanding the institutional needs, existing leadership bench strength and gaps.
Leadership Skillset & Competencies	Relationship between academic Vs administrative success; Look at the external trends and influencers	- We have a strange belief that academic success somehow correlates with administrative success; Need PhDs and MBA or do we need folks with knowledge in emerging industry trends like Artificial Intelligence, Virtual Reality?
Executive Support	Funding resources to support training & development; Upkeep of systems and repositories	- Ongoing commitment for succession planning & part of the strategic plan; Real resources, not just philosophy, but ensuring each of our budget owners have real dollars put against professional development
Strategy to drive business	Accelerating and Scaling Up; Expansion and Divesture; Succession planning follows strategy	- If the strategy is to scale up, then invest in development of people within; If the choice is to go with different lines of business then hiring from outside and investing in the right talent may be part of succession planning

Once the researcher exhausted creating open codes, these were further analyzed and grouped into categories based on their common properties. For example, research participants spoke passionately about their strategic plan and how these were operationalized via deliberate activities like goal setting and discussion performance measures at the beginning of the year and holding senior leaders accountable to achieve the results. They also believed that while strategic plans were there as a guide, the need for the development and alignment of goals to meet the strategies was vital to organizational success.

Figure 9 below captures the formation of open and axial codes using the cyclic process of reviewing the data until all the interviews had been analyzed and the categories were exhausted. This led to the creation of one of the core categories or selective codes - Institutional Strategy.

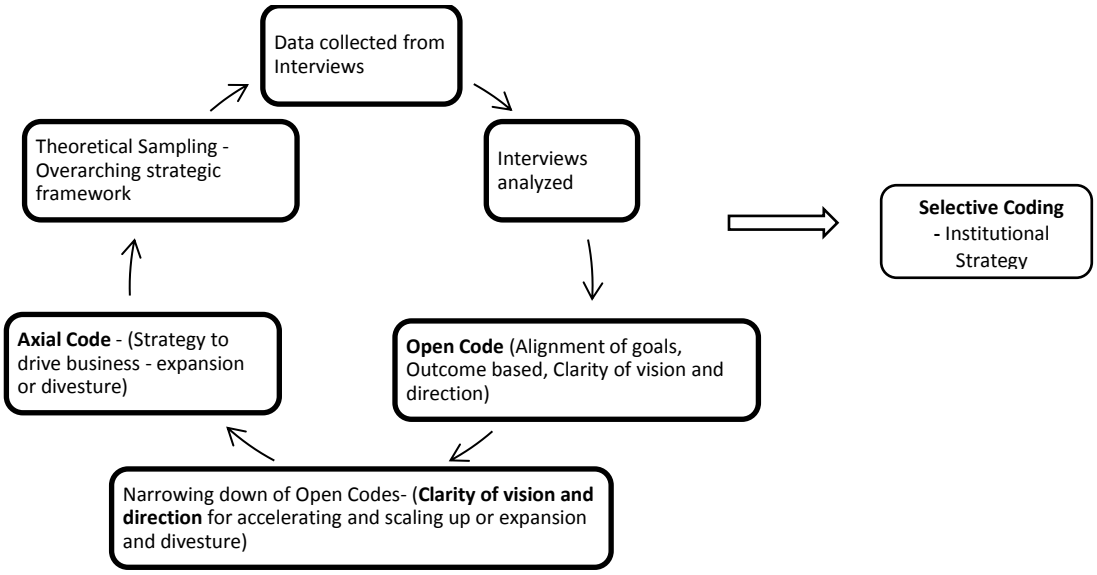

Figure 9. Example of formation of Open Code and Axial Code. Adapted from Corbin and Strauss (1998).

The researcher used the software Dadoose to assist with identifying and tagging the codes.

Table 2

Open and Axial Code Applications using Dadoose

	Poly3_Exec6	Poly3_Exec5	Poly3_Exec4	Poly3_Exec3	Poly3_Exec2.docx	Poly3_Exec1	Poly2_Exec4	Poly2_Exec2	Poly2_Exec 3	Poly2 - Exec1	Poly1_Exec6	Poly1_Exec5	Poly1_Exec4	Poly1_Exec3	Poly1_Exec2.docx	Poly1_Exec1.docx	Totals
Aligned with Industry & External Trends	1	0	2	2	2	5	0	1	0	1	3	3	1	0	4	0	25
Clear Vision & Strategic Priorities	6	2	6	4	6	7	6	4	4	3	11	5	2	3	8	3	80
Financial Sustainability	0	0	0	0	0	0	1	0	0	0	1	1	1	1	0	0	5
Leadership Characteristics	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	0	4
Agile and Driven	1	0	1	0	1	3	1	1	0	1	0	0	0	0	0	0	9
Business Acumen	0	0	1	0	1	2	2	1	0	1	0	0	0	1	1	0	9
Complex Systems thinker	1	0	2	0	2	2	1	1	0	2	0	0	0	0	0	0	11
Diversity	0	1	0	0	0	4	3	0	0	0	0	0	0	0	0	0	8
Risk Taker, Entrepreneurial, Innovative	1	0	2	0	0	4	0	0	0	0	0	0	0	0	0	0	7
Transformational Leader	1	0	1	0	0	2	0	1	0	0	0	0	0	0	0	0	5
Leadership - Development	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	1	4
Mentorship Support	1	2	3	3	3	3	3	2	2	4	6	0	1	3	4	1	41
Professional Development	1	1	1	1	2	2	2	2	1	3	3	1	2	1	2	2	27
Leadership Competencies	1	1	1	0	2	2	1	0	0	2	2	2	0	0	0	4	18
Performance Indicators	0	0	1	1	2	2	1	2	1	2	2	2	1	2	0	0	18
Performance Management	0	1	1	1	1	2	2	2	3	2	4	1	3	2	1	3	29
Polytechnic Position & Identity	4	1	4	0	1	3	1	0	0	1	2	4	0	0	2	1	24
Succession Planning Informal	4	3	5	4	5	4	5	4	2	4	7	3	5	9	2	6	72
Succession Plg, Talent Mgmtt, Leadership Dev	1	0	3	1	2	4	0	1	2	2	1	0	1	1	1	1	21
Systems and Technology	2	0	0	0	0	0	1	0	0	0	4	1	0	0	3	0	11
Talent Management Formal	1	0	3	4	4	3	0	1	0	0	2	0	0	0	1	0	19
Talent Management Informal	3	2	4	5	1	1	6	4	4	5	7	5	4	5	2	2	60
Talent Mobility	2	0	1	1	0	0	0	0	1	7	0	3	0	1	0	2	18
Talent Recruitment	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3	5
External Hiring	0	1	0	0	1	0	0	0	1	0	0	0	1	0	7	0	11
Internal Hiring	1	1	0	0	0	1	0	0	1	0	1	0	1	1	0	0	6
Internal and External Hiring	1	1	3	1	2	3	2	4	3	4	0	4	3	1	0	4	36
Totals	33	17	44	28	38	58	39	32	28	44	58	35	26	31	40	33	0

Table 2 above captures the application of open codes that generated 27 axial codes and 584 code applications from all the interviews with sixteen senior leaders. Refer to appendix 5 for details of open codes. The highest number of code applications as shown in table 2, led to the development of themes that the researcher used as selective codes: institutional strategy, accountability framework, talent management framework, leadership development and training, essential leadership skills and informal succession planning. These selective codes are explained further in the next chapter.

Table 3

Themes from Open and Axial Codes

Concepts / Open codes	Categories / Axial codes	Themes / Selective codes
1. External and internal factors; Higher Education environment changes; Clarity of vision and direction; Strategy for accelerating and scaling up or expansion and divesture	Strategy to drive business; environmental scan; Executive sponsorship	Institutional strategy
2. Outcome based; Goals alignment; Outcome Based; Targets and Metrics; Understanding polytechnic context	Strategic priorities aligned with internal and external factors; Performance goals and success measures	Accountability Framework
3. Align leadership competencies Administrative experience Vs Academic credential and experience; Leadership development & training; Development Opportunities; Mentorship	Developing leadership bench strength; Leadership competencies	Leadership Development & Training
4. Institutional needs; Map needs with existing talent; Recruitment and succession planning by developing potential talent; Internal Hires; External Hires;	Talent Management; Talent Calibration; Organizational Effectiveness;	Talent Management Framework
5. Alignment with institutional values; Diversity – gender, experience and competence; Essential skills for cultural awareness, business acumen, be politically astute; are strong collaborators with high emotional intelligence.	Leadership Characteristics and Attribute Alignment with Institutional Values	21st Century Essential Leadership skills
6. Invest in for building leadership talent pool for the higher education sector; Informal conversations for internal progression; Special projects and leadership development opportunities	Talent Mobility – Internal and External Sharing of resources with other PSIs	Informal Succession Planning

Figure 10 below, shows the evolution of grounded theory beginning from raw data gathered from the interviews to form concepts. Clusters of concepts with similarities or relationships then form categories or axial codes. Numerous reviews of data and categories lead to generation of core categories also called selective codes.

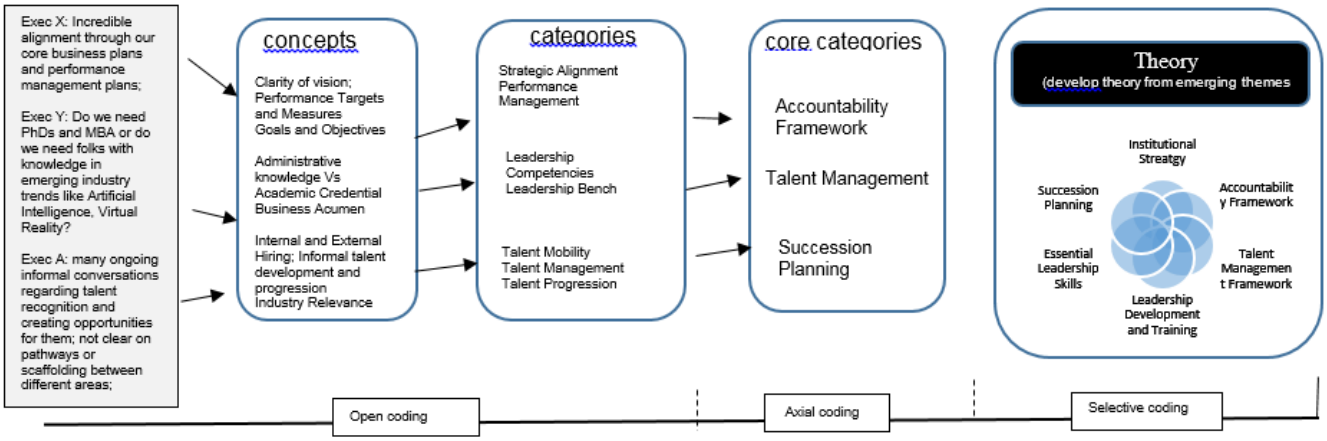

Figure 10. Example of formation of Open, Axial and Selective Codes; Adapted from Gidey, Marmsoler Eckhardt (2017).

Summary

Polytechnics have applied learning and applied research at the core of their program offerings. These institutions which operate under the consortium of Polytechnics Canada, offer range of credentials from bachelor degree, diploma, certificates and apprenticeship programs that are endorsed and certified by professional affiliations and accreditation bodies. The interviews with the senior leaders of the three polytechnics led to the finding that while the leaders recognized the need for succession planning to sustain in the complex and dynamic environment they operate in, they however used various approaches to dealing with filling in vacant senior positions. The term talent management was used interchangeably with succession planning, hence included formal and informal activities like performance management (based on deliberate goal setting discussions to align with the institutional strategic priorities), mentoring programs,

professional development opportunities and temporary assignment to special projects, as way to identify and grow talent. A significant finding from the interviews was that while the senior leaders saw an urgency for succession planning, they wanted it to be informal and an organic effort rather than a documented plan. The interviews with senior leaders, who had varied experience, skills-sets and backgrounds within their respective institutions, led to six themes, namely, institutional strategy, accountability, leadership development, talent management, essential leadership skills, and informal succession planning. These themes are explained in the next chapter.

Chapter 6. Discussion

The study investigated the role of succession planning in achieving organizational stability for polytechnic institutes in Canada. Examining the themes generated from open, axial and selective codes revealed significant inter-dependencies between strategic planning, talent management and leadership development and how these relate to the succession planning efforts within the polytechnic environment. Before elaborating on the core categories and associated theory, the researcher presents the strong relation between the findings and the current literature described in Chapter 2 of this study.

In particular, Uhl-Bien, Marion, and McKelvey (2007) highlight the importance of strong leadership and the urgency for senior leaders to stay progressive, be open to change and adaptable to the significant shift in the internal and external environment of the organization, sponsor technological advancements and promote knowledge-centered business models. This was a recurring sentiment shared by the executives of the polytechnics, to stay nimble and agile and aligned with the required leadership characteristics and attributes. The executives recognized that no matter how many resources are allocated towards leadership training, unless the leaders are aligned with organizational values and understand institutional purpose, it may not yield the desired outcomes.

Hunt, Layton, & Prince (2015) reviewed the ability of an organization to yield increasing business returns, employee engagement and customer satisfaction by investing in talent management strategies and integrating diversity into workplace. This resonated with the finding that the leaders need to have essential skills such as business acumen, emotional intelligence, entrepreneurial and relationship management, as well as administrative competence, to create an engaged and committed employee group that is open to change and welcomes diversity.

Likewise, Rothwell (2005) states that true succession planning is driven through deliberate strategic planning efforts with executive sponsorship. Succession planningcalls for a systematic plan to identify organizational leadership needs and mapping them with existing talent and developing others to build a healthy talent pool. The leaders recognized the shifting realities and impact of external and internal factors, like changes to the government, policy reforms, reliance on government funding, shift in industry trends, and economic volatility, as well as student and employee demographic changes requiring complexity leadership attributes. The findings confirmed Scharment and Senge's (2009) position regarding the complex environments and interdependencies the leaders need to be adept with to be able to, not just navigate through the current state, but to position the organization for the future. This resonated with Uhl-Bien, Marion, and McKelvey's (2007) position regarding complexity leadership, and having the right blend of administrative and entrepreneurial mindset to transform the context and culture of institutions and achieve changes within the organization. Despite such unpredictable times, the leaders relayed a great sense of optimism and readiness to embrace innovation and technology evolution. They recognized the need for the leadership team to be bold and transformational and possess clear vision, emotional intelligence and charisma to stimulate and inspire followers to achieve extra-ordinary outcomes (Harms & Credé, 2010). Being purposeful and strategic to facilitate organizational learning while providing opportunities for personal and professional growth for leaders was discussed as a talent management strategy.

The presidents of two polytechnics shared that it was their expectation to identify and groom at least three to four leaders for future progression opportunities. There was consensus regarding informal development opportunities for leaders and each polytechnic had ample opportunities for leaders to lead and facilitate employee forums, key institutional projects and

participate in mentorship and leadership development programs. Exhaustive review and analysis of interviews resulted in generation of six themes or selective codes that are described in the section below.

Theme 1: Institutional Strategy

Each leader mentioned that alignment between operational plans and strategic plan was fundamental to their success. They believed that the strategic priorities aligned in different ways with students, employees and industry and provided them the roadmap to run their business. Although it was not evident from the information presented on the website or through interviews, a few leaders emphasized that the institutional strategy must be clear and confirm whether the institute should expand and scale up or diversify and divest, as this then dictates the business plan and alignment of talent resources.

For the purposes of readability in this dissertation, participating leaders will be assigned letters A through P, following the order of the 16 respondents from Poly1_Exec1 through to Poly3_Exec6.

Leader M shared the following important perspective around the strategic plan:

> "when you bring in a new strategic plan, it's also an opportunity to review your organizational structure. Because the organizational structure that may serve one particular set of priorities and plans very well may not be the right organizational structure to effectively achieve a somewhat different set of goals and priorities' (Leader M).

This perspective was particularly important as the senior leaders discussed the pace and magnitude of changes in higher education and the urgent needfor institutions to have leaders who can cope with the changes and lead amidst these complexities. The majority of the participants

noted the need to be agile and nimble to adapt to the changes.They agreed that the strategic plan provides institutional direction of whether the organization needs to expand in the current business or diversify to meet the growth and long-term sustainability needs. For example, in response to a question around internal or external hiring trends with their organization, the majority stated that it is a combination of both with the prime goal to ensure a good fit for the position and the organization. They explained that if the institutional strategy is to scale up, then the organization must invest in the development of people within. They believed that there is enough institutional knowledge and experience within their organization that can be leveraged to scale up or expand programs. If the choice however is to diversify and go with different lines of business, then they would need to invest in purposeful recruitment, that is hiring from outside, and that investing in the right talent should be part of talent management and succession planning efforts. Leader B presented the point that succession planning follows strategy and not the other way around by positing that a succession planning framework must align with the institutional strategy of expansion and scalability or diversification for sustainability.

> "I think the relative weighting is dependent on where you are going with that strategy. By that I mean, if it is accelerating business as is, more programming, more enrollment, those things like that drive a polytechnic, then you probably scale up and over invest on developing your talent from within. If however your long term strategic plan is a bit of an expansion, a divesture, or a different path, so if we as a polytechnic are also going to train in this area, or completely different lines of business, or changing how we partner with industry, if distance learning becomes that core element, those types of things, then I think moving people from within will likely not be the best strategy because you need a broader range of talent coming in" (Leader B).

There was a consensus that if the organization is looking at expanding the current program mix with similar composition then it is wise to grow talent from within. However, if the organization needs to reposition its make-up and strategic focus including restructuring, then there is an opportunity to bring external talent with new perspectives, knowledge and skill sets.

Theme 2: Accountability Framework

To drive the required focus, the leaders highlighted the importance of an outcome-based approach to planning and measuring success. Strategic plans with well laid out priorities, goals and metrics enabled the leaders to elevate accountability at all levels and overall operational governance. Executive sponsorship and support for leading and resourcing various strategic initiatives was critical to their success. Failing this executive commitment, the leaders saw their plans remained unexecuted. The leaders firmly believed that a robust accountability framework, including transparent performance management processes that clearly articulate the organizational priorities, goals and desired outcomes, is fundamental for elevating leadership accountabilities and overall operational governance at all levels of the organization. This finding of the importance of an accountability framework was summarized by the comments below from the Leader A:

> "I'm really big on people having a very clear understanding of how you connect the dots between those various elements of strategy. How it's important to have focused leadership on your strategic priorities if you want to achieve those. How it's important to be able to draw the line between strategic plans to business and operational plans to performance plans for individuals in the organization. And to have a conversation on an ongoing basis, not just once a year, of how we're doing. And it's having some ways of

actually demonstrating or measuring whether or not we're on track with those plans" (Leader A).

The leaders believed that having a well-laid out accountability framework with alignment between strategic priorities, performance goals and desired outcomes provides transparency and builds a culture of shared responsibility and empowerment that eventually enhances engagement and productivity. The leaders also recognized the importance of having robust systems and technology infrastructure and dedicated resources for hiring the right talent and training for emerging leaders.

Theme 3: Leadership Development Framework

There was a unanimous agreement by all the leaders for succession planning to be an ongoing conversation at all levels, particularly at the executive and senior leadership levels, to understand institutional needs and direction, potential talent within the institution, and gaps in talent to identify opportunities for external hires. In response to a probing question regarding the desired leadership competencies and experience, 12 of the 15 leaders believed that having experience in the academic side of the business would not trump expertise in administrative side of the business, even though it may be in a totally different area of business. They believed that due to the changing employee and student demographics, having subject matter expertise was no longer a mandatory requirement. Within the complex polytechnic environment with increased accountability, the participants recognized the urgency for leaders to support innovation and inter-disciplinary offerings and practice excellence, quality and lean management in all their administrative operations. While technical expertise would complement the role, it was not a recipe for success. On the contrary they affirmed that having stronger administrative skills to hire and train the right team, manage operations and different internal and external relationships, and

having an entrepreneurial and growth mindset was in fact more critical to stay ahead of the changes. Having the ability to hire the right technical talent within the team and creating a collaborative and engaged environment for technical experts and leaders to work together was seen as a key leadership attribute. In response to the question around strategy when hiring internal or external as well administrative versus academic competence, the Leader H mentioned:

> "We have this real strange belief that academic success somehow correlates with administrative success. We tend to take those people who have been very successful on the academic side and say, "We really believe you need to step forward to lead a department, or to become an Associate Dean, or to become a Dean." Whereas that skillset may not be orthogonal to what's required, but I'm not sure it's positively correlated either. We end up putting people that should never have been put in administrative position in places where it does a disservice, both to that person and to the institution" (Leader H).

While this was a consensus, the leaders did highlight the urgency of investing in understanding institutional leadership bench strength, identifying the existing gaps and addressing those by developing leaders through formal and informal leadership development opportunities. Developing leadership competencies that aligned with institutional values and mandate and integrated into the accountability and performance management framework was seen as fundamental to drive the desired leadership and building the bench strength.

Theme 4: Talent Management Strategy

The term "talent management" was interchangeably used with "leadership development" suggesting the leaders recognized their desire to confirm the framework that supports recruiting, training and retaining top talent. However, they did not understand the difference between talent management and leadership development. As stated before, having the leadership bench strength

with diverse skills and depth of experience was discussed as fundamental to staying sustainable. However, each leader acknowledged that discussions around potential talent and succession planning were handled informally with a risk of losing the required attention due to competing priorities. Baby boomers' retirements and the pace and significant changes in the post-secondary landscape haw caused some unintended consequences of operational disruption, delays in hiring or not being successful with the choice of hires.

The leaders spoke to the need to have more diversity and experience within the leadership team to lead institutions through tremendous opportunities. This would include having the leadership bench strength that is positioned to be entrepreneurial, innovative and bold as they navigate through the environmental complexities.

The executives echoed the need for leaders to have the emotional intelligence amongst other leadership competencies to be able to engage and mobilize their teams and entire employee group to embrace the vision and direction set for the organization. They admitted that building the team with this balance has been challenging and needs a more deliberate effort, starting with having a well-defined talent management strategy including leadership competencies that cater to the organizational vision and mission. Leader L eloquently presented the dilemma the leaders face:

> "It's our ability to stay nimble to continue to be innovative and to continue to have the courage to be innovative and embrace the things that we need to do to achieve those changes, even though there is so much uncertainty out there. So, there's always risk in change, and it needs to have a certain level of tolerance for the ambiguity. You have to have confidence in your direction and your people. And you have to be willing sometimes to dive in and take a risk on things because you're never going to have all the

information you want to make a perfect decision, but you can't be paralyzed by those things haunting you when you try to move forward on things" (Leader L).

While one polytechnic had talent management as a priority in its strategic plan, the other two were still working on integrating this urgency in a more formal way. As alluded to earlier in this section, talent management is tied closely to the institutional strategy and the leaders believed that a combination of formal and informal activities, with executive sponsorship would help them address this urgency. Additionally, a few leaders believed that a leadership development framework must be a subset of talent management strategy, indicating specific recruitment, onboarding, retention and succession planning efforts.

Additionally, the findings aligned with the human capital management models, illustrated in Figure 3 capturing the job-ladder model, replacement strategy, career-lattice model and external hiring. The researcher noted a large percentage of interviewees recommended using a combination of the career-lattice model (Benko & Anderson, 2011) and external hiring (Cappelli, 2010) for recruitment and succession planning efforts. It was also evident that succession planning was critical to human capital optimization and sustainability for these polytechnics and their leaders believed it should be embedded within their strategic plans and business plans. The researcher noted that other than the presidents, most senior leaders were unable to make clear distinctions about how the leadership development and talent management aligned to their existing strategic plans.

Theme 5: Essential Leadership Skills

Another finding that emerged from discussions with senior leaders was around the essential soft skills required of leaders in the current volatile, complex and ambiguous environment. While the institutions must deal with internal and external changes, not everyone

is ready for change, requiring change leaders who are able to help build engagement and positive influence across the organizations. In addition to a clearly stated strategic plan, it was noted that the institutions need to have leaders with essential skills that are non-technical and instrumental in bringing the desired paradigm shift from being bureaucratic to a culture of empowerment and inclusivity. Trust, being results-oriented, and authenticity are critical leadership attributes that help the leaders drive the organization through change.

The presidents of each of the polytechnics as well as senior leaders who had moved from an external organization, echoed that the current and emerging leaders needed essential skills and organizational capabilities different from those that helped them succeed in the past. Collaboration, systems thinking, problem-solving and entrepreneurial skills were a few that the leaders spoke passionately about. The leaders stated that with the propagation of digital disruptive platforms there was a need for diversification of portfolios and talent to cater to the changing learner and employee demographics. Additionally, with the evolution of distance education and competency-based education, leaders need to be adaptable and open to change across the board to make consequential decisions that align with institutional strategy and mandate. Regarding the desired essential skills, Leader N mentioned that

> "We're also looking at the overall values of the organization and what we're trying to achieve. So when I'm looking at succession planning, I also do it through the lens of equity and diversity. We are a very diverse organization so I'm very aware of the need to reflect diversity in our leadership team and that's everything from gender to ethnicity to... all those dimensions. For example, if you have an organization that values respect and innovation then you want have leaders that walk and talk those values" (Leader N).

The executives noted the importance of ethical values and high emotional intelligence to support diverse employee and student populations. They suggested leaders to be authentic to allow open, inclusive and transparent interactions with employees when dealing with sensitive personnel matters and building engagement to collectively navigate operational complexities. When asked about leadership attributes and essential skills, Leader I put, communication skills and being bold, as fundamental to connect with masses across the board:

> "I think that there's something really important in executive leadership that has to do with an experiment from an article called "The Work of Leadership" but it's this notion of being able to get up on this balcony. It's the idea of being able to step up and really look out over the whole organization and being able to make decisions from that perspective. The second one for me is the ability to communicate to be able to communicate in the executive suite and to the custodial staff and to academic staff and stakeholders in the community. So a really strong set of communication skills and the ability to simply describe concepts and directions is absolutely key' (Leader I).

Theme 6: Informal Succession Planning

All the participants recognized the importance of succession planning although they shared that there was nothing formal in place to support that. The researcher noted a general belief that succession planning could happen in two ways: (a) by supporting leaders for internal progression and professional growth, and (b) by encouraging leaders to explore external opportunities in the higher education sector. Internal progression was being referred to as scaffolding talent across the organization and allowing various formal and informal opportunities for leaders to learn and demonstrate their capabilities to the rest of the organization. This resonated with Cornerstone's (2017) definition of internal mobility: "Moving employees

efficiently and proactively throughout the organization, vertically and horizontally, to ensure the organization can leverage skills, talents, and competencies when and where they are most needed" (Cornerstone, 2017).

Another popular perspective and a shift in the conversation at the executives table was to look beyond their own organization and being open to building a talent pool for the higher education sector. The executives were mindful of their corporate responsibility under fiscal constraint and recognized that the recruitment, retention and succession of leaders while critical for the growth and operational resilience of the organization, is a complex, time-consuming and costly undertaking. There was a consensus amongst the leaders that working collaboratively to build a governance model of developing a senior leadership talent pool and sharing resources would serve the individuals and institutions well. The leaders shared that they used various leadership development programs to help emerging leaders to develop. These programs were offered within their respective institutions and in Canada and US. There were numerous examples shared where the leaders were supported to move in and out of polytechnics to explore progression opportunities within other higher education institutions. The researcher noted that while there was a desire, there was no evidence of a formal initiative underway to support this recommended strategy. Leader K was passionate about his thoughts on external mobility and said,

> "Yeah, I think we worry too much about developing people and keeping them for our own institutions and sometimes we frustrate people as we may not have enough opportunities. I hate to lose that individual, but I don't want to hold them back either with their goals of getting into a leadership role. I think that if everyone in the system kind of thought of it that way, we would just have more leaders in the system and better leaders

in the system. They may leave your organization and go take on another role, but they may just come back stronger" (Leader K).

Generating Theory: 4P Model for Succession Planning in Polytechnic Institutes

The researcher identified the six themes in the data collected from the participants at the three polytechnics: institutional strategy, accountability framework, leadership development, talent management framework, essential leadership skills, and informal succession planning. The section below includes the explanation and summarization of the model illustrated in Figure 11, generated using the grounded theory approach. This approach rendered the proposed model centering on four key pillars: Purpose, Progression, Performance and Persistence to provide a deliberate, integrated, systematic approach to succession planning and leadership development and not a stand-alone operational activity. While the themes resonated with a number of concepts that emerged from the literature review, succession planning is as an organic process supported by all-encompassing systems, technology, and governance with the goal to develop leaders at all levels with the relevant knowledge, 21st century essential skills and aptitude.

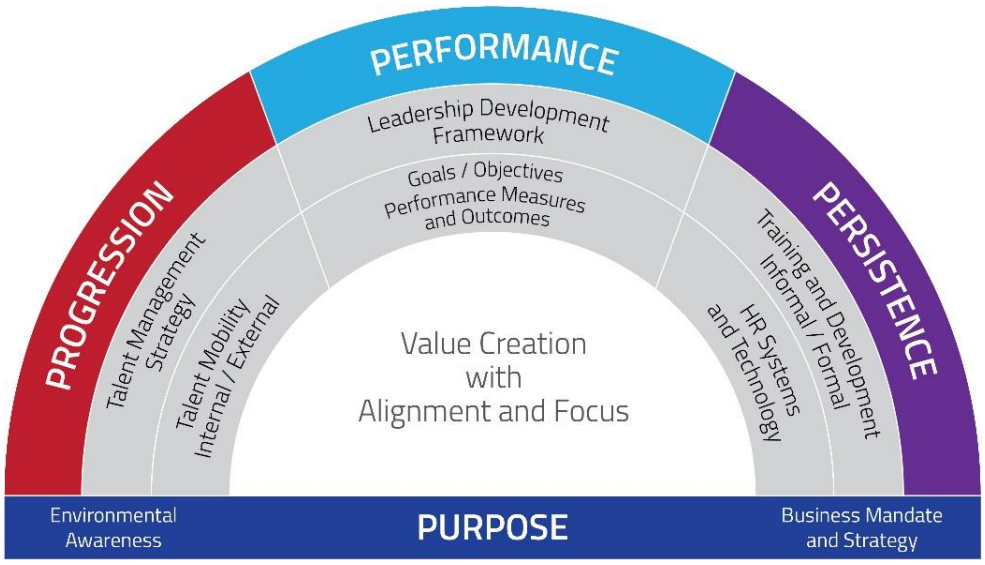

Figure 11. 4Ps of Succession Planning using Grounded Theory.

Succession Planning Purpose. The senior executives agreed that for an organization to be sustainable, it needs to be clear about its purpose and mandate at all levels of the organization, and maintain sound governance to manage the fiscal, environmental and corporate responsibilities. This is carried through by having a strategic plan that clearly articulates the mission and the strategic priorities for the organization over the next set period. The first 'P' in the model suggests a well-defined and articulated "purpose or strategic plan' that serves as the foundation for succession planning as it provides the direction for hiring the right talent and developing the leadership bench strength critical for achieving sustainability. This component is consistent with the view of Taylor and Bennett (2002) that succession management should not stand alone but must link with the business strategy and intended outcomes; and that capabilities identified for development, hence HR strategies such as recruitment and development, must flow from, and align with, the organizational strategic plan (Compton, 2009).

Strategic plans serve as the roadmaps for organizations and provide the required focus and agility to adapt to the changing higher education landscape and successfully carry on their operational mandate. Strategic plans must evolve by predicting and creating the future through a balanced and comprehensive system of assessing opportunities and risks and managing resources to create advantage.

It was obvious from talking to the senior executives that the process of developing strategic plans was critical and as important as the plan itself (Coblentz, 2002). The process needs to be inclusive and highly consultative to ensure stakeholder engagement through solicitation of ideas and suggestions from external and internal stakeholders. This first part of the model reflects the importance of the institution remaining well connected with its external environment, and a need to gain updated information and data on external factors bearing on

strategy and operations. It signals the need to maintain a sound knowledge of current and anticipated changes in the institution's external operating environment in order to prepare for the effects of change.

Taylor, de Lourdes Machado, and Peterson (2008) note that strategic management "serves as a mechanism to provide direction to an institution and at the same time has the potential to propel an HEI on a perilous course into uncharted waters" (p.371). Balancing these two aspects of strategic governance is complex and requires effective leadership. It emphasizes the importance of the preparation of new leaders in that leaders must have the aptitude to understand and position their institutions amidst evolving strategic contexts and how they relate to the work of their functional units and organizations (Horder, 2000).

Opportunities and threats posed by rapidly changing internal and external polytechnic environments demand a more diverse set of leadership and management skills than previously has been the case. James (2002) recommends constantly monitoring to update a strategy to take account of non-linear, unpredictable developments. Changes may relate to increased innovation supported by adequate risk management (Shattock, 2003), acquiring specialist knowledge for sound governance; creating and managing different partnerships for accessing support (funds for research and development where applicable); and carrying out the core business (Drew 2006; Marshall, Adams, Cameron, & Sullivan 2000; Schein, 1997).

Due to economic and technological diversification, changing local and global economic and political conditions, competing pressures on government costs and associated funding for higher education, the environment around the institutions is constantly changing and so does the organizational context along with it. While having the institutions being purposeful and deliberate in managing their strategic and operational mandate is critical, their agility to adapt to

the changing internal and external dynamics is equally important. Strategic plans provide high-level guided pathways and specify strategic priorities, and have well-aligned business plans or annual plans that are more prescriptive and provide the detail goals and success measures to implement the chosen strategies. Sustainable institutions take time to review these business and annual plans regularly to ensure they align with changing realities and make the necessary modifications to position them for success, mitigate risk and reconfirm strategic direction. Navigating these internal and external complexities require change leaders who have the drive, are well-versed with institutional operational nuances, and are politically astute to influence required behaviors and competence across all levels of the institutions. Leaders who are operationally strong and have a strong academic background and experience but are lacking the external focus to stay relevant and drive to keep pace with the changes may be not suited to lead the organization through tremendous change. Having said that, for an organization to have just aspirational leaders with a huge desire to innovate and stay externally aligned but lacking the operational skillset to understand and manage higher education nuances, may put the organization at risk for under-performing and not meeting its governance accountability. Essentially, the 'Purpose' pillar of the model helps the organization confirm and recruit leadership talent that aligns with the confirmed strategic direction and ensures sustainability.

Succession Planning Progression. The second P in the model, represents the importance of the progression of leaders within an organization through a deliberate and well-planned effort. This includes the need for institutions to invest in developing talent management strategy, and not to mistake that with leadership development. Investing in the right talent who are equipped with the right skills and fit the organizational strategic direction, is fundamental to the success and stability of an organization. Whitlock states that the role of leadership in

strategic planning is the vehicle that guides an institution from mission to vision (Whitlock, 2003). According to him leadership "is the creativity, intuition, emotion, values, relationship building, and vision that are necessary in setting a new direction, redefining, reframing, reinforcing and communicating the raison d'être for the organization" (Whitlock, 2003, pp. 11–12). Throughout the data collection phase, the researcher noted a similar trend as pointed out by Fancher that "most participants shared a common view of the purpose of succession planning but had difficulty in describing its parameters, contents and characteristics" (Fancher, 2007, p. 77). Of the three polytechnics, only one had begun to recognize the elements of formal talent management and had included it in the strategic plan, while the others seemed confused and continued to refer to succession planning as leadership development efforts. It was obvious that the leaders used succession planning and leadership development interchangeably, and that succession planning was often represented by descriptions of leadership development activities without the strategic identification of high potentials or talent pools which are characteristic of formal succession planning. For the institutions to stay nimble and positioned to meet the growing competition in higher education, they must invest in sophisticated systems that support the vision to recruit, retain and grow talent to support the institutional mandate.

Within the context of succession planning, an organization's strategic plan must clearly state whether the organization is driven to expand its current services and programs or is committed to diversifying its capabilities or both. Depending on the strategy, the annual plans of the organization must define its goals, objectives, desired outcomes and the required financial, capital and personnel resources needed to meet them. While investing in identifying the organizational talent pool and required competencies that align with the strategic direction is critical to achieving the required talent base, the institutions studied do a less than favorable job

of managing this urgency. The senior leaders within the institutions alluded to the fact that the talent management seems *ad hoc*, resulting in lack of agility and nimbleness to maximize business potential either due to vacancies or inexperienced leaders.

As part of talent management strategy, the researcher suggests the importance for an organization to confirm the mechanism for internal progression and external mobility. Irrespective of the strategic direction, the organization must have a system for identifying existing talent and subsequently identifying the gaps in the talent pool based on leadership competencies that align with the strategic direction. For example, if the strategy is to diversify in new territories and develop that expertise, then the talent recruitment strategies must address those gaps. Likewise, if the strategy is to continue to strengthen the existing business model, then perhaps it is important to grow internal talent by enabling scaffolding opportunities for leaders to participate in institutional projects and initiatives, and gain a better understanding of various nuances of the operations.

Furthermore, there was a growing support for talent mobility amongst the senior leaders. For example, the leaders within the institutions were mandated to help grow three to four leaders through formal and informal activities. Whether or not these leaders stayed within the organization or moved to another organization, the initiative was supported by the institutes with the prime focus being the development of leaders for the higher education sector and recognizing that there may never be adequate opportunities for all talented leaders with potential to grow.

Succession Planning Performance. Strategic plans usually extend into a more elaborate and well-defined annual plan or business plans that clearly explains the goals, objectives and success measures for each of the strategic priorities. As polytechnics are public institutions that are funded by the government, these annual plans or business plans cater to the accountability

framework whereby each organization is mandated to state their organizational priorities, planned activities and associated operational resources to support the plan. A well-articulated annual plan helps in producing an annual budget, which is another characteristic of a sustainable organization.

The third 'P' in the model signifies the importance of a performance management framework for leadership, including well-defined leadership competencies and success benchmarking for ensuring the required leadership attributes, rigor and accountability to meet the strategic mandate. Performance management is symbolic of organizational self-reliance as a result of competent leadership bench strength and efficient operational governance. A self-reliant organization demonstrates confidence and competence to navigate the shifting landscape including funding reductions, industry standards, and policy reforms and so on without compromising its mission. Through this third pillar of the model, the researcher urges the importance of integrating the accountability framework within the operational governance of an organization that clearly articulates the strategic priorities, goals and objectives for achieving success at all levels. This aligns with Salminen's (2003) position that higher education institutions need to develop professional academic management. More specifically, Salminen posits, "because of the massification of universities and the increased complexity of university decision-making, management processes are much more complicated than previously. Performance indicators, personnel policies and strategic choices have to be integrated in new ways into management processes and practices in each university" (p. 66). The researcher advocates blending transformational leadership while developing leadership competencies (Bass & Avolio., 1997) and performance management framework and considering the 4Is of Transformational Leadership presented by Bass and Avolio: *individual* consideration that

stimulates motivation through performance and rewards; *intellectual* stimulation to challenge the status quo for innovation and continuous improvement; *inspirational* motivation and articulating the road map to desired future states; and *idealized* influence to gain trust, respect, confidence, and a culture of empowerment. With the marked changes occurring in higher education, now more than ever before, institutions need to invest in developing leadership capabilities to balance their social responsibility with corporate sustainability. This can be achieved through a well-defined performance management framework that embodies leadership competencies and its alignment with the overall organizational strategy.

Succession Planning Persistence. Rothwell (2005) has defined effective succession planning as a process that includes a "deliberate and systematic effort by an organization to ensure leadership continuity in key positions, retain and develop intellectual and knowledge capital for the future, and encourage individual advancement" (p. 10). Higher education is faced with shifting student and employee demographics and diversity that has a direct impact on the changing expectations of workplace skills and overall technical competence. While most institutional leaders indicated they offered some form of internal or external leadership development programs for faculty, staff, or administrators, few respondents spoke of comprehensive or systematic efforts that also included evaluation of the strategy itself or assessment of an individual's development.

The fourth 'P' in the model suggests the investment in Human Resource systems, technology and processes that support the ongoing assessment of leadership talent as well offering training and development for the continuous improvement of leaders. It advocates aligning leadership training and development practices with the capabilities identified as critical to achieving desired culture and goals. It suggests identifying and fostering those formal and

informal training opportunities that allow ongoing conversations with high potential employees. Due to the threats posed by a rapidly changing internal and external environment, polytechnic institutions need to invest in recruiting, retaining and training a diverse leadership team with a good blend of technical, essential and administrative skills.

The researcher posits that the leadership training and development must be ongoing and align with the Talent Management strategy, that is, the program must be organic and integrate leadership competencies and essential skills as part of the experiential activities to enhance participants' leadership capabilities. Through self-paced, trainer-led sessions and stretch assignments and projects, the program must have a mechanism for supporting and measuring the continuous development of leaders.

In a study about management education programs, Rubin and Dierdorff (2011) noted that while essential skills or behavioral competencies were perceived to be the most important to leaders, these were the least represented in the programs offered. With a greater focus on skills and behaviors, like leadership, there is a need to ensure that the skills learned in management courses transfer back to the job (Rubin & Dierdorff, 2011). The researcher suggests leadership training programs offer flexibility, to permit a level of customization based on an individual's personal development needs. It cannot be "one size fits all". Persistence emphasizes the need for institutions to be strategic around succession planning so that leadership development happens organically as the organization goes about its business. This would require a paradigm shift and ongoing communication to keep employees at all levels of the organization informed of the critical strategic and operational initiatives, and seamlessly integrating all formal and informal activities related to leadership development. A culture of persistence will enable the organization to achieve an integrated leadership development framework that ultimately meets

succession planning needs by assessing and repositioning leadership bench strength with emerging trends and organizational needs in a timely fashion and investing in the personal growth of employees.

Strengths and Limitations

The researcher used the information from the websites and interviews as two key sources for gathering the data. While the strategic plans and business plans were fairly comprehensive and easily accessible on the websites, due to the changes in the leadership at each of the polytechnic, there were limitations regarding the complete context of aspects of the plans, and more particularly how these related to where the institutions were headed in future. Except for the three presidents and one or two other senior leaders at each of the organizations, there had been significant turnover in the leadership teams that meant more diverse ideas but also some misaligned perspectives on how succession planning is handled within each organization. This resonated with Creswell's (201) point that not all interviewees can articulate their thoughts and perspectives equally and sometimes may be influenced by their personal biases; thereby the interviewers may need to interpret responses which may not be an actual reflection of their perspectives.

The other limitation was the setting for the actual interview. Given that the research participants were from three different polytechnics and majority of the interviews were conducted on the phone, the researcher may have missed any nuances that are possible in face to face interviews. For example, she could not tell if the interviewees were multi-tasking while responding to the questions or were fully committed to the interviews. The researcher mitigated these limitations by recording and transcribing all interviews. The researcher returned to the

transcribed notes and memo cards multiple times to ensure all themes were captured and theoretical saturation was achieved.

The researcher limited this study to presidents and senior executive from each of the three polytechnics, based on the assumption that executives would have broad perspectives about succession planning and be able to speak on behalf of the institution. The executives represented a range of portfolios including the academic, administrative and human relations sides of the institutions, The results of this study are, therefore, shaped in the perspectives of executives and may not be a reflection of other levels of the organization, particularly of those high-performing mid-level leaders who have the potential for progression within the leadership pipeline, or by those who may be asked to implement the succession plan model once developed.

The greatest challenge of this study was the interpretation of terms participants used to describe succession planning and leadership development activities. Many participants used the term "succession planning" to describe typical leadership development activities like training, mentoring, and job shadowing, and coaching. The definition of "succession planning" referred to in this study was intended to encompass a broader, more deliberate and systemic process that included identifying potential candidates, determining the competencies for leadership development activities, measurement or evaluation of the candidates" readiness to take on new responsibilities, and an assessment or evaluation of the process itself. These activities and others as described by Rothwell (2005) differentiate systemic succession planning from leadership development activities. As such, the researcher was often asked to clarify questions about what constituted formal succession planning. The researcher believes limiting the participants to executives ultimately strengthened the study in that the responsibilities of these executives require extensive knowledge of an institution, its multiple constituents; both internal and

external. As such, these executives were more likely to give thought to additional implications or influences that may impact succession planning and to think strategically about complex issues and interconnected relationships.

Summary

The increased need for institutions to be agile and nimble calls for executive leadership bench strength to exhibit competence, diversity, business acumen and vision to position the organization for future. Additionally, human-centered attributes of empathy, self-regulation and emotional intelligence are essential skills that complement the knowledge and expertise needed to manage academic and administrative operations. While knowledge in technical disciplines is important, it was evident from the study that it was challenging for any one leader to possess all of the attributes listed above, hence, the institutions were aware of the urgency to have a balanced leadership bench strength with higher order inter-personal skills and administrative competence.

The organizational structure of the three polytechnics was similar with unicameral system in which the Board of Governors and President/CEO are the key decision makers. The student population was similar for POLY1 & POLY2 and smaller than POLY3. As part of the operational governance, the senior executives met regularly to discuss key initiatives and strategies including informal conversations around high-performers and creating opportunities of development for them. Strategic plans and business plans for each of the polytechnic were available on their respective website demonstrating a transparent and inclusive governance model that aligned with the provincial accountability framework. While POLY 3 executives mentioned talent management as part of the strategic priorities and an effort to develop systems and governance framework for supporting that, POLY 1 & POLY 2 shared that talent

management was being managed informally with certain systems in place that didn't necessarily align with an over-arching strategy. All the leaders believed for succession planning to be an ongoing and deliberate conversation and not necessarily follow a prescriptive plan. The pace of change and complexity within the system was disruptive requiring deliberate conversations by leaders at every level to identify and develop at least a few leaders for each position. Ensuring the hire was the right fit for the position, the leaders believed they would hire from internal or external pool. Having said that, majority of them seemed open to hiring from other sectors and post-secondary institutions to allow new perspectives, talent and experiences be introduced into the executive team.

Chapter 7. Conclusion

The primary focus of the study is to examine the role of succession planning in achieving organizational sustainability among Canadian polytechnics. Boudreau and Ramstad (2005), refer to sustainability as achieving success today without compromising the needs of the future. Wales (2013) posits that organizational sustainability means the organizational capability to consistently achieve or exceed its mission, goals and objectives.

The researcher noted trends emerging from the data showing the existence of informal succession planning activities in all three polytechnics. While all the leaders recognized the need to have an increased level of commitment and dedication by the senior executives to make it more organic, they admitted their respective organization had more work to do. They echoed the need for a functional model that was integrated into the fabric of the organization and requiring a paradigm shift at a strategic and operational level.

The researcher observed prevalence of individual perspectives and varying organizational realities when dealing with succession planning. Almost all the leaders felt that the succession planning strategy cannot be too prescriptive as it may change depending on what's best for the organization at any given time. Depending on the needs and required skills sets, they would either hire internally or externally. The study also revealed that while the institutions strive for having mature succession planning models that include well integrated talent management and leadership development systems, they were still learning about various associated nuances. This was also due to the changing higher education landscape and leadership attributes required to navigate the complex internal and external environment.

While there was a tendency for senior leaders to gravitate towards their current flexible and fluid approach of succession planning that involved formal and informal conversations

around identifying and developing high potential employees, senior leaders strongly supported investing in a succession planning framework of identifying high performers through a series of deliberate and well planned activities. These would include cascaded activities like measuring performance goals that aligned with strategic priorities, success in stretch projects and assignments and other activities with measurable outcomes. Informal approaches included identifying talent during mentorship programs, facilitating, and presentations at institutional events like town halls and board meetings, and finally success in in-house courses and workshops. Furthermore, the senior leaders from two polytechnics shared a practice of formal and informal performance calibration, whereby the senior leaders have an opportunity to seek feedback about an individual's performance as a leader, more specifically around teamwork, collaboration and alignment with institutional values.

Research Generalizability Validity

To ensure reliability in qualitative research, examination of trustworthiness is crucial. The generalizability of the result depends on the rigor and testing used to get to the findings. Use of grounded theory approach for the study helped in elevating the generalizability of the study. This is because theory generated was based upon patterns found in a cyclic process for data collected and not due to personal biases or assumptions. More specifically, the approach allowed constant comparison of emerging codes and categories with new data collected, themes identified until the inductive analysis reached a saturation point (Strauss & Corbin, 1998). With every interview, the researcher used notetaking and memoing to capture ideas and expressions, that later helped in creation of codes and categories. For example, all interviewees emphasized the urgency of alignment and need to have a decision making framework with disciplined approach to meeting the strategic goals while managing the entrepreneurial and administrative

functions. Through note-taking and cyclic process of coding, this led to the formation of the 'Accountability Framework' theme. This approach and constant comparison between data sets resulted in the themes and ultimately the theory. Generalizability is found in the assessment of the reader, who will benefit from the detailed explanation of the research process including clear procedure of data collection and analysis as shown in Figure 9. Additionally, due to the similarity in governance of polytechnic institutes, the results will be the same if the study was extended to more participating institutes and their respective leaders.

Recommendations

The polytechnic landscape is undergoing tremendous changes and continues to evolve. Public funding has had a steady decline over the last decade, prompting institutions to adopt entrepreneurial and bold approaches to enter unchartered territories. This has also meant additional governance demands like increased accountability, higher growth targets and student access, legislative changes, growing competition amongst post-secondary institutes. At the same time the evolution of distance education from traditional correspondence offerings to e-learning and modular competency-based learning has required institutions to invest in smart systems and infrastructure that supports accessible and affordable education using various delivery modalities. Polytechnic institutions are challenged to stay stable and sustainable under these unprecedented changes without a strong leadership bench strength. This study confirms the lack of systematic succession planning models that encompass effective talent management and leadership development practices in polytechnic institutes (Drew & Ehrich 2010; Gayle, Tewarie, & White 2011; Groves 2007).

This study introduced the *4P Model for Succession Planning in Polytechnic Institutes* by organically integrating talent management and leadership development processes to achieve

organizational sustainability. Through the 4P model, this study recommends following measures to build the leadership pool that is instrumental in steering organizations towards the desired paths for success:

Purpose – As polytechnics find ways to work through budget pressure, demographic shifts, emerging technology and rapidly-evolving labour market, they are most challenged to see what type of jobs will exist in the next few decades. Due to automation and smart technologies, industry will see a big share of their human jobs getting replaced by smart machines. Under such circumstances and environmental influences, for an organization to be sustainable, it needs to be clear about its purpose and mandate at all levels of the organization, and maintain sound governance to manage the fiscal, environmental and corporate responsibilities. This is carried through by having a strategic plan that clearly articulates the mission and the strategic priorities for the organization over the next set period. Having a strategic plan that clear states the vision and roadmap for the organization including the type of programming and associated administrative services is vital for its success. Additionally, the plan must confirm if the institution would like to expand its current offerings, diversify or both.

The first ‘P’ in the model suggests a well-defined and articulated ‘purpose or strategic plan’ that serves as the foundation for succession planning as it provides the direction for hiring the right talent and developing the leadership talent pool, critical for achieving the sustainability of an organization. For example, if the institutional strategy is to scale up, then the organization must invest in development of people within. If the choice however is to diversify and go with different lines of business, then they would need to invest in purposeful recruitment i.e. hiring from outside and investing in the right talent would make sense.

Progression – The researcher recommends polytechnic institute to invest in development of talent management strategy that is aligned to the strategic plan and encompasses the types of changes the organization is dealing with, for example, changes due to technological advancements and digital disruption, learner demographics, legislative impacts, distance education evolution, economic and industry requirements, employee engagement, and so on. Investing in the right talent who are equipped with the right skills and fit the organizational strategic direction, is fundamental to the success and stability of an organization.

The second P in the model, represents the importance of progression of leaders within an organization through this deliberate and well-planned talent management strategy and effort. Leaders today must acknowledge and embrace a life of continuous ambiguity and uncertainty as they navigate through disruptive change and create breakthroughs that advance existing ways of doing business. Talent management framework must address the changing paradigm and include leadership competencies, critical positions, and existing talent and subsequently identify the gaps based on the leadership competencies. For example, if the strategic plan calls for the institution is to diversify in new territories, then it requires the new talent and expertise to design and deliver the associated program offerings. Likewise, if the strategy is to continue to strengthen the existing business model and program offerings, then perhaps grow internal talent by enabling scaffolding opportunities for leaders to participate in projects and initiatives of different nature.

Performance – Disruptive innovation and change is the "new normal" for higher education. Leaders need to embrace new competencies to compete in this evolving landscape while creating strategic differentiation for themselves and their organizations. In order for them to continue to be productive while exploring new territories and mastering new competencies, requires a disciplined effort and guidance. The performance focus in the model emphasizes the importance

of discipline approach and integrating the accountability framework to ensure efficient governance while achieving strategic success. The researcher recommends polytechnics invest in establishing performance management framework for leaders to include leadership competencies that align with the institutional values and provide success benchmarking for ensuring the required leaders recognize their roles from being individual contributor to leader.

Persistence – Following development of a comprehensive and employee-centered performance management framework with leadership competencies, the institutions need to invest in systems and technologies that help with training and development opportunities for employees. More specifically, the fourth P in the model suggests the investment in Human Resource systems, technology and process that support ongoing assessment of leadership talent as well offering training and development for continuous improvement of leaders. It suggests identifying and fostering those formal and informal training opportunities that allow ongoing conversations with high potential employees. The researcher posits, that a culture of persistence enables the organization to achieve an integrated leadership development framework that ultimately meets succession planning needs by assessing and repositioning leadership bench strength with emerging trends and organizational needs in a timely fashion and investing in the personal growth of employees.

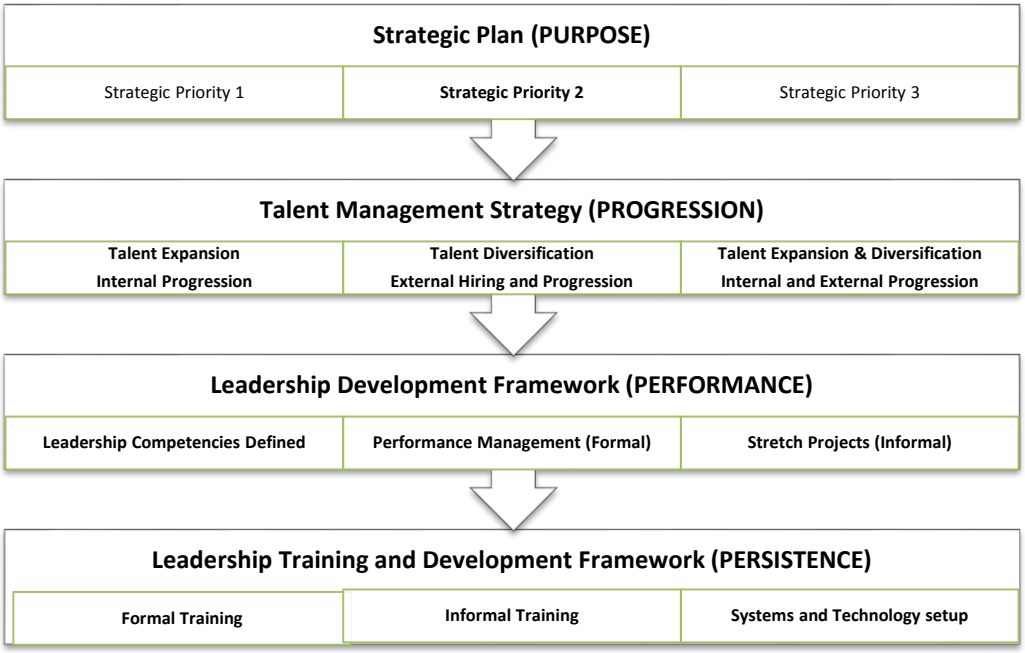

Figure10. 4P Model – Articulation.

The researcher recommends that each polytechnic's leadership identify recruitment, retention and progression as a priorities to manage the ever-changing higher-education landscape. More specifically there needs to be executive sponsorship at these institutions to establish a governance model including systems and technologies to support succession planning for leaders. This calls for the deliberate and continuous review, evaluation and development of the talent pool and the processes to ensure both are meeting the desired institutional objectives.

Finally, change is the new normal within higher education due to disruptive technologies and innovation and requires leaders with technical and administrative competence to make a difference while creating strategic differentiation for themselves and their organizations. Technology disruption has been felt in majority of the industry sectors as well where they have experienced dramatic change due to new and converging technologies. While the leaders in polytechnics continue to partner with these industries to ensure the training programs are

relevant and current with industry standards, they also need to cater to the changing student demographic. Access and flexibility, re-skilling and non-traditional certification options that lead to employability are a few examples of what the students are seeking from their educational institutes. The use of digital technology in education is critical for the economic competitiveness and efficiency of labor and knowledge production. Polytechnics need to continue to enhance their applied learning model by integrating active learning pedagogies and classrooms, online and blended delivery, virtual reality and augmented reality, and investing in the required information technology infrastructure and governance. This shift calls for polytechnics to have leaders who are embrace change, are competent and innovative, collaborate with different functions, have a multidisciplinary education and surround themselves with diverse team members with diverse perspectives. To build this leadership bench with the required talent, the institutions need to have a robust and functional succession planning framework that integrates organically within all levels of the organization.

Recommendations for Future Research

As higher education institutions find ways to adapt to the new norms triggered due to technology advancements and other internal and external influence, shaping employee culture while achieving growth and operational efficiency continues to be the focus for the senior executives at these institutions. This requires the leadership talent and subject matter expertise at every level of the organization to navigate the administrative and entrepreneurial needs and stay sustainable. This challenge seems relevant for the corporate world as well, especially due to the economic volatility because of technology advancements and shifting industry trends, political influences and employee demographic.

While the study focused on polytechnic institutes only, it would be timely and worth exploring how this study relate to succession planning in senior leadership in higher education in general as well as corporate sector? Additionally, it would be worth exploring measures of success for succession planning i.e. what are the qualitative and quantitative success measures for succession planning in senior leadership in polytechnics? Lastly, based on feedback from a few interviewees, there is an opportunity for polytechnics to consider developing a shared pool of senior leaders with the required talent and leadership attributes. To that end, future research could consider exploring organizational factors and constraints that must be considered to build a consortium of polytechnics that are invested in developing a shared talent pool of senior leaders.

Summary

Organizational stability and sustainability require an ongoing effort from leaders and employees at all levels to ensure efficient and effective operational governance that aligns with organizational mandates and strategies. This means that talent recruitment, leadership development and succession planning efforts are of prime significance in navigating higher educational complexities. The pace and magnitude of changes prompted by technological advancements, political and economic influencers, student and employee demographics and diversity and funding constraints makes succession planning a vital constituent of the strategic fabric of an organization. Succession planning needs to be deliberate and involve a combination of formal and informal conversations at all levels. There needs to be executive sponsorship and commitment for purposeful investment towards building a leadership pipeline that is aware of various organizational nuances and leaders at all levels adept at addressing those with agility and nimbleness.

This study has revealed that while polytechnics are aware of the urgency of having a well-defined and resourced succession planning framework, they currently use formal and informal ways to manage leadership development that lack an institutional alignment. The researcher posited that the use of the 4P Model for Succession Planning in Polytechnic Institutes can build a more robust and competent leadership bench strength that is well-positioned to advance the institutions during economic volatility and unpredictable environmental impacts. The four pillars of the model are (a) Purpose - having a well-defined plan as the foundation of aligning succession planning efforts to the institution's strategic direction and priorities; (b) Progression – aligning the talent management strategy to hire and retain leaders with the institution's direction of expansion of current programs, or diversification of its business into newer areas or both; (c) Performance – establishing a leadership development framework that clearly articulates the leadership competencies – technical, administrative, essential and soft skills and, the importance of aligning these competencies with a performance management model to measure goals, objectives and success measures; and (d) Persistence – investing in ongoing the training and development of leaders as well as providing systems and technology infrastructure that generates data and reports to measure continuous improvement in leadership development.

By investing in a system that is built on sound strategic and operational governance of leadership recruitment, retention and progression, polytechnics make the much-required paradigm shift to deliberate and systemic succession planning, and thus position themselves for organizational sustainability.

References

Abadie-Mendia, T. (2013). Accountability and quality in higher education: A case study. (Doctoral dissertation, University of North Florida). Retrieved from http://digitalcommons.unf.edu/etd/375

Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2010). Tracking a global academic revolution. *Change: The Magazine of Higher Learning, 42*(2), 30-39.

Al-Rodhan, N. R., & Stoudmann, G. (2006). Definitions of globalization: A comprehensive overview and a proposed definition. *Program on the Geopolitical Implications of Globalization and Transnational Security*, 6.

Alberta Credential Framework. (2018). Retrieved from https://open.alberta.ca/dataset/c8ff10eb-eccc-448b-92f6-c91ac8e3b482/resource/ea7b90da-52bb-4265-84d4-5d0eb34a5181/download/alberta-credential-framework.pdf

Amirault, R. J., & Visser, Y. L. (2010). *The impact of e-learning programs on the internationalization of the university.* New York, NY: Nova Science.

Anderson, M. (2010). Succession as a component of strategy. Of Counsel, 29(5), 13-17.

Arasli, H., & Tumer, M. (2008). Nepotism, favoritism and cronyism: A study of their effects on job stress and job satisfaction in the banking industry of north Cyprus. Social Behavior and Personality: An International Journal, 36(9), 1237-1250.

Barden, D. M. (2008). The internal-candidate syndrome. The Chronicle of Higher Education, 54(35), C2.

Barnett, R., (1998). 'In' for 'for' the learning society, Higher Education Quarterly, 52, 7-21.

Barr, A., & Turner, S. E. (2013). Expanding enrollments and contracting state budgets the effect of the great recession on higher education. The Annals of the American Academy of *Political and Social Science, 650*(1), 168-193.

Bass, B. M., & Avolio, B. J. (1994). Transformational leadership and organizational culture. The International Journal of Public Administration, 17(3-4), 541-554.

Bass, B., & Avolio, B. (1997). Full range leadership development: Manual for the Multifactor Leadership Questionnaire. Palo Alto, CA: Mind Garden.

Bass, B. M., & Riggio, R. E. (2006). Transformational leadership. Psychology press. Beetham, H., & Sharpe, R. (2013). *Rethinking pedagogy for a digital age: Designing for 21st century learning.* London, UK: Routledge.

Beaudoin, M. F. (2004). Reflections on research, faculty and leadership in distance education. BIS-Bibliotheks-und Informations system der Universität Oldenburg.

Becker, S. A., Brown, M., Dahlstrom, E., Davis, A., DePaul, K., Diaz, V., & Pomerantz, J. (2018). NMC horizon report: 2018 higher education edition. Louisville, CO: EDUCAUSE.

Bennis, W. (1989). *On becoming a leader.* Reading, MA: Addison-Wesley.

Benko, C., & Anderson, M. (2011). The Corporate Lattice. *The Talent Paradox: A 21st century talent and leadership agenda*, 64.

Bidwell, M. (2011). Paying more to get less: The effects of external hiring versus internal mobility. *Administrative Science Quarterly, 56*(3): 369–407.

Boggs, G. R. (2011). Community colleges in the spotlight and under the microscope. *New Directions for Community Colleges, 2011*(156), 3-22.

Boudreau, J. W., & Ramstad, P. M. (2005). Talentship, talent segmentation, and sustainability: A new HR decision science paradigm for a new strategy definition. Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management, 44(2), 129-136.

Brundrett, M., & Rhodes, C. (2010). *Leadership for quality and accountability in education.* London, UK: Routledge.

Burns, J. M. (1998). Transactional and transforming leadership. Leading institutions, 5(3), 133-134.

Bryant, S. E. (2003). The role of transformational and transactional leadership in creating, sharing and exploiting organizational knowledge. *Journal of Leadership & Organizational Studies, 9*(4), 32-44.

Burns (1978) [Cited in-text not in reference list. Since this looks like a seminal text this warrants finding the full citation and adding to the reference list.]

Buscher, A. (2007). *Negotiating helpful action: A substantive theory on the relationship between formal and informal care.* (Doctoral dissertation, University of Tampere). Retrieved from Negotiatinghelpfulaction978-951-44-6843-8.pdf

Byham, W. C. (2002). A new look at succession management. *Ivey Business Journal, 66*(5), 10-12.

Canadian Association of University Teachers. (2009). *CAUT almanac of post-secondary education in Canada: 2009–2010*. Ottawa, ON: Author.

Canada's International Education Strategy. Retrieved from https://www.international.gc.ca/global-markets-marches-mondiaux/assets/pdfs/overview-apercu-eng.pdf

The Canadian Association of Research Administrators (CARA. Retrieved from https://cara-acaar.ca/CARAblog?path=&node=aug22-17

Cappelli, P., & Keller, J. R. (2014). Talent management: Conceptual approaches and practical challenges. Annu. Rev. Organ. Psychol. Organ. Behav., 1(1), 305-331.

Charmaz, K. (2011). *Constructing grounded theory: A practical guide through qualitative analysis.* Washington, DC: Sage.

Charan, R., Drotter, S., & Noel, J. (2011). *The leadership pipeline: How to build the leadership powered company.* San Francisco, CA: Jossey-Bass.

Coblentz, J. B. (2002). *Organizational Sustainability: The three aspects that matter.* Washington, DC: Academy for Educational Development.

Coccoli, M., Guercio, A., Maresca, P., & Stanganelli, L. (2014). Smarter universities: A vision for the fast changing digital era. *Journal of Visual Languages & Computing*, *25*(6), 1003-1011.

Cohen, A. M. (2007). *The shaping of American higher education: Emergence and growth of the contemporary system.* San Francisco, CA: John Wiley & Sons.

Cohen, L., Manion, L. & Morrison, K. (2011). *Research methods in education* (7th ed.). London, UK: Routledge.

Collins, J. (2005). Level 5 leadership: The triumph of humility and fierce resolve. *Harvard Business Review*, *83*(7), 136.

Community College Leadership Development Initiative. (2000). *Meeting new leadership challenges in the community colleges.* (ERIC Document Reproduction No. ED 447 888). Claremont, CA: Claremont Graduate University.

Conger, J. A., & Fulmer, R. M. (2003). Developing your leadership pipeline. *Harvard business review, 81*(12), 76-85.

Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. Qualitative sociology, 13(1), 3-21.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research. Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.

Cornell University, Succession Management Model. Retrieved from https://hr.cornell.edu/sites/default/files/talent_management_models.pdf

Cornerstone. (2017). *Cornerstone.* [Website]. Santa Monica, CA: Author. Retrieved from https://www.cornerstoneondemand.com/glossary/talent-mobilityCreswell, J. W. (2003). Research design: qualitative, quantitative, and mixed methods approaches.

Creswell, J. W. (2013), *Qualitative inquiry & research design: Choosing among five approaches.* Thousand Oaks, CA: Sage.

Creswell, J. W. (2014). A concise introduction to mixed methods research. SAGE publications.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches.* Thousand Oaks, CA: Sage.

Creswell, J. W., & Poth, C. N. (2017). Qualitative inquiry and research design: Choosing among five approaches. Sage publications.

Crotty, M. (1998). The foundations of social research: Meaning and perspective in the research process. London: Sage

DeCew, J. W. (2003). *Unionization in the academy: Visions and realities.* New York, NY: Rowman & Littlefield.

De la Fuente, A., & Ciccone, A. (2003). Human capital in a global and knowledge-based economy (Vol. 562). Office for Official Publications of the European Communities.

Dick, B. (2003, May). *What can action researchers learn from grounded theorists.* Paper prepared for the research symposium at the Australian and New Zealand ALARPM/SCIAR conference, Gold Coast, 4-5 May 2003. (pp. 1-12). Retrieved from http://www.aral.com.au/DLitt/DLitt_P60andgt.pdf

Dickeson, R. C. (2010). *Prioritizing Academic Programs and Services: Reallocating Resources to Achieve Strategic Balance*. doi: 10.1002/9781118269541

Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C., & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, *25*(1), 36-62.

Doern, B. (2008). *"Polytechnics" in higher education systems: A comparative review and policy implications for Ontario.* Toronto, ON: Higher Education Quality Council of Ontario.

Drew, G. M. (2006). Balancing academic advancement with business effectiveness? The dual role for senior university leaders. International Journal of Knowledge, Culture and Change Management, 6(4), 117-125.

Drew, G., & Ehrich, L. C. (2010). A model of organisational leadership development informing succession development: Elements and practices. *Academic Leadership*, *8*(4), 42-55. Retrieved from http://www.academicleadership.org/?s=A+model+of+organizational+leadership+development+informing+succession+development%3A+Elements+and+practice

Duree, C. A. (2007). The challenges of the community college presidency in the new millennium: Pathways, preparation, competencies, and leadership programs needed to survive. *Dissertation Abstracts International, 68*(11), 191A. (UMI No. 3289420)

Ehrenberg, R. G. (2012). American higher education in transition. *The Journal of Economic Perspectives, 26*(1): 193–216.

Estedadi, E., & Hamidi, K. (2015). The importance of succession planning in organizations. Advanced Social Humanities and Management, 2(3), 41-47.Etzkowitz, H., Webster, A., Gebhardt, C., & Terra, B. R. C. (2000). The future of the university and the university of the future: Evolution of ivory tower to entrepreneurial paradigm. *Research policy, 29*(2), 313-330.

Etzkowitz, H., (2004). 'The evolution of the entrepreneurial university'. Int. J. Technology and Globalisation, Vol. 1, No.1, pp. 64-77.

Fancher, L. P. (2007). The influence of organizational culture on the implementation of succession planning. (Doctoral dissertation, Georgia State University). Retrieved from htpp://scholarworks.gsu.edu/pmap_diss/28

Fong, J., Janzow, P., & Peck, K. (2016). Demographic shifts in educational demand and the rise of alternative credentials. Retrieved August, 20, 2016.

Fayol, H. (1949), General and Industrial Management, Sir Isaac Pitman & Sons, London

Fu, I. (2015). Favoritism: Ethical dilemmas viewed through multiple paradigms. *The Journal of Values-Based Leadership, 8*(1), 6.

Fulmer, R. M., & Conger, J. A. (2004). *Growing your company's leaders.* Washington DC: AMACOM.

Gardner, J. (1990). *On leadership.* New York: The Free Press.

Gayle, D. J., Tewarie, B., & White, A. Q., Jr. (2011). Governance in the twenty-first-century university: Approaches to effective leadership and strategic management: ASHE-ERIC Higher Education Report (Vol. 14). San Francisco, CA: John Wiley & Sons.

Gibbons, R., & Waldman, M. (2004). Task-specific human capital. *American Economic Review, 94*(2) 203-207.

Gibb, A., Haskins, G., Hannon, P., & Robertson, I. (2012). Leading the entrepreneurial university: meeting the entrepreneurial development needs of higher education (2009, updated 2012).

Gidey, H. K., Marmsoler, D., & Eckhardt, J. (2017, April). Grounded architectures: Using grounded theory for the design of software architectures. In 2017 IEEE International Conference on Software Architecture Workshops (ICSAW) (pp. 141-148). doi:10.1109/ICSAW.2017.41

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research.* Chicago. IL: Aldine.

Green, D. (Ed.). (2014). *What is quality in higher education?* London, UK: Society for Research into Higher Education & Open University Press.

Griffin, P., Care, E., & McGaw, B. (2012). The changing role of education and schools. In P. Griffing & E. Care (Eds), *Assessment and teaching of 21st century skills* (pp. 1-15). Dordrecht, NL: Springer.

Groves, K. S. (2007). Integrating leadership development and succession planning best practices. *Journal of Management Development, 26*(3), 239-260.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). London, UK: Sage.

Harms, P. D., & Credé, M. (2010). Emotional intelligence and transformational and transactional leadership: A meta-analysis. *Journal of Leadership & Organizational Studies, 17*(1), 5-17.

Hartnell, C. A., Ou, A. Y., & Kinicki, A. (2011). Organizational culture and organizational effectiveness: A meta-analytic investigation of the competing values framework's theoretical suppositions. *Journal of Applied Psychology, 96*(4), 677-694.

Heijde, C. M., & Van Der Heijden, B. I. (2006). A competence-based and multidimensional operationalization and measurement of employability. *Human Resource Management, 45*(3), 449-476.

Heuer, J. J. (2003). *Succession planning for key administrators at ivy-plus universities.* Dissertation Abstracts International, 64/03, 740.

Hunt, V., Layton, D., & Prince, S. (2015, February 2). *Diversity matters.* McKinsey & Company. Retrieved from https://assets.mckinsey.com/~/media/857F440109AA4D13A54D9C496D86ED58.ashx

Irvine, V., Code, J., & Richards, L. (2013). Realigning higher education for the 21st century learner through multi-access learning. *Journal of Online Learning and Teaching, 9*(2), 172.

Israel, M., & Hay, I. (2006). *Research ethics for social scientists: Between ethical conduct and regulatory compliance.* Thousand Oaks, CA: Sage

Jacob, W. J. (2015). Interdisciplinary trends in higher education. *Palgrave Communications 1*:15001, 1-5 doi:10.1057/palcomms.2015.1

Jepsen, C., Troske, K., & Coomes, P. (2014). The labor-market returns to community college degrees, diplomas, and certificates. *Journal of Labor Economics, 32*(1), 95-121.

Johnson, L., Adams Becker, S., Cummins, M., Estrada, V., Freeman, A., and Hall, C. (2016). NMC Horizon Report: 2016 Higher Education Edition. Austin, Texas: The New Media Consortium.

Jones, G. A. (2014). An introduction to higher education in Canada. *Higher Education Across Nations, 1,* 1-38.

Kaplin, W. A., & Lee, B. A. (2007). *The law of higher education,* San Francisco, CA: John Wiley & Sons.

Kesler, G. C. (2002). Why the leadership bench never gets deeper: Ten insights about executive talent development. *People and Strategy, 25*(1), 32.

Kirby, D. (2011). Strategies for widening access in a quasi-market higher education environment: Recent developments in Canada. *Higher Education, 62*(3), 267-278.

Knight, J. (2015). Five myths about internationalization. *International Higher Education*, (62). doi: 10.6017/ihe.2011.62.8532

Kok, S. K., & McDonald, C. (2017). Underpinning excellence in higher education: An investigation into the leadership, governance and management behaviours of high-performing academic departments. *Studies in Higher Education, 42*(2), 210-231.

Komesch, D. (2017, July 11). Polytechnics are the missing link in the automation revolution. *The Globe and Mail.* Retrieved from https://www.theglobeandmail.com/report-on-

business/rob-commentary/polytechnics-are-the-missing-link-in-the-automation-revolution/article35655639/

Kouzes, J. M., & Posner, B. Z. (2006). *The leadership challenge* (3rd ed.). San Francisco, CA: Wiley.

Kowalewski, S. J., Moretti, L., & McGee, D. (2011). Succession planning: Evidence from 'best companies in New York'. *International Journal of Management and Marketing Research, 4*(2), 99-108.

Kyvik, S., & Lepori, B. (Eds.). (2010). *The research mission of higher education institutions outside the university sector: Striving for differentiation* (Vol. 31). New York, NY: Springer Science & Business Media.

Lamoureux, K., Campbell, M., Smith, R., & Center for Creative Leadership. (2009). *High impact succession management: Executive Summary.* Greensboro, NC: Center for Creative Leadership. Retrieved from http://www.ccl.org/leadership/pdf/research/HighImpactSuccessionManagement.pdf

LaRossa, R. (2005). Grounded theory methods and qualitative family research. *Journal of marriage and Family, 67*(4), 837-857.

Leibman, M., Bruer, R. A., & Maki, B. R. (1996). Succession management: The next generation of succession planning. *People and Strategy, 19*(3), 16.

Long, J., Johnson, C., Faught, S., & Street, J. (2013). The Need to Practice What We Teach: Succession Management in Higher Education. *American Journal of Management*, *13*(2), 73.

Luke, R. (2013). Measuring Innovation Skills Acquired by College and Polytechnic Students through Applied Research. *Technology Innovation Management Review, 3*(10): 36-43. http://timreview.ca/article/735

Luna, G. (2010). Succession planning: A doctoral program partnership for emerging community college leaders. *Community College Journal of Research and Practice, 34*(12), 977-990.doi:10.1080/10668921003723144

Lloyd-Walker, B., & Walker, D. (2011). Authentic leadership for 21st century project delivery. *International Journal of Project Management, 29*(4), 383-395.

Marshall, S. J. (2006). *Issues in the development of leadership for learning and teaching in higher education.* Sydney, AU: ALTC Exchange. Retrieved from http://www.altc.edu.au/resource-issues-development-leadership-learning-macquarie.

McClenney, K. M. (2001). Converting crisis to opportunity: The AACC community college leadership summit. *Community College Journal, 71*(6), 24-27.

McCoy, S. K., & Gardner, S. K. (2012). Interdisciplinary collaboration on campus: Five questions. *Change, 44* (6), 44–49.

Meister, J. C., & Willyerd, K. (2010). *The 2020 workplace: How innovative companies attract, develop, and keep tomorrow's employees today.* New York: NY: HarperCollins.

Miller, D. (2001). Successful change leaders: what makes them? What do they do that is different? *Journal of Change Management, 2*(4), 359-368.

Mone, E. M., & London, M. (2014). *Employee engagement through effective performance management: A practical guide for managers.* London, UK: Routledge.

Moore, M. G., & Kearsley, G. (2011). *Distance education: A systems view of online learning.* Belmont, CA: Wadsworth/Cengage Learning.

Moscarini, G., & Postel-Vinay, F. (2016). Did the job ladder fail after the Great Recession? *Journal of Labor Economics, 34*(S1), S55-S93.

Ng, J. W., Azarmi, N., Leida, M., Saffre, F., Afzal, A., & Yoo, P. D. (2010, July). The Intelligent Campus (iCampus): End-to-end learning lifecycle of a knowledge ecosystem. In *2010 Sixth International Conference on Intelligent Environments* (pp. 332-337). IEEE.

Owoc, M., & Marciniak, K. (2013, September). Knowledge management as foundation of smart university. In *2013 Federated Conference on Computer Science and Information Systems* (pp. 1267-1272). IEEE.

Patton, M. Q. (1990). Qualitative evaluation and research methods. SAGE Publications, inc.

Polytechnic Canada. Retrieved from https://www.polytechnicscanada.ca/the-polytechnic-advantage/what-is-a-polytechnic/

Postman, N. (1995). *The end of education: Redefining the value of school.* New York, NY: Alfred A. Knoff.

Pynes, J. E. (2008). *Human resources management for public and non-profit institutions: A strategic approach* (Vol. 30). San Francisco, CA: John Wiley & Sons.

Richards, C. L. (2009). *A new paradigm: Strategies for succession planning in higher education.* (Doctoral dissertation). Available from ProQuest Dissertations & Theses Global database. (UMI No. 3366286)

Rothwell, W. J. (1994). *Effective succession planning: ensuring leadership continuity and building talent from within.* New York, NY: AMACOM.

Rothwell, W. J. (2007). *Ten key steps to effective succession planning* [White paper]. Rothwell and Associates. Retrieved from www.halogensoftware.com

Rothwell, W. J. (2010). *Effective succession planning: Ensuring leadership continuity and building talent from within.* Washington, DC: AMACOM

Rothwell, W. J. (2011). Replacement planning: A starting point for succession planning and talent management. *International Journal of Training and Development, 15*(1), 87-99.

Rothwell, W. J., Jackson, R. D., Ressler, C. L., & Jones, M. C. (2015). *Career planning and succession management: Developing your organization's talent for today and tomorrow*. Santa Barbara, CA: ABC-CLIO.

Roueche, J. E., & Jones, B. R. (2005). *The entrepreneurial community college*. Washington, DC: Community College Press.

Rubin, R. S., & Dierdorff, E. C. (2011). On the road to Abilene: Time to manage agreement about MBA curricular relevance. Academy of Management Learning & Education, 10(1), 148-161.

Salminen, A. (2003) New public management and Finnish public sector institutions: The case of universities. In A. Amaral, V. L. Meek & I. Larsen (Eds), *The Higher Education Managerial Revolution?* (pp. 55-69). Dordrecht, NL: Kluwer Academic Publishers.

Scharmer, C. O., & Senge, P. M. (2009). *Theory U: Leading from the future as it emerges.* San Francisco, CA: Berrett-Koehler.

Schiemann, W. A. (2014). From talent management to talent optimization. *Journal of World Business, 49*(2), 281-288.

Schiemann, W. A., Seibert, J. H., & Morgan, B. S. (2013). *Hidden drivers of success: Leveraging employee insights for strategic advantage*. Alexandria, VA: Society for Human Resource Management.

Selwyn, N. (2013). Discourses of digital 'disruption' in education: A critical analysis. *Fifth International Roundtable on Discourse Analysis, City University, Hong Kong*, 23-25.

Shelton, K. (2001). *The effects of employee development programs on job satisfaction and employee retention* (Masters' Research Paper). Retrieved from http://www2.uwstout.edu/content/lib/thesis/2001/2001sheltonk.pdf

Shek, K. (2001, June 12). Recruiters tackle employee shortfall. *Community College Times.* Retrieved from http://www.aacc.nche.edu/Content/ContentGroups/Headline_News/June_2001/Recruiters_Tackle_Employee_Shortfall.htm

Sheppard, J. A., Sarros, J. C., & Santora, J. C. (2013). Dealing with the consequences of a rapidly changing global landscape. *Strategic Direction, 29,* 24-27.

Shults, C. (2001). *The critical impact of impending retirements on community college leadership* (Research Brief No. 1, AACC-RB-01-5). Washington, DC: American Association of Community Colleges. Retrieved http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.458.6137&rep=rep1&type=pdf

Sporn, B. (1999). *Adaptive university structures: An analysis to adaptations to socioeconomic environments of US and European universities*. London, UK: Jessica Kingsley.

Sporn, B. (2007). Governance and administration: Organizational and structural trends. In International handbook of higher education (pp. 141-157). Springer, Dordrecht.

Steele, K. (2010). The changing Canadian PSE landscape. CANADIAN OFFICES US OFFICES, 27.

Strauss, A., & Corbin, J.(1998). Basics of qualitative research: Techniques and procedures for developing grounded theory.Thousand Oaks, CA: Sage. Taylor, J. S., de Lourdes Machado, M., & Peterson, M. W. (2008). Leadership and strategic management: Keys to institutional priorities and planning. *European Journal of Education*, *43*(3), 369-386.

Taylor, J. S., de Lourdes Machado, M., & Peterson, M. W. (2008). Leadership and strategic management: Keys to institutional priorities and planning. European Journal of Education, 43(3), 369-386.

Taylor, M. (2013). Shared governance in the modern university. Higher Education Quarterly, 67(1), 80-94.

Teddlie, C., & Tashakkori, A. (2003). Major issues and controversies in the use of mixed methods in the social and behavioral sciences. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 3-50). Thousand Oaks, CA: Sage.

Teichler, U. (2007, October). *The end of alternatives to universities or new opportunities.* Presentation to Workshop on Revisiting Polytechnical and Vocational Education, Lisbon, Portugal.

Tripathi, K., & Agrawal, M. (2014). Competency based management in organizational. *Global Journal of Finance and Management, 6*(4), 349-356.

Turpin, D.H., De Decker, L., & Boyd, B. (2014). Historical changes in the Canadian university presidency: An empirical analysis of changes in length of service and experience since 1840. Canadian Journal of Public Administration (in press).

Uhl-Bien, M., Marion, R., & McKelvey, B. (2007). Complexity leadership theory: Shifting leadership from the industrial age to the knowledge era. *The leadership quarterly*, *18*(4), 298-318.

Uhl-Bien, M., Marion, R., & McKelvey, B. (2008). Complexity leadership theory. *Complexity leadership, 1*, 185-224.

Usher, A., (2018). The State of Post-Secondary Education in Canada, 2018. Toronto: Higher Education Strategy Associates.Vaughan (1986). [Cited in-text not in reference list.]

Vaughan, G. B., & Weisman, I. M. (1998). *The community college presidency at the millennium.* Washington, DC: The Community College Press.

Vaughan, & Weisman. (2002). [Cited in-text not in reference list.]

Vickers, K. J. (2007). An assessment of leadership development programs for employees in Iowa's community colleges. *Dissertation Abstracts International*, *68*(7). (UMI No. 3274902)

Wales, T. (2013). Organizational sustainability: What is it, and why does it matter. *Review of enterprise and management studies, 1*(1), 38-49.

Watts-Rynard, S., & Amyot, D. (2019, January 30). Polytechnics and colleges, natural allies to businesses, deserve more access to government funding. *The Hill Times.* Retrieved from https://www.hilltimes.com/2019/01/30/colleges-polytechnics-key-innovation-business/185941

Weisman, I. M., & Vaughan, G. B. (2002). The Community College Presidency, 2001. Research Brief. Leadership Series.

Weisman, I. M., & Vaughan, G. B. (2007). A profile of community college presidents.[Special issue]. *The Chronicle of Higher Education,* B16.

Weller, M., & Anderson, T. (2013). Digital resilience in higher education. *European Journal of Open, Distance and E-learning, 16*(1).

Whitlock, J. L. (2003, March). *Strategic Thinking, Planning, and Doing: How to reunite leadership and management to connect vision with action.* Paper presented at the 64th National Conference of the American Society for Public Administration, The Power of Public Service, Washington, DC. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.201.8757&rep=rep1&type=pdf

Wickens, C. M. (2008). The organizational impact of university labor unions. *Higher Education, 56*(5), 545-564.

Williamson, B. (2018). The hidden architecture of higher education: building a big data infrastructure for the 'smarter university'. *International Journal of Educational Technology in Higher Education, 15*(1), 12.

Willis, J. W., & Jost, M. (2007). *Foundations of qualitative research: Interpretive and critical approaches.* Thousand Oaks, CA: Sage.

Wolfe, R. (1996). *Systematic succession planning building leadership from within.* Menlo Park, CA: Crisp.

Youssef, Y., & Hunter, C. (2010). *Polytechnic education in Canada: Reflections on a new model.* [Working paper]. doi: 10.13140/RG.2.1.2931.4800

Zach, L. (2006). Using a multiple-case studies design to investigate the information-seeking behavior of arts administrators. *Library trends*, 55(1), 4-21. doi: 10.1353/lib.2006.0055

Appendix A: Letter of Information

Succession Planning in Leadership in Polytechnic Institutes: For Stability and Operational Resilience

Nov 24, 2018

Principal Researcher:

Neera Arora

Email- neera.arora@sait.ca

Supervisor:

Dr. Marti Cleveland-Innes

martic@athabascau.ca

You are invited to take part in a research project entitled 'Succession Planning in Polytechnic Institutes: for Stability and Operational Resilience'.

This form is part of the process of informed consent. The information presented should give you the basic idea of what this research is about and what your participation will involve, should you choose to participate. It also describes your right to withdraw from the project. In order to decide whether you wish to participate in this research project, you should understand enough about its risks, benefits and what it requires of you to be able to make an informed decision. This is the informed consent process. Take time to read this carefully as it is important that you understand the information given to you. Please contact the principal investigator, Neera Arora if you have any questions about the project or would like more information before you consent to participate.

It is entirely up to you whether or not you take part in this research. If you choose not to take part, or if you decide to withdraw from the research once it has started, there will be no negative consequences for you now, or in the future.

Introduction

My name is Neera Arora and I am a Doctorate of Education, Distance Education program student at Athabasca University. As a requirement to complete my degree, I am conducting a research project about succession planning in senior leadership positions within higher education, more specifically in polytechnic institutes in Canada. I am conducting this project under the supervision of Dr. Marti Cleveland-Innes.

Why are you being asked to take part in this research project?

You are being invited to participate in this project because as part of the senior executive team you are being contacted based on your experience and length of service in the organization.

What is the purpose of this research project?

The objective of this study is to examine succession planning in senior leadership positions within higher education in Canada. Senior leadership refers to senior management team including President's direct reports i.e. vice-presidents or division heads responsible for key business units and deans and directors responsible for key academic and non-academic departments. Recognizing there are internal and external influences, the purpose of the research is to highlight key domains, factors and areas of focus associated with succession planning and recommend a functional model that balances the required technical, industry experience and leadership competencies.

What will you be asked to do?
More specifically, using qualitative methodology research method, multiple-case study of four polytechnic institutes in Canada will be conducted to describe leadership succession planning models that exist in these institutions and how these models supports the respective institutional mandates.

Interviews with college presidents and senior management will be conducted to solicit their perspectives regarding current succession planning practices at each institution.

Interview will be audio taped and last approximately one hour. All research will take place at the campuses of participating institutions unless there is a request for an off-site location for convenience. Interview participants may be requested to review the transcripts of interview for correctness and completeness. The questions will relate to succession planning in senior leadership positions within their respective organization. The study is expected to conclude by December 2019.

What are the risks and benefits?
The benefits of the research are expected to include a body of knowledge generated that will inform the succession planning efforts at the polytechnic institutions. There are no risks associated to the study. The participants have the right to refuse to be in this study or may skip questions or discontinue participation at any time.

Do you have to take part in this project?
As stated earlier in this letter, involvement in this project is entirely voluntary.
Participants may refuse to answer any questions or to share information that they are not comfortable with. Participants from interviews may withdraw from the study any time prior to the completion of the analysis of the study, if they choose to by informing the researcher.

How will your privacy and confidentiality be protected?
The ethical duty of confidentiality includes safeguarding participants' identities, personal information, and data from unauthorized access, use or disclosure. "All information will be held confidential, except when legislation or a professional code of conduct requires that it be reported." Individuals will not be identified personally or individual's participation will not be identified. The tapes and transcripts of interviews will be identified by a pseudonym / code assigned by the researcher. The tapes and transcripts of the interviews will be stored in a safe location at the researcher's home. The electronic files will be saved on a password protected hard-drive.

Following the Institutional Research Ethics approval, the research principal investigator will contact the presidents of the participating polytechnics to solicit their participation in the interviews. Following steps will be taken to maintain anonymity and confidentiality and no risk to the participants.

- Following the interview with the presidents, the principal investigator will request for general acceptance for inviting the senior management group for interviews.
- Due to the size of the leadership teams in the institutions, although the names of participants are known, their responses in the research will be kept confidential and the individuals will not be identified personally to maintain anonymity.
- Names of participants will be not be shared to safeguard identification of participants and maintaining anonymity.
- This information will be provided to the participants via the Information Letter and clarified prior to the interviews, in the event the participant has provided consent to participate.
- As part of the comparative analysis, feedback from presidents and other management members will be reported as a collective feedback from the senior management team of respective institutes

and not as separate feedback from presidents and other members. This will allow safeguarding identity of participants.

How will my anonymity be protected?

Anonymity refers to protecting participants' identifying characteristics, such as name or description of physical appearance. Individuals will not be identified personally or individual's participation will not be identified. Every reasonable effort will be made to ensure your anonymity; you will not be identified in publications without your explicit permission.

It is expected that there will be minimum 6 participants from the senior management team, from each college. While the data set may seem small, as part of the comparative analysis, feedback from presidents and other management members will be reported as a collective feedback from the senior management team not as separate feedback from presidents and other members.

Every step will be taken to safeguard identity of participants and findings from the analysis including the use of quotes, will be shared with the participants for their consent.

The participants will be provided the contact details of the researcher, to contact at any time during the study for clarification or for any concerns. Additionally, the participants will be kept abreast of the study at different times of the study i.e.

- Validating the script after the interviews and prior to starting the data analysis
- Approving the use of the feedback within the data analysis section i.e if the intent of the feedback including any personal quotes, captured accurately within the overall analysis?

How will the data collected be stored?

The tapes and transcripts of interviews will be identified by a pseudonym / code assigned by the researcher. The tapes and transcripts of the interviews will be stored in a safe location at the researcher's home. The electronic files will be saved on a password protected hard-drive.

During the research the data will be stored in a laptop computer that is password protected. An additional external hard-drive will be used for backing-up the files and data on the computer. Backup of the documents throughout the study will be stored in a locked cabinet in principle investigator's home. The data will be retained for a period of five years after the completion of the study and subsequently will be destroyed. The mode of data disposition will include shredding the printed copies and sanitizing the laptop and external hard drive by hard deletion of electronic files and reformatting the drive completely to ensure the data is destroyed completely.

Who will receive the results of the research project?

The existence of the research will be listed in an abstract posted online at the Athabasca University Library's Digital Thesis and Project Room and the final research paper will be publicly available. The results of this study will be reported to the doctorate degree committee members, Athabasca University Graduate Studies department as well as published on AU website. Using googledoc site the study will also be shared with participants who were part of the interviews.

Who can you contact for more information or to indicate your interest in participating in the research project?

Thank you for considering this invitation. If you have any questions or would like more information, please contact me, Neera Arora by e-mail neera.arora@sait.ca or my supervisor by martic@athabascau.ca.

If you are ready to participate in this project, *please complete and sign the attached Consent Form and return it to Neera Arora by emailing the form at neera.arora@sait.ca*

Thank you.

Neera Arora

This project has been reviewed by the Athabasca University Research Ethics Board. Should you have any comments or concerns regarding your treatment as a participant in this project, please contact the Research Ethics Office by e-mail at rebsec@athabascau.ca or by telephone at 1-800-788-9041, ext. 6718.

Appendix B: Participant Informed Consent

Principal Researcher:

Neera Arora

Email- neera.arora@sait.ca

Supervisor: (if applicable)

Dr. Marti Cleveland-Innes

martic@athabascau.ca

You are invited to participate in a research study about succession planning in senior leadership positions within higher education, more specifically in polytechnic institutes in Canada. I am conducting this study as a requirement to complete my Doctorate in Distance Education, degree.

As a participant, you are asked to take part in an interview that will be audio taped and last approximately one hour. All research will take place at your campus or via phone, as agreed upon. You may be asked to review the transcripts of interview for correctness and completeness. The questions will relate to succession planning in senior leadership positions within your organization. As part of the senior executive team you are being contacted based on your experience and length of service in the organization. The study is expected to conclude by December 2019.

The benefits of the research are expected to include a body of knowledge generated that will inform the succession planning efforts at the polytechnic institutions. There are no risks associated to the study. Participation in this research is voluntary. You have the right to refuse to be in this study. You may skip questions or discontinue participation at any time.

Following the Institutional Research Ethics approval, the research principal investigator will contact the presidents of the participating polytechnics to solicit their participation in the interviews. Following steps will be taken to maintain anonymity and confidentiality and no risk to the participants.

- Following the interview with the presidents, the principal investigator will request for general acceptance for inviting the senior management group for interviews.
- Due to the size of the leadership teams in the institutions, although the names of participants are known, their responses in the research will be kept confidential and the individuals will not be identified personally to maintain anonymity.
- Names of participants will be not be shared to safeguard identification of participants and maintaining anonymity.
- This information is also provided to you via the Information Letter along with this consent form.

During the research the data will be stored in a laptop computer that is password protected. An additional external hard-drive will be used for backing-up the files and data on the computer. Backup of the documents throughout the study will be stored in a locked cabinet in principle investigator's home. The data will be retained for a period of five years after the completion of the study and subsequently will be destroyed. The mode of data disposition will include shredding the printed copies and sanitizing the laptop and external hard drive by hard deletion of electronic files and reformatting the drive completely to ensure the data is destroyed completely.

The results of this study will be reported to the doctorate degree committee members, Athabasca University Graduate Studies department as well as published on AU website.
This study has been reviewed by the Athabasca University Research Ethics Board. Should you have any comments or concerns regarding your treatment as a participant in this study, please contact the Office of Research Ethics at 1-800-788-9041, ext. 6718 or by e-mail to rebsec@athabascau.ca.

Thank you for your assistance in this project.

CONSENT:

I have read the Letter of Information regarding this research study, and all of my questions have been answered to my satisfaction. I will keep a copy of this letter for my records.

My signature below confirms that I agree to participate in this research project and that:

- I understand the expectations and requirements of my participation in the research;
- I understand the provisions around confidentiality and anonymity;
- I understand that my participation is voluntary, and that I am free to withdraw anytime following the verification of transcripts and before the analysis stage of the data (apprx Feb 2019), with no negative consequences
- I understand that if I choose to end my participation during data collection, any data collected from me up to that point will not be retained by the researcher, unless I indicate otherwise.
- I am aware that I may contact the researcher, *Dr. Marti Cleveland-Innes*, or the Office of Research Ethics, if I have any questions, concerns or complaints about the research procedures.

Additionally, by initialing the statement(s) below,

_____ I am granting permission for the researcher to use an audio recorder

_____ I acknowledge that the researcher may use specific quotations of mine, without identifying me

_____ I am granting permission for the researcher to attribute my name to any quotes used

_____ I would like to receive a copy of the results of this research study by letter mail.

Your Mailing address: _____

If you are willing to have the researcher contact you at a later time by e-mail or telephone for a brief conversation to confirm that I have accurately understood your comments in the interview, please indicate so below. You will not be contacted more than six months after your interview.

_____ Yes, I would be willing to be contacted.

_____ _____

Signature of Participant Date

I have explained this project to the best of my ability. I invited questions and responded to any that were asked. I believe that the participant fully understands what is involved in participating in the research project, any potential risks and that he or she has freely chosen to participate.

_____ _____

Signature of Principal Investigator Date

Appendix C: Interview Script

Organizational Structure

1. What is the approximate number of employees in your institution – fulltime & part-time?
2. Please describe your institution's organizational structure (President, Vice Presidents, Deans/ Directors etc).
3. What is the governance structure at your institute (Board, Public, private, Faculty governance, student governance, union, etc).

Strategic Planning

4. Does your organization have a strategic plan? If yes, what are the strategic priorities and how are these operationalized?
5. Does your organization have a talent management strategy? If yes, how does it fit into your organization's overall strategy?
6. What do you believe are the key elements/strategies needed for a succession plan to be implemented in academia?

Existing Succession Planning

7. Does your institution currently have a formal succession planning program?
    a. If yes, please walk me through what happens and how are you approaching this task?
    b. If not, have you ever considered implementing a succession plan? Why or why not?
8. How does succession planning fit into your organization's overall talent management strategy?
9. Who is accountable and has authority to implement and execute a succession plan in your organization?
10. What external and internal factors have contributed to your institutional decisions around succession planning?

11. How has it been received by employees?
12. What challenges do organizational leaders have with implementing succession planning?
13. How, if at all, do you think collective bargaining systems influence succession planning?

Senior Leadership

14. What do you see as the role of the president/CEO in succession planning?
15. How does your team stay nimble and agile, while managing the operational priorities in the changing landscape of HE?
16. How would you describe your institution's culture with regard to leadership development?
17. What are the characteristics and required skills sets of the executive team / senior management team in polytechnics and are these any different from senior leadership in universities?
18. What resources are needed to develop leadership in the organization? Do you prefer internal hiring or external; and why?

Overall Concepts Alignment

19. What is the relationship between strategic planning, leadership and succession planning in polytechnics?
20. For your institution in specific, what processes, methods or strategies would be necessary to support a formal succession plan?
21. Is there anything else you would like to add with respect to this topic of succession planning in senior leadership in polytechnics?

Appendix D: Open Coding

Research Question 1: How do you operationalize your strategic plan and how does talent management fit into your organization's strategic plan?

Open Code	Concepts	Examples of participants' words
Goals alignment	Alignment of goals and targets with strategic priorities Targets and Metrics	- Incredible alignment through our performance management plans - Example of technology road map or end to end HR solution to align with strategic priorities - core business plans and business strategies and accountability is fully in line with those strategic imperatives
Outcome Based	Goals have defined targets to yield tangible results Strategic lens to evaluate all business opportunities Decisions making framework Alignment with strategic priorities and operational initiatives	- Tend to measure outcomes rather than inputs - All leaders are accountable to those broad based outcomes and promises - Executive decisions made through the lens of our priorities and values. - No decision is made in isolation of understanding how we deliver on our strategic promises and values - We periodically assess initiatives and projects line up to our strategic plan. We actually show that and highlight the ones that align and the ones that do not. So very explicitly, as in, this particular project supports this priority in the strategic plan.
Talent Calibration	Leadership commitment is more critical than the plan Performance Management Plan; Formal & Informal Discussions Developed institutionally a talent management strategy and framework	- And then we did a cross-peer review. So while I may have had three director reports and I had one, two, and three, asking my peers to say, would you rank them the same way, or would you see the same capabilities that I'm seeing. - So that leadership team, along with the senior vice president at the time, undertook an assessment of all of our leaders, not ourselves, but one level down. And we actually went through that leadership competency framework and then talked about potential successors and where people were in terms of today versus where they could be in the future.

Research Question 2: How does succession planning fit into your organization's overall talent management strategy? What kind of Leadership Development opportunities do you offer?

Open Code	Concepts	Examples of participants' words
Talent Management	Informal ongoing discussions to identify potential talent Leadership Competencies Institutional Needs Adhoc / Informal Talent Management practices Risk of creating false expectations of succession	- haven't seen solid evidence of formal succession planning; many ongoing informal conversations regarding talent recognition and creating opportunities for them - Talent management can't be misunderstood by Leadership development; - We have established metrics and things to report on – annual deliberate performance review to identify potential talent and opportunities for development - Vertical progression is more obvious than lateral opportunities - lookout for potential talent for your executive bench strength
Internal Hires	Identify High potential Mobility depends on types of roles Leadership Development Programs Understand institutional needs	- Recruiting for diversity - Meets/Fits the need of the organization at the time - Not clear on pathways or scaffolding between different areas - Academic professionals may stay in the same role forever - Post-secondary, you have a lot of long standing employees, - I fundamentally believe that you just have to hire the right person. That may be internal, that may be external.
External hires	Does it slow down the progress of the organization Constant mode of change with injection of external talent Mobility depends on types of roles	- Question for me would be reconciling the speed at implementing versus truly understanding if the strategy is right. It is pushing the boundaries. - Injection of new talent and the injection of new ways of thinking, I think is critical for post-secondary institutions, I really do. - External can mean recruiting from another academic organization with the right experience, but recruiting can also mean from another sector like healthcare.
Leadership Development	Internal and External training opportunities Alignment with institutional needs for leadership bench strength	- We purposely pick top leaders and take them through an intense program where they have to present concepts to senior executives - Executive programs (internal and external) - Conferences - Leadership development programs - Mentoring /Coaching - Participating in institutional initiatives

Research Question 3: What type of leadership is required to drive the polytechnic mandate? (Probing question - what are the characteristics and required attributes for senior management and executive team working in a polytechnic?)

Open Code	Concepts	Participants Words/ Expressions
Leadership Attributes	Perception that good leaders must have strong academic and research background Cultural awareness & Alignment with values of the organization Collaboration with industry	- Need leaders who can collaborate, are politically astute, have the business acumen and have vision for future. - Level of collaboration, level of business acumen, level of connection with outside industry are all critical for senior leaders at a polytechnic.
Leadership Characteristics	Combination of competence and experience Understand organizational effectiveness	- People who are accomplished and experienced and knowledgeable and who help the institute grow from a basic competency standpoint - Being bold and courageous to deal with the ambiguity and help plan the future course. - You get them on the same page, moving in the same direction, and trying to achieve the same goal, and effectively move the organization forward
Leadership Skillset & Competencies	Relationship between academic Vs administrative success Look at the external trends and influencers	- We have a strange belief that academic success somehow correlates with administrative success - Need PhDs and MBA or do we need folks with knowledge in emerging industry trends like Artificial Intelligence, Virtual Reality - understanding of industry, both the core industries that drive Alberta's economy, that drive Canadian economy - understanding of industry, both the core industries that drive Alberta's economy, that drive Canadian economy -
Diversity	Diverse background, experiences and cultural fit Gender Equality; Inclusivity	- where the cultural considerations around hiring are really fundamental, because you can get a wonderful, experienced person in our organization, yet they can't figure out how to work in the culture and they're not successful because of that. - personally believe that it's healthy for an organization to have a mix of people who are internally promoted who have those opportunities, and a healthy introduction of new ideas from external leaders
Organizational Effectiveness	Talent Recognition	- Comprehensive approach through one-on-one conversations during performance management and information conversations throughout the year ; Broader talent management strategy
Understanding Polytechnic Context	When hiring from outside, explain what a polytechnic is	- Helping them understand what a polytechnic is, or an institute of technology is perhaps a challenging piece in recruitment. - I think that we want to do is to lobby to the government about the advantages and benefits offered while

Research Question 4: What organizational features could advance the practice of succession planning in polytechnic institutes?

Open Code	Concepts	Example of Participants words
Leadership Bench strength	Mechanism of assessing institutional bench strength Assess on the value of internal versus external	- Be deliberate about understanding the institutional needs, existing leadership bench strength and gaps. - McDonald's actually took an outside and inside view and said, "Here are the people on the outside," (maybe there was a vendor relationship or maybe a supplier relationship) that was mapped out against internal potential as well.
Executive Support	Funding resources to support training & development Upkeep of systems and repositories	- Real resources, not just philosophy, but ensuring each of our budget owners have real dollars put against professional development
Development opportunities	Mentorship Presentation to executives Executive Buddy System Special Projects	- Other philosophies our president has is to ensure that our executive committee have the opportunity to regularly interact with our board. And so we attend all of the board meetings and typically have the opportunity to give a report, sometimes have an opportunity to present on a topic of interest - Buddying with my peers, just the depth of wisdom and knowledge that I'm able to learn from is really remarkable

Research Question 5: What is the relationship between strategic planning, leadership and succession planning in polytechnic institutes?

Open Code	Properties	Examples of participants' words
Strategy to drive business	Accelerating and Scaling Up Expansion and Divesture	- If the strategy is to scale up, then invest in development of people within - If the choice is to go with different lines of business then hiring from outside and investing in the right talent may be part of succession planning - These are iterative, and a cyclical thing. You can't do one without the other but at the same time there is no one, second, or third. You have to keep assessing your strategy and leadership team to modify succession planning.
Succession planning follows strategy	Succession planning framework rather than a plan Alignment of values, strategies and leadership	- Institutional planning and leadership is a primary function, succession planning is secondary. - Look at those strategies to advocate and encourage the involvement in professional development, ensure that decision making and behaviors are abided by our main values.
Complex competing priorities	Strategic plans supporting polytechnic mandate	It is complex! Strategic plans are big, and there's a number of deliverables, and there's a number of initiatives. And then your leadership development plan is big, because you're identifying competency, and you're identifying high performers and high potentials, and you're identifying those

	Leadership development & succession planning to support strategic plan Data analysis for evidence based decisions	you need to develop at the lower end. And all this stuff is happening parallel and often in different departments by different individuals, and things change.
Talent Mobility	Grooming, you know, the leaders for the education sector. Talent Pool for the higher education sector	- We're a training ground for the rest of the college system because we keep losing our leaders to them suggesting we're doing something right that everybody wants our leaders. - Movement of leaders within the higher education sector - Why can't we, from an efficiency point of view, or from an effectiveness point of view, we can work together in some way?

Appendix E: Axial and Selective Coding

Open codes	Axial codes	Selective code
1. External and internal factors; Higher Education environment changes; Clarity of vision and direction; Strategy for accelerating and scaling up or expansion and divesture	Strategy to drive business; environmental scan; Executive sponsorship	Institutional strategy
2. Outcome based; Goals alignment; Outcome Based; Targets and Metrics; Understanding polytechnic context	Strategic priorities aligned with internal and external factors; Performance goals and success measures	Accountability Framework
3. Align leadership competencies Administrative experience Vs Academic credential and experience; Leadership development & training; Development Opportunities; Mentorship	Developing leadership bench strength; Leadership competencies	Leadership Development & Training
4. Institutional needs; Map needs with existing talent; Recruitment and succession planning by developing potential talent; Internal Hires; External Hires;	Talent Management; Talent Calibration; Organizational Effectiveness;	Talent Management Framework
5. Alignment with institutional values; Diversity – gender, experience and competence; Essential skills for cultural awareness, business acumen, be politically astute; are strong collaborators with high emotional intelligence.	Leadership Characteristics and Attribute Alignment with Institutional Values	21st Century Essential Leadership skills
6. Invest in for building leadership talent pool for the higher education sector; Informal conversations for internal progression; Special projects and leadership development opportunities	Talent Mobility – Internal and External Sharing of resources with other PSIs	Informal Succession Planning

Appendix F: Certification of Ethical Approval

Athabasca University
RESEARCH CENTRE

CERTIFICATION OF ETHICAL APPROVAL

The Athabasca University Research Ethics Board (AUREB) has reviewed and approved the research project noted below. The AUREB is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS) and Athabasca University Policy and Procedures.

Ethics File No.: **22807**

Principal Investigator:
Mrs. Neera Arora, Graduate Student
Centre for Distance Education\Doctor of Education in Distance Education

Supervisor:
Dr. Marti Cleveland-Innes (Supervisor)

Project Title:
Succession Planning in Higher Education: Condition for Sustainable Growth and Operational Resilience

Effective Date: January 17, 2018 **Expiry Date**: January 16, 2019

Restrictions:

Any modification or amendment to the approved research must be submitted to the AUREB for approval.

Ethical approval is valid *for a period of one year*. An annual request for renewal must be submitted and approved by the above expiry date if a project is ongoing beyond one year.

A Project Completion (Final) Report must be submitted when the research is complete *(i.e. all participant contact and data collection is concluded, no follow-up with participants is anticipated and findings have been made available/provided to participants (if applicable))* or the research is terminated.

Approved by: **Date:** January 17, 2018

Debra Hoven, Chair
Centre for Distance Education, Departmental Ethics Review Committee

---

Athabasca University Research Ethics Board
University Research Services, Research Centre
1 University Drive, Athabasca AB Canada T9S 3A3
E-mail rebsec@athabascau.ca
Telephone: 780.675.6718