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Pepperdine University  
Graduate School of Education and Psychology

ESSENTIAL ENTREPRENEURIAL AND INNOVATION PRACTICES OF EXECUTIVE  
LEADERS IN CALIFORNIA EDUCATION SERVICE AGENCIES

A dissertation submitted in partial satisfaction  
of the requirements for the degree of  
Doctor of Education in Organizational Leadership

by

Karen M. Connaghan

June, 2016

Kent Rhodes, Ed.D. – Dissertation Chairperson

This dissertation, written by

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under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements of the degree of

DOCTOR OF EDUCATION

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DEDICATION

To my husband, Bill.

You are my rock and my soul-mate.

To my mom, Millie.

Wishing you were here to see the final completion of this journey.

## ACKNOWLEDGMENTS

Although only my name appears on the cover of this dissertation, a number of people have contributed to both its production and its completion. I owe my gratitude to these individuals for supporting my work and making the experience a meaningful one.

I could not have done this without the help and support of several family members, my husband Bill, my daughters Kim and Christie, my mom Millie, and my aunt Pat. Thank you for going the extra mile with me.

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To my colleague, Alicia, thank you for your assistance at the end. You helped me push past mental blocks to reach the finish line.

A big thank you to my chair, Dr. Kent Rhodes, and my committee members, Dr. June Schmieder-Ramirez, and Dr. Margaret Riel for your support, wisdom, and feedback throughout this process.

Finally, thanks to a wonderful cohort. You all made this journey fun!

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## ABSTRACT

The role of entrepreneurship and innovation in K-12 education continues to evolve. As more reform efforts come and go, it is clear that little has changed despite billions of dollars invested in these efforts. Education leaders are being asked to leverage entrepreneurial and innovative solutions to transform the K-12 education environment to meet the needs of a modern society and workplace. Consequently, there is an urgent need to expand the boundaries of possibilities for improving public education. Identifying the essential practices of executive education leaders is of particular importance to K-12 education which is under increasing pressure to provide better equity of resources, do more with less, close the student achievement gap, and prepare students for a future where most jobs have yet to be defined. To meet this challenge, executive education leaders must leverage and implement key entrepreneurial and innovation practices. The purpose of the study was to identify and understand the practices of executive level leaders in California County Offices of Education. The study was designed using the Delphi method approach of identification, shared evaluation, re-evaluation, and finally consensus among the executives to identify the essential entrepreneurial and innovation practices of education leaders. At the conclusion of the process, 15 executives identified 13 opportunity recognition, leadership, and staff practices they believe to be essential to support entrepreneurship and innovation in education. The 2 opportunity recognition skills were: (a) collaboration, (b) future-focus. The 8 leadership practices were: (a) articulate vision, (b) promote healthy organization culture, (c) flexibility, (d) life-long learning, (e) relationship building, (f) actively seek opportunities, (g) decisive. The 3 staff practices were: (a) trust, (b) flexibility, (c) drive. A key finding of the study was the identification of 3 overarching practices spanning opportunity recognition, leadership, and staff: (a) collaboration, (b) flexibility, and (c) future-focused. The essential practices

identified in this study assist leaders in strengthening and transforming education organizations. By focusing on the identified essential practices, leaders are able to meet the challenges and complexity evident in today's K-12 education environment, and create organizations where entrepreneurship and innovation can thrive in support of student learning.

## **Chapter 1: Introduction**

A universal problem faced by America and its citizens concerns the relevancy and quality of our public education system. Our current system, designed over 150 years ago, is no longer equipped to handle the issues and needs of present day society. Issues such as race and income disparities, high student dropout rates, poor urban school performance; and most importantly, a growing disparity between the global demand for skills and knowledge, and the American education system's rapidly stagnating ability to cultivate these skills and knowledge among our young citizens highlight a few of the challenges we face (Mead & Rotherham, 2008).

Our system of education faces more challenges than at any other time in our history. The current system, designed to meet the needs of an industrial nation and society, no longer meets the needs of a global information-driven society. Although America is no longer an industrial society, we continue to attempt to utilize an education model that maintains the status quo and lacks the ability to meet the needs of global citizenship, global employment, and global societies (Hess, 2007). For our society to continue to be productive and prosperous we must expand the opportunities and possibilities of what American public education can and should be. To do so we must strive for ideas that are innovative and game-changing rather than ideas that are structural and provide only marginal improvement in learning progress (Mead & Rotherham, 2008). In other words, we must cultivate entrepreneurial and innovation characteristics and activities among our education leaders if we expect to transform our public education system.

This study will examine the practices of executive level leaders in Education Service Agencies (ESAs) in California. In today's economic climate, ESAs are asked to do more with less and to stretch dollars as far as they can. Local school districts are facing the same economic challenges, and therefore the need for ESA services is increasing while the economic resources



are decreasing. In California, county offices of education (COEs) are one type of ESAs whose focus is supporting and improving K-12 public education within their individual regions. Given all the recent focus over the past few decades on improving public education, one would think the education field would be filled with entrepreneurial activities within the system itself. Sadly, this is not the case.

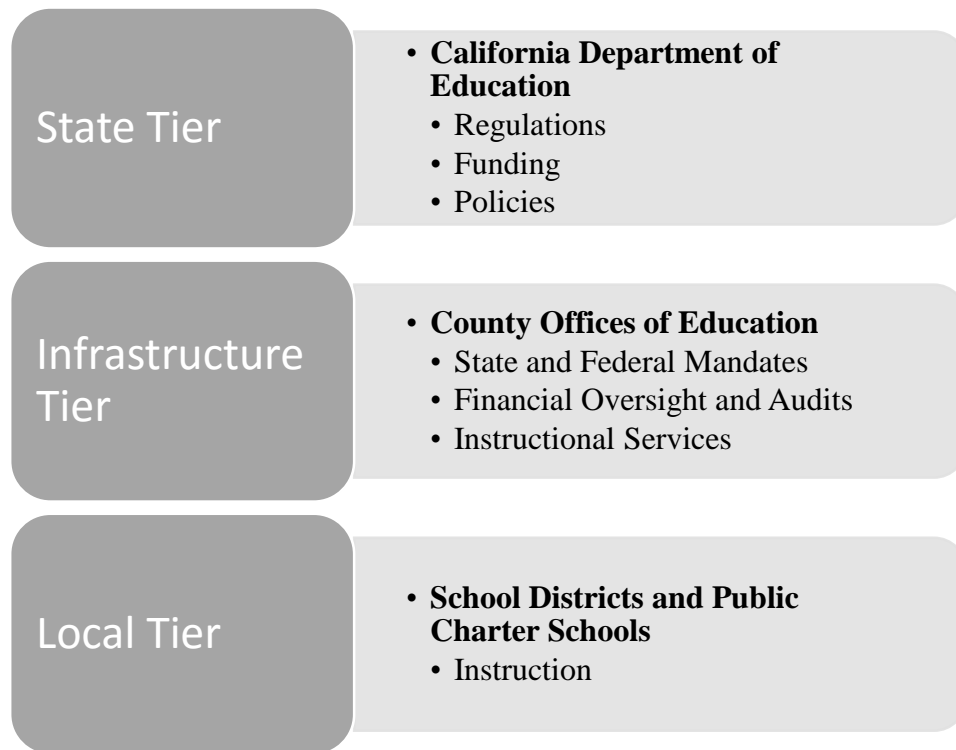
While recent federal and state initiatives have definitely brought entrepreneurs into the realm of education, these initiatives are external attempts rather than internal attempts to make changes. In other words, federal and state initiatives have provided opportunities for private sector entrepreneurs to create and implement solutions, approaches, and theories, yet, internal attempts are limited. This lack of internal entrepreneurship is surprising considering the fact that over 50 million students are served by approximately 95,000 schools, in 15,000 districts, staffed by a workforce of approximately 6 million, and funded by a budget of approximately \$500,000,000 (half trillion; Hess, 2007).

It is surprising that the current widespread concern about K-12 educational performance has yet to spur acceptable internal levels of innovation and entrepreneurship within the education system itself. Since COEs are an internal part of the education system, their ability to provide programs and services to schools throughout the state of California places them in an ideal context to deliver K-12 education utilizing new and better methods.

## **Background**

The public education system in California was created over 150 years ago utilizing a three tier system. The tiers: state, infrastructure, and local were established by State Constitution. Regulations, funding, and policies are established at the state tier. The local tier establishes the

delivery of instruction. The infrastructure tier is where mandates, audits, and instructional services are delivered by COEs (see Figure 1).



*Figure 1.* California public education service tiers.

Functioning at the infrastructure tier, COEs fulfill state and federal mandates, audit school district budgets, monitor teacher credentials, certify attendance records, and provide a variety of services and products to local school districts (California County Superintendents Educational Services Association, 2010). The services provided by COEs are those generally considered to be provided more efficiently and economically at a county rather than a local level (California Department of Education, n.d.). Figure 2 provides a list of sample services and products provided by COEs. In addition to the services and products listed in Figure 2, COEs provide many other services designed and developed to meet the rapidly changing needs of schools and students.

Instructional Services	Business Services
<ul style="list-style-type: none"> <li>• Staff Professional Development</li> <li>• Instructional Design</li> <li>• Curricula and Program Design</li> <li>• Special and Vocational Education</li> <li>• Programs for At-Risk Students</li> <li>• Online Learning Opportunities</li> <li>• Grant Design and Management</li> </ul>	<ul style="list-style-type: none"> <li>• Technical Trainings</li> <li>• Customized Programming of Business, Personnel, and Student information Systems</li> <li>• Technology Delivery Systems</li> <li>• Technology Services</li> </ul>

*Figure 2.* Sample services and products provided by county offices of education.

Currently, there are 58 county offices of education with elected governing boards administered by elected or appointed county superintendents (California County Superintendents Educational Services Association, 2010). Fifty-three of the county superintendents are elected, while three (San Diego, Santa Clara, and Sacramento) are appointed by the County Board of Education, one (Los Angeles) is appointed by the County Board of Supervisors, and one (San Francisco) is the appointed school district superintendent (California County Superintendents Educational Services Association, 2010). A listing of the 58 county offices of education including current superintendent and region is included in Appendix A. Each COE determines and operates their own educational programs and provide both administrative and support services specifically geared to small school districts (League of Women Voters of California, 2009).

Over the past five years, the nation's economic woes have played havoc on the resources and services available to K-12 education; and, COEs have not been immune to this economic downturn being asked to do more with less. As mentioned in the introduction section of this study, the difference is that while budgets for COEs are dwindling, the requests from school districts for more services and products are increasing. Local school districts are not only seeking new and innovative ideas from COEs for improving learning opportunities, they are also seeking

ways to make their budget dollars stretch through consortium pricing models, business process optimization, and business automation. It is this unique set of circumstances that sets the stage for entrepreneurial activities and opportunities, so it is no surprise that renewed interest in entrepreneurship and innovation has recently emerged. While many efforts to transform education over the past two decades have failed or provided only slight improvements to the system, COE leaders who recognize, identify, and leverage these opportunities hold an important key to understanding entrepreneurial activities offering game-changing transformation within the education system.

### **Statement of Problem**

Given all the funding, focus, and research devoted to improving K-12 education, our system of public education remains relatively rule-bound and embroiled in politics (Hess, 2007). While there is evidence that entrepreneurial activities can and do exist within our public school system, it remains critical that ESAs no longer remain in the background providing invisible support to schools. ESAs must significantly expand the boundaries of possibilities for improving public education by engaging in innovative, entrepreneurial pursuits aimed at genuine solutions and products for public education and the local regions they service (Mead & Rotherham, 2008).

### **Statement of Purpose**

The goal of this study is to identify and understand the practices of executive level leaders in California ESAs and to share the best practices for how education leaders can become and remain entrepreneurial in distressed, challenging economic times. Entrepreneurs and innovators across a number of industries are seeking new and better methods for supporting K-12 education, and ESAs within the education system are no exception. This mixed-methods Delphi study will examine how executive level leaders in of California ESAs identify and leverage

entrepreneurial opportunities within their organization and local region. Transforming education requires a shift in the very culture of education from one of status-quo, institutional resistance, and bureaucracy to one of personalization, authenticity, flexibility and adaptive distributed learning experiences (KnowledgeWorks, n.d.). This can be accomplished by educational leaders through a focus on entrepreneurship and innovation within the public education system. This shift of focus changes the playing field by creating habits of innovation and giving ESAs a key role in assisting schools in breaking away from traditional practices toward a new, global approach to educating our youth for a new, rapidly changing global society (Hess, 2007; Mead & Rotherham, 2008; Williams, 2006).

This Delphi study will use a mixed methods technique in gathering data from executive level leaders working in California ESAs. The study will consist of several phases. Phase one will identify those executive level leaders who are pioneering the way forward for their ESAs by examining what services and products they create, the challenges they face, their motivation to be entrepreneurial, and the resources used to support their efforts. During this phase, 15-20 leaders will be identified for further study of their entrepreneurial activities.

During phase two, the selected leaders will be interviewed to reveal how they discover, evaluate, and exploit opportunities turning the ideas into new and innovative products, processes, and services within their education settings. Phase three will further investigate the results of phase two through electronic surveys to identify the best practices ESA leaders utilize to increase entrepreneurial and innovation behavior in their organizations.

### **Studies That Have Addressed the Problem**

A few studies have been published that have addressed the topic of entrepreneurship in K-12 education. However, only one study has addressed the topic of entrepreneurship in ESAs.

Kari Arfstrom's doctorate dissertation examined the entrepreneurial activities of ESA superintendents across the United States (Arfstrom, 2009). Arfstrom (2009) identified 34 entrepreneurial ESA superintendents located throughout the United States and conducted a survey. The results of the survey were used to conduct a comparative case study of one emerging ESA and one established ESA.

Arfstrom's (2009) findings indicated that emerging ESA superintendents rely on their boards of education for assistance and support in identifying opportunities, whereas superintendents from established ESA are usually the first to recognize innovative efforts and take action. Findings from the study indicated that entrepreneurship can be learned and replicated within ESAs. The case study results revealed that both emerging and established ESA superintendents regard their clients as the key drivers of new opportunities and solutions. Interestingly, the two case study superintendents differed in their processes once new opportunities were identified. The established ESA followed more formal and established procedures while the emerging ESA looked to established ESAs for assistance in formulating appropriate procedures.

Further study of this topic was recommended by Arfstrom (2009) with a focus on entrepreneurial ESAs located in one state and in a state mandating ESAs be or become entrepreneurial. An additional recommendation for further study was to include direct input from key staff and board members. This study will supplement the work of Arfstrom (2009) by concentrating on entrepreneurial ESAs located in the state of California while extending the participants to include executive level leaders.

## **Recent Statistics**

California school districts comprise 12% of the largest school districts in the United States (National Center for Education Statistics, 2012). In total, California is home to over 10,000 schools with approximately 6.2 million students and 314 million teachers as reported in the 2009-2010 State Education Data Profiles compiled by the National Center for Education Statistics (2012).

During the 2010-2011 fiscal year, County Offices of Education in California received approximately 5.4 billion dollars in revenues from various sources, and spent approximately 5.2 billion dollars (Ed-Data Education Data Partnership, 2012). These statistics clearly demonstrate that education is big business in the state of California. Yet, as noted earlier, efforts to transform and reform education, both in California and across the nation, continue to lag.

## **Research Questions**

1. How do executive level leaders in California ESAs define entrepreneurship and innovation?
2. According to executive leaders in California ESAs, what core practices are necessary to cultivate a culture of change supporting entrepreneurship and innovation?
3. To what extent, if any, do executive level leaders in California ESAs recognize and address entrepreneurial opportunities (a) at an organizational level, (b) at a regional level, and (c) beyond a regional level?

## **Significance of Topic**

There are few studies addressing the issue of entrepreneurship and innovation activities of executive level leaders in ESAs, and none focusing specifically on California ESA. This study will advance the entrepreneurship research domain focusing specifically on ESAs and the

leadership practices that increase or inhibit the ESA leader's entrepreneurial behavior (Llano, 2010).

The significance of this study is that schools, ESAs, students, and society in general will benefit from an education system that leverages entrepreneurship and innovation from within rather than solely relying on outside entities to provide such opportunities. This study will provide a comprehensive review of the entrepreneurial attitudes and activities of executive level leaders in California ESAs. Its focus on California county leaders will contribute to knowledge through the identification of practices and determinants of entrepreneurship in these leaders and through the resulting improved services, processes, and products. This knowledge will also contribute to the knowledge of organizational leadership by utilizing data to cultivate and support innovation and entrepreneurship within ESAs.

Additionally, this study is important for the future viability of ESAs in California. As technology closes the gap between experts, vendors, resources, and customers, COEs must find ways to differentiate themselves and provide unique value to school districts, taxpayers, and most importantly to students. The findings of this study will assist COEs to cultivate a culture of innovation and entrepreneurship within their organizations providing fertile ground for developing and launching potentially game-changing new programs, processes, services, and ideas.

### **Definitions**

**Board of Education**—a governing body that operates at a regional or state level with oversight for school districts or other education entities.

**California County Superintendent**—similar to the Chief Executive Officer (CEO) of private businesses, this position is responsible for fiscal oversight for school districts within the



region conducting such tasks as examining and approving school district budgets and expenditures, identifying sound, cost-effective practices, and promoting quality. County superintendents provide school district support in the areas of student services, business services, technology services, and curriculum services. The position was created by statute making the county superintendent a state constitutional officer (California County Superintendents Educational Services Association, 2010).

County Office of Education—An Education Service Agency (ESA) comprised of the county superintendent and the county board of education. The county board of education establishes and governs the policies of the county office of education and the members are the governing board for all education programs operated at the county level.

Educational Service Agency (ESA)—an agency that serves schools and communities by providing programs and services to support both business objectives and learning objectives. There are 553 educational services agencies nationwide. For the purposes of this study, ESA refers to county offices of education.

Educational Entrepreneur—a person recognized as an innovator whose activities lead to transformative changes in public education.

Entrepreneur—a person who practices entrepreneurship and who seeks to leverage opportunities into new and unique solutions and products while assuming risk for business ventures.

Entrepreneurship—a process of discovery, identification, evaluation, and opportunity exploitation resulting in the conversion of knowledge into processes, products, and services (Agbim, Owutuamor, & Oriarweo, 2013; Llano, 2010).

Executive level leaders—leaders holding senior level positions in the organization. These may include, but are not limited to, superintendents, assistant superintendents, executive directors, chief technology officers, chief business officers, senior directors, and directors.

Innovation—the introduction of something new or novel that results in a more effective product, process, service, technology, or idea (“Innovation,” n.d.).

Innovator—a person with the ability to create new or novel processes, products, services, technology, and ideas creating transformation.

Intrapreneurship—the process of creating new services, products, processes and solutions within an organization.

Public Education—for the purposes of this study, public education refers specifically to K-12 education in America.

State Education Agency (SEA)—a formal government department within each state responsible for providing oversight for educational initiatives.

Superintendent—this is the chief school administrator with oversight of an education entity: national, state, regional, or local.

### **Key Assumptions**

This study had the following assumptions:

1. Superintendents, assistant superintendents and other executive level leaders participated honestly in the study. It is assumed that participants responded candidly and truthfully, however, it must be noted that when participants become involved in a study, especially after giving informed consent, it is possible that their behavior was modified impacting the results.

2. Executive level leaders of California ESAs desire to be entrepreneurial in their activities, and desire their ESA to be considered innovative.
3. Researcher bias must be considered in any study. The nature of this study is such that it investigates the lived experiences of executive level leaders. This researcher is not, nor has ever been a superintendent or assistant superintendent, however, this researcher has held positions at the executive level in several education organizations. Since the researcher is an active executive level leader at a large California County Office of Education, there is the possibility that while analyzing data, variances may be uncovered because of personal knowledge of the domain and subject being explored.

The study gathered data from a limited number of subjects at a single point in time. Generalizing the findings from this sample to larger populations requires an understanding of these stated assumptions.

### **Study Limitations**

A key limitation of this mixed-methods Delphi study is applicability. The degree to which the findings from this study can be applied more broadly to other ESAs across the United States will be limited due to the uniqueness of the manner in which each state utilizes, organizes, and regulates ESAs. This study focuses specifically on ESAs located within California and therefore is crafted specifically to study those ESAs.

Truth and honesty of the respondents are limitations of the study. The value of truth and honesty is based on credibility as participants will bring multiple realities to the study. It is therefore important that these realities are presented correctly (Krefting, 1991). The relationship that exists between the researcher and participants will, to some degree, determine the truthfulness of responses. The researcher of this study has had interactions with participants from

one COE, but has not had previous interactions with participants from any other County Office of Education.

Measuring the variables of entrepreneurship, innovation, and leadership is based on perceptions and attitudes of participants through self-reported questionnaires and interviews. Since this study is non-experimental, internal validity will be weak. This is problematic for determining any direct cause-effect relationship that may exist between the variables, the organization, and the leader (Trochim & Donnelly, 2007).

### **Chapter 1 Summary**

Over the past 5 years, the nation's economic woes have played havoc on the resources and services available to public education. County Offices of Education have not been immune to the economic downturn and in response must find ways to do more with less. As a result of dwindling budgets, local school districts are looking to COEs for more services and new and innovative solutions to their challenges. These districts are not only seeking new and innovative ideas from COEs for improving the learning opportunities of students, they are seeking ways to stretch their budget dollars as well. A primary focus of COEs should be the identification and development of innovative products, solutions, and services designed to transform the educational and business processes of local school district so that they may better serve the learning needs of students.

## **Chapter 2: Review of the Literature**

For many years, researchers have published books, developed university courses, and conducted studies to understand the concept of entrepreneurship and innovation. Yet, both concepts remain elusive (Connaghan, 2008). For decades, education reform efforts have come and gone, yet little has changed in the education system despite billions of dollars invested in reform efforts (Hess, 2007). According to Mead and Rotherham (2008), the key to transforming public education is through broadening the boundaries of possibilities. Leaders in education must shift their focus to the core functions of teaching and learning while driving game-changing ideas in the field rather than simply changing the structure of education. The practice of broadening the boundaries of possibility is the result of entrepreneurial and intrapreneurial activities, both relatively new concepts in education (Mead & Rotherham, 2008). This chapter provides a review of the literature related to: (a) entrepreneurship and intrapreneurship, (b) innovation, (c) leadership, and (d) entrepreneurship and innovation in a changing education landscape.

### **The Nature of Entrepreneurship and Intrapreneurship**

In the early 1980s entrepreneurship was an emerging field (Bygrave & Hofer, 1991). By the 1990s entrepreneurship was considered a legitimate field of study but still lacked a strong theory foundation (Bygrave & Hofer, 1991). Fast forward to today, and entrepreneurial organizations are considered to be innovative, opportunity seeking, and risk-taking (Sun & Pan, 2011).

The following sections will review the concept of entrepreneurship and intrapreneurship, the characteristics of entrepreneurs and intrapreneurs, the characteristics of entrepreneurial and intrapreneurial organizations, and the barriers preventing entrepreneurial and intrapreneurial endeavors.

**Concept of entrepreneurship and intrapreneurship.** A review of the literature reveals an abundance of definitions for the term entrepreneurship revealing the lack of agreement on a single definition. A variety of researchers have studied the concept of entrepreneurship and intrapreneurship, however, two dominant voices in the field of entrepreneurship emerge: Joseph Schumpeter and Peter Drucker (Levin, 2006).

The crux of entrepreneurship, as described by Schumpeter, is creative destruction described as a continual destruction of existing products in order to provide something new (as cited in Barringer & Bluedorn, 1999). This ability to combine elements in new ways to create something new is the primary function of entrepreneurship (Eyal & Inbar, 2003; Eyal & Kark, 2004). According to Schumpeter, entrepreneurship is more than invention, it is the process of adding value to society (as cited in Levin, 2006). Similarly, entrepreneurship can be defined as the ability to create newness (Ireland, Hitt, & Sirmon, 2003; Lumpkin & Dess, 1996). Still another definition of entrepreneurship identifies the act of creating a venture outside the existing organization as a defining characteristic of entrepreneurship (Parker, 2009).

Both Schumpeter and Drucker (2006) equate entrepreneurship with invention, however, Drucker places more emphasis on the role of management in the entrepreneurial process (as cited in Barringer & Bluedorn, 1999). Likewise, Levin (2006) views management as the new technology transforming the American economy into an entrepreneurial economy. William Bygrave (2009) expands the definition of both Schumpeter and Drucker to encompass the creation of any new business regardless of whether the product or service is new. Combining the views of the major theorists, entrepreneurship can be thought of as the ability to combine elements in new ways to create something new, either a product, a service, or an entirely new organization.

In contrast to entrepreneurship, intrapreneurship expands on the concept of entrepreneurship noting that activities deemed entrepreneurial do not necessarily have to be involved in a business start-up independent of the original organization (Pinchott, 1985). Shaker Zahra and Gerard George reveal that organizational survival, growth, and renewal is linked to intrapreneurial activities in large firms (as cited in Ireland et al., 2003). During the 1960s and 1970s, American executives practiced 'business as usual' because foreign competition posed no threat to their profits (McGinnis & Verney, 1987). Today, interest in intrapreneurial activities has increased due to the increase of competition from both the foreign market and disruptive technology (McGinnis & Verney, 1987). As a result, businesses must seek ways to retain and enhance their competitive advantage.

In the case of intrapreneurship, DeJohn and Wennekers state that individuals are said to be working in an entrepreneurial fashion within their own organization (as cited in Boon, Klink, & Janssen, 2013). Antoncic & Hisrich (2001) define intrapreneurship as entrepreneurship occurring within established organizations. In other words, intrapreneurship is the process of bringing entrepreneurial behavior within the organization. Intrapreneurs strive to define new associations and opportunities advancing both organizational and individual goals (Parker, 2009; Pinchott, 1985; Robinson, 2001; Smith, 2007).

For the purpose of this study, intrapreneurship is defined as entrepreneurship within an organization and refers to the process of creating not only new business opportunities, but also new services, technologies, processes, and products (Antoncic & Hisrich, 2001, 2003). The remainder of this section will focus on the concept of intrapreneurship.

Intrapreneurship research can be categorized into three focus areas (Antoncic & Hisrich, 2003; Drucker, 2006; Hornsby, Naffziger, Kuratko, & Montagno, 1993; Kuratko, Hornsby, Naffziger, & Montago, 1993; Pinchott, 1985):

1. Individual intrapreneurs emphasizing individual characteristics.
2. New corporate ventures focusing on type, fit, and enabling internal environments.
3. The entrepreneurial organization emphasizing the organization's characteristics  
(Antoncic & Hisrich, 2003; Drucker, 2006; Hornsby et al., 1993; Kuratko et al., 1993; Pinchott, 1985)

Intrapreneurship is a relatively new concept as indicated by the low number of significant studies on the topic (Boon et al., 2013). A variety of terms are used to describe the concept known as intrapreneurship. These include corporate entrepreneurship, corporate venturing, and internal corporate entrepreneurship (Antoncic & Hisrich, 2001; Hornsby et al., 1993; Pinchott, 1985). Corporate entrepreneurship, as another term for intrapreneurship, refers to an infusion of entrepreneurial thinking within an organizational structure (Kuratko, Montagno, & Hornsby, 1990). Corporate entrepreneurship is multidimensional and focuses on proactivity, product innovation, and leadership (Antoncic & Hisrich, 2001). As previously noted, entrepreneurship and intrapreneurship are closely related with entrepreneurship being more outward focused and intrapreneurship being more inward focused. The primary focus of intrapreneurship is to leverage and embrace the entrepreneurial spirit for the benefit of the organization (McGinnis & Verney, 1987). It is this blending of entrepreneurship and intrapreneurship that creates innovation. Table 2 identifies and describes the six dimensions of intrapreneurship.



Table 1

*Intrapreneurship Dimensions*

Dimension	Description
New business ventures	Emphasis is on establishing new businesses inside the current organization.
Innovation	Emphasis is on creating new products, services, and processes.
Renewal	Emphasis is on organizational change and re-imagining.
Proactive	Emphasis is on competitiveness, risk-taking, and pursuit of bold steps.
Risking-taking	Emphasis is on bold actions and committing resources to leverage new opportunities.
Competition	Emphasis is on competing aggressively with competitors.

*Note.* Information from “Intrapreneurship: Construct refinement and cross-cultural validation,” by B. Antoncic and R. Hisrich, 2001, *Journal of Business Venturing*, 16(5); “Clarifying the entrepreneurial orientation construct and linking it to performance,” by G. T. Lumpkin & G. G. Dess, 1966, *Academy of Management Review*, 21(1); “Fostering intrapreneurship: The new competitive edge,” by E. G. Rule & D. W. Irwin, 1988, *Journal of Business Strategy*, 9(3); “Juggling entrepreneurial style and organizational structure: How to get your act together,” by D. P. Slevin & J. G. Covin, 1990, *MIT Sloan Management Review*, 31(2).

Leaders benefit from the ability of intrapreneurship to renew and revitalize an organization, to inspire innovation, and to enhance the overall organization culture (Antoncic & Hisrich, 2001; Kuratko et al., 1990; Parker, 2009). In fact, intrapreneurship often drives organizational change, renewal, and reinvention (Rathna & Vijaya, 2009; Rigtering & Weitzel, 2013). This change, renewal, and reinvention cycle creates an environment where employees are not satisfied with the status quo and seek to improve customer needs (Antoncic & Hisrich, 2001; Srivastava & Agrawal, 2010).

In summary, this section discussed the concept of entrepreneurship and intrapreneurship noting the similarities of concepts and the respective roles each plays in an organization. While there are numerous definitions for both terms, this study defines entrepreneurship as the ability to combine and blend elements in new ways creating something new such as a product, a service, or even an entirely new organization. Intrapreneurship, in this study, is defined as entrepreneurial

activities within an organization including, new business opportunities, new services, technologies, processes, and products. Entrepreneurship and intrapreneurship are closely related concepts with one being focused on outward opportunities and the other focused on internal opportunities. The section highlighted the concept of intrapreneurship and its role in bringing entrepreneurial behavior into the organization and extending the organization's competence and opportunities through new resource combination (Robinson, 2001). Intrapreneurship infuses entrepreneurial thinking within the organization. Intrapreneurship drives organizational change through its ability to renew and revitalize the organization, to inspire innovation, and to enhance the overall culture of the organization.

**Characteristics of entrepreneurs and intrapreneurs.** Opportunities are recognized by entrepreneurs and who leverage the opportunities to create something that did not exist before (Alvarez & Barney, 2007; Rathna & Vijaya, 2009). This ability to recognize and exploit opportunities forms the core of entrepreneurship (Abdelgawad, Azhra, Svejenova, & Sapienza, 2013; Chelly, 2010). Opportunity recognition is often cited as the most important characteristic of entrepreneurs and is often messy and non-linear (Abdelgawad et al., 2013; Barringer & Bluedorn, 1999). Entrepreneurs practice environment scanning by continually looking for and identifying opportunities for entrepreneurship and innovation (Kuratko et al., 1993).

Like entrepreneurship, the definitions of entrepreneur are wide and varied. Several researchers define an entrepreneur as someone who recognizes and leverages opportunities by taking risks (Bygrave & Hofer, 1991; Drucker, 2006). Other researchers use terms such as innovative, initiative, opportunity seeker, and risk-taker in their definitions (Drucker, 2006; Rathna & Vijaya, 2009). Olm and Eddy use terms such as self-generating enthusiasm for

products and services, willingness to take risks, determination and tenacity to reach goals, and planning ability (as cited in Luchsinger & Bagby, 1987).

Schumpeter defined an entrepreneur as someone who creates new combinations accelerating the process of economic activity (as cited in Mead & Rotherham, 2008; as cited in Rathna & Vijaya, 2009). Teske and Williamson (2006) define an entrepreneur as a business professional who creates a new product, process, or business model in the hopes of creating disruptive, transformational changes in public and nonprofit enterprises. Other characteristics of entrepreneurs include pro-activeness, self-efficacy, and a tolerance for ambiguity (Lindsey, 2009). Energy, innovative thinking, risk-taking, and creativity are entrepreneurial characteristics identified by Lavaroni and Leisey (2000).

Individuals who practice intrapreneurship are known as intrapreneurs. Similar to entrepreneurs, intrapreneurs are individuals within an organization responsible for identifying new opportunities (Rathna & Vijaya, 2009). Hassell (2008) describes intrapreneurs as individuals working creatively inside organizations developing new associations and opportunities expanding both organizational and personal goals. These individuals contribute to the organization's performance through proactive behavior and an ability to take risks. According to Argyris and Schon (1978), intrapreneurs, or product champions as some call them, display persistence and courage with little regard to indifference or resistance (Hornsby et al., 1993; Kuratko et al., 1993). Maidique (1980) notes that successful intrapreneurs challenge the status quo, push the limits, work under the radar, and do the things that are needed to move ideas forward. While Sun and Pan (2011) identify innovativeness, pro-activeness, and constructive risk-taking by employees as characteristics of intrapreneurial behavior. Intrapreneurs allow organizations to maintain a competitive edge (Robinson, 2001).

Sayeed and Gazdar (2003) point out that the characteristics defined as critically relevant for entrepreneurship are critically relevant for intrapreneurship as well. Table 3 compares the relevant characteristics identified in the literature for entrepreneurs and intrapreneurs. It is important to understand individuals are the ones who directly impact the intrapreneurial behavior of an organization since they act in autonomous ways to initiate new ideas (Robinson, 2001). Without the individual, intrapreneurship is absent and innovation cannot occur. In fact, success depends on motivated individuals taking action within a larger philosophy of entrepreneurial support (Sayeed & Gazdar, 2003).

Table 2

*Comparison of Entrepreneur and Intrapreneur Characteristics*

Characteristic	Entrepreneur	Intrapreneur	Researchers
Environmental scanning, opportunity identification	X	X	(Barringer & Bluedorn, 1999; Bygrave & Hofer, 1991; Drucker, 2006; Jena & Sahoo, 2014; Kuratko et al., 1993; Rathna & Vijaya, 2009)
Flexibility in planning, research, and development	X	X	(Barringer & Bluedorn, 1999; Jena & Sahoo, 2014; Kuratko et al., 1993; Hornaday as cited in Rathna & Vijaya, 2009; Sayeed & Gazdar, 2003)
Risk-taking	X	X	(Bygrave & Hofer, 1991; Drucker, 2006; Kuratko et al., 1993; Lavaroni & Leisey, 2000; Olm & Eddy as cited in Luchsinger & Bagby, 1987; Lumpkin & Dess, 1996; Hornaday as cited in Rathna & Vijaya, 2009; Sayeed & Gazdar, 2003; Srivastava & Agrawal, 2010; Sun & Pan, 2011)
Creativity, imagination	X	X	(Kuratko et al., 1993; Lavaroni & Leisey, 2000; McGinnis & Verney, 1987; Hornaday as cited in Rathna & Vijaya, 2009; Sayeed & Gazdar, 2003)
Innovative thinking, ability to innovate	X	X	(Drucker, 2006; Jena & Sahoo, 2014; Lavaroni & Leisey, 2000; Lumpkin & Dess, 1996; McGinnis & Verney, 1987; Rathna & Vijaya, 2009; Sun & Pan, 2011)

(continued)

Characteristic	Entrepreneur	Intrapreneur	Researchers
Challenge authority, autonomy, dominance, strong control needs	X		(Lumpkin & Dess, 1996; Maidique, 1980; McGinnis & Verney, 1987; Srivastava & Agrawal, 2010)
Autonomous by nature, determined, persistence	X	X	(Kuratko et al., 1993; McGinnis & Verney, 1987; Rathna & Vijaya, 2009; Srivastava & Agrawal, 2010)
Challenge the status quo, push the limits, work under the radar		X	(Maidique, 1980)
Energy	X	X	(Lavaroni & Leisey, 2000; Luchsinger & Bagby, 1987; McGinnis & Verney, 1987; Rathna & Vijaya, 2009; Sayeed & Gazdar, 2003)
Proactive	X	X	(Jena & Sahoo, 2014; Kuratko et al., 1993; Lindsey, 2009; Lumpkin & Dess, 1996; Sun & Pan, 2011)
Tolerance for ambiguity	X	X	(Eisenbeifs & Boerner, 2010; Lindsey, 2009)
Strategic	X	X	(Drucker, 2006; Jena & Sahoo, 2014; Luchsinger & Bagby, 1987; McGinnis & Verney, 1987; Rathna & Vijaya, 2009; Sayeed & Gazdar, 2003)
Execution	X	X	(McGinnis & Verney, 1987)
Competitive	X		(Lumpkin & Dess, 1996)
Locus of control	X	X	(Barringer & Bluedorn, 1999; Eisenbeifs & Boerner, 2010; Srivastava & Agrawal, 2010)
Need to achieve: motivation, high goals, deliver results, communicate and sell vision	X	X	(Eisenbeifs & Boerner, 2010; Jena & Sahoo, 2014; Luchsinger & Bagby, 1987; Rathna & Vijaya, 2009)
Interpersonal skills	X	X	(McGinnis & Verney, 1987; Rathna & Vijaya, 2009)
Confidence, self-efficacy	X	X	(Kuratko et al., 1993; Lindsey, 2009; Rathna & Vijaya, 2009)
Organization building	X		(Eisenbeifs & Boerner, 2010)

In summary, this section (Characteristics of Entrepreneurs and Intrapreneurs) discussed the characteristics of entrepreneurs and intrapreneurs noting the similarities of both and the respective roles each plays in an organization. The recognition and exploitation of opportunities forms the core of both entrepreneurship and intrapreneurship (Abdelgawad et al., 2013). Characteristics defined as important for entrepreneurs and entrepreneurship are equally as relevant for intrapreneurs and intrapreneurship. Both entrepreneurs and intrapreneurs contribute to the organization through proactive behavior and risk-taking. Entrepreneurs and intrapreneurs transform dreams and ideas into commercial ventures through innovation and creativity. Both share similar characteristics, yet leverage those characteristics and traits in different contexts. The intrapreneur is the revolutionary inside the organization benefiting from resources of the organization, while the entrepreneur is the revolutionary outside the organization gathering the funding and resources necessary to launch new endeavors (Maier & Pop Zenovia, 2011).

**Characteristics of entrepreneurial and intrapreneurial organizations.** For the purposes of this section, the term entrepreneurial and intrapreneurial will be used interchangeably when discussing the characteristics of organizations. The typical corporate environment and culture is hierarchical, has established procedures and rules, and has strict reporting structures with clear lines of authority and control. This type of environment does not support the development of new products, services, organizations, or processes. In this environment, leaders and managers are motivated by rewards and promotions. Emphasis is on conservative decision making and data. This is in stark contrast to the culture and environments of entrepreneurial organizations where entrepreneurial/intrapreneurial leaders change the environment (Sayeed & Gazdar, 2003).

Entrepreneurial organizations create environments where staff can engage in discovery, evaluation, and exploitation of opportunities along with a tolerance for failure (Llano, 2010). These organizations create environments where success is captured, indoctrinated into the culture, and brought to scale (Arfstrom, 2009). These organizations exhibit several characteristics: (a) have risk awareness and an opportunity focus; (b) have an openness to change; (c) they embrace ambiguity; (d) they create safe environments to experiment collaboratively with new ideas; (e) they reward and motivate employees to encourage innovation; and (f) they create opportunities for individual team growth (Abdelgawad et al., 2013; Srivastava & Agrawal, 2010).

Intrapreneurial organizations create a culture and climate of feedback, positive reinforcement, individual responsibility, rewards, and mutually agreed upon explicit goals (Kuratko et al., 1993). In fact, several researchers identify intrapreneurship as a key part of successful organizations supporting improved organization results related to growth and profitability (Antoncic & Hisrich, 2001; Peters & Svedkauskaite, 2008; Pinchott, 1985). In traditional organizations, employees only adapt to and/or conform to existing norms and practices (Sayeed & Gazdar, 2003). Consequently, intrapreneurial firms generally have very alert management teams allowing the organization to increase technical expertise and employee development to allow the team to easily recognize opportunities and ideas (Sayeed & Gazdar, 2003).

Accordingly, intrapreneurial organizations are generally flatter in terms of hierarchies, have more diverse assignments of duties and span of authority, and are decentralized (Srivastava & Agrawal, 2010). The entrepreneurial organization exhibits enhanced communication flows while minimizing bureaucratic barriers allowing the rapid response to market and industry

changes. These organizations maintain a structure to support both entrepreneurial and management behaviors. Their leaders maintain a balance between entrepreneurial behavior and structure (Slevin & Covin, 1990).

Barringer and Bluedorn (1999) highlight the importance of the following combination of activities to support entrepreneurial activity by organizations: (a) focused planning; (b) intense environmental scanning; and (c) organizational flexibility. This combination of activities provides the capacity to recognize and respond to change (Barringer & Bluedorn, 1999). Slevin & Covin (1990) further note that the capacity to respond to changing opportunities requires environments: (a) free from threats; (b) leader participation in boundary spanning action; (c) a climate of openness and free communication; and (d) an openness to risk-taking. A well-connected organization is able to combine, re-combine, and re-invent unrelated ideas and solutions to create new solutions by simultaneously leveraging their existing connections (Eyal, 2008).

Pre-requisite enabling characteristics of entrepreneurial behavior and innovation within an organization include: (a) clearly stated mission; (b) realistic goals; (c) willingness to identify failed objectives; and (d) building entrepreneurial behavior, along with innovation, into policies and practices (Drucker, 2006; Kuratko et al., 1993). Drucker (2006) expands these characteristics noting that entrepreneurial organizations have a strong entrepreneurial vision, an openness to innovation, and a strong desire for new things throughout the organization. Table 4 identifies additional criteria that must be present within the organization to support entrepreneurial behavior (McGinnis & Verney, 1987). These include organizational knowledge, industry knowledge, innovation rewards, and enlightened rules.



Table 3

*Criteria Supporting Entrepreneurial Behavior Within Organizations*

Element	Description
Organizational knowledge	Employees who are empowered with the strategic goals and strategies for pursuing those goals are more likely to act in innovative ways.
Industry knowledge	A broader understanding of the industry allows employees to act in innovative ways.
Rewarding innovation	Innovative behavior must be sustained. To sustain such behavior, employees must be rewarded for innovation.
Enlightened rules	Enhance the climate for individual innovation by reducing and/or eliminating non-essential restrictions on employee behaviors.

*Note.* The data in this table are from “Innovation management and intrapreneurship,” by M. A. McGinnis & T. P. Verney, 1987, *SAM Advanced Management Journal*, 52(3).

The culture within an organization is a critical determinant of both intrapreneurial and entrepreneurial behavior. Sayeed and Gazdar (2003) identify thirteen (13) characteristics of intrapreneurial organizations:

1. Search for big opportunities
2. Make bold decisions despite uncertainty of outcome
3. Believe that innovation is necessary for sustaining the organization
4. Encourage new and innovative patterns of thinking
5. Treat employees with confidence, trust, and accountability
6. Encourage employees to look for new ways of thinking and doing
7. Employee assessment focuses on entrepreneurial behavior
8. Communication and sharing are encouraged and promoted among employees
9. New employees participate in an orientation program to ensure employees have organization vision and purpose
10. Organization continually recruits individual entrepreneurs into the organization

11. Strong emphasis on teamwork within the organization
12. Individuals with different views from the company are encouraged to innovate
13. Organization communicates vision to ensure innovation occurs

The thirteen characteristics identified by Sayeed and Gazdar (2003) above can be summarized into six essential elements intrapreneurial organizations exhibit: (a) flexibility; (b) idea generation; (c) leadership; (d) idea selection; (e) idea development; and (f) contributor rewards (Rigtering & Weitzel, 2013; Rule & Irwin, 1988). Table 5 describes the six elements in detail.

Table 4

*Essential Elements Intrapreneurial Organizations Exhibit*

Element	Description
Flexibility	Team members need flexibility to manage and define its resources, time schedules, and budget allowing the team to maintain control while providing freedom to innovate.
Idea generation	Management must support and invite ideas and communicate a process for submission of ideas to the organization.
Leadership	Senior management must be committed to innovation and intrapreneurship remembering that actions speak louder than words. Leaders must take actions to support and encourage intrapreneurship.
Idea selection	New ideas must be screened for selection. A process to screen and select should not include cost analysis, but rather a review of personal commitment, middle management support, presence of an idea champion, and alignment with the organization mission.
Idea development	Support for selected ideas should include real commitment of time, money, and resources to realize full potential of opportunity.
Contributor rewards	Successful intrapreneurial organizations reward contributors in a variety of ways such as freedom to work on pet projects, discretionary budget for future idea development, and monetary reward.

*Note.* The data in this table are from “Fostering intrapreneurship: The new competitive edge,” by E. G Rule & D. W. Irwin, 1988, *Journal of Business Strategy*, 9(3).

The combination of individual, organization, and external environment impact the level of intrapreneurship within an organization (Robinson, 2001). Successful, innovative firms

combine entrepreneurial/intrapreneurial, managerial, and technology roles to create a climate conducive to innovation, opportunity identification, and action (Maidique, 1980).

In summary, this section discussed the characteristics of entrepreneurial and intrapreneurial organizations. Entrepreneurial organizations cultivate environments allowing staff to engage in discovery, evaluation, and exploitation of opportunities. In these organizations, failure is expected and tolerated. A culture of focused planning, environmental scanning, and flexibility in combination create an organization's capacity to recognize and respond to change. Organizations engaged in entrepreneurial and intrapreneurial activities maintain a structure to support both entrepreneurial behaviors and management behaviors. Leaders of these organizations create a balance between both behaviors. Successful, innovative organizations combine essential roles: entrepreneurship, intrapreneurship, management, and technology elements to support innovation, opportunity identification, risk-taking, and action.

**Barriers to entrepreneurship and intrapreneurship.** A review of the literature indicates a number of barriers faced by both private and public organizations. The key barriers to entrepreneurship and intrapreneurship include size, time constraints, funding, human resources, strategy, and leadership. This sections reviews the barriers to entrepreneurship and intrapreneurship from a general perspective.

Many entrepreneurial and intrapreneurial activities takes place on the geographic periphery of an organization where most autonomy occurs (Eyal & Inbar, 2003). According to Schills, conflicts within organizations occur between the organizational center and the geographic periphery and are to be expected (as cited in Eyal & Inbar, 2003). It is important that leaders are aware of activities along the periphery. They must cultivate such activities in support

of entrepreneurship and intrapreneurship as it is this disregard for rules, regulations, and policies that allows entrepreneurial activity to occur Eyal (2008).

A major barrier to entrepreneurship in organizations is related to the size of the organization and to a lesser extent the strategy employed by the organization to cultivate entrepreneurship (Hitt & Ireland, 2000). Time constraints, money, and human resource constraints are generally identified as a barrier to entrepreneurship (Lindsey, 2009). Finding enough time to carry out entrepreneurial endeavors, creating the marketing, locating enough funding to support the endeavors, and having the talent to produce and sustain entrepreneurial activities are all identified as challenges of entrepreneurship (Kohli, 2012).

Funding is essential for innovation to flourish, yet organizations often continue to fund old ideas rather than support new ideas (Kohli, 2012). Many organizations today are focused on short-term profits and deploy initiatives to cut costs. This approach misses opportunities for innovation and is counter to the idea of innovation (Gupta, 2011). The use of suitable rewards for employees are often absent and many times employees are unwilling to take risks and act in entrepreneurial ways (Srivastava & Agrawal, 2010). Often the organization's practice is to reward employees who follow safe strategies and those who maximize profits (McGinnis & Verney, 1987).

Most studies identify the lack of entrepreneurial drive as a key factor in the low rates of entrepreneurship from established organizations (Kacperczyk, 2012). This lack of drive results from bureaucratic processes hindering the employee skills, motivation, and aspirations that are conducive to innovation activities (Kacperczyk, 2012). In this respect, leadership effectiveness is frequently identified as a key impediment to implementing change and innovation thereby impacting entrepreneurial behavior (Basheer & Sulphrey, 2012).

In summary, this section (Characteristics of Entrepreneurial and Intrapreneurial Organizations) discussed the barriers to entrepreneurship and intrapreneurship. The key barriers faced by organizations include size, time constraints, funding, human resources, rewards, policies and regulations, strategy, and leadership. Employees are often rewarded for status quo, and safe decisions rather than for risk-taking and innovation. Since most entrepreneurial activities take place along the edge of organizations, leaders must be aware of this activity and cultivate such to allow for entrepreneurial activity.

### **Innovation**

Research widely suggests that innovation improves organizational performance, yet many organizations do not or cannot develop innovation to the level or degree they desire (García-Morales, Jiménez-Barrionuevo, & Gutiérrez-Gutiérrez, 2012). In the late 1990s, Clayton Christensen of Harvard Business School directed businesses to sustainable innovation in order to achieve growth (as cited in Gupta, 2011). Since that time, the increase in global competition has necessitated an increase in innovation (Gupta, 2011). Researchers understand the role innovation plays in the success of organizations, small and large (Hitt & Ireland, 2000). In an ever changing, competitive world, the continual success and survival of an organization depends of its ability to innovate and pursue entrepreneurial activities (Mumford & Licuanan, 2004).

Several definitions of innovation appear in the literature. A number of researchers define innovation as the ability to execute new services and products (Eyal & Inbar, 2003; Eyal & Kark, 2004). Amabile (1988) defines innovation as the successful implementation of unique products and services resulting from creative activities, while Mead & Rotherham (2008) define innovation as a systematic examination of change opportunities. Barsh, Capozzi, and Davidson (2008) provide a broad definition of innovation as a big idea with a big potential. Regardless of

the specific definition used, it is clear that innovation cannot occur within organizations without entrepreneurial activity because entrepreneurs innovate (Drucker, 2006; Hitt & Ireland, 2000).

Innovation enables organizations to change. The change may be a response to the internal or external environment or as actions to proactively impact the environment. Organizations adopt innovations continually over time and the process should be viewed as multiple rather than single events (Damanpour, 1991). Entrepreneurs utilize innovation as a tool to exploit change opportunities to create a different service or business (Abdelgawad et al., 2013). In essence, innovation is an instrument of entrepreneurship creating the resources to support new capacity (Drucker, 2006). Innovation drives new product creation and success (Catantone et al., as cited in Wong, 2013), increases firm organizational performance (Artz et al., Bowen et al., Rosenbusch et al., as cited in Wong, 2013), prompts knowledge management and innovation (Dougherty as cited in Wong, 2013), and aids the creation of value within the organization (Amit and Zott as cited in Wong, 2013). The process of innovation is risky and demands strong planning and effective management (Wong, 2013).

The shared perception of practices, procedures, and policies of the organization creates an innovative climate allowing new knowledge and practices to be created within the organization (Agbim et al., 2013; Moolenaar, Daly, & Slegers, 2010). To create a climate of innovation, leaders must be visionary, facilitate and encourage change, and be persistent with vision and strategy (Kanter, 1982).

Successful, innovative organizations embrace a vision of innovation and maintain support for innovation to ensure sustainability. These organizations understand the realities of the environment, they maintain a structure that is flat, they keep project teams small, and they encourage parallel development of several projects ensuring learning and knowledge

development transcends traditional boundaries within the organization, and utilize boundary spanning groups and teams operating at the edge of the organization (Kuratko et al., 1993). This approach eliminates bureaucracy, encourages rapid turnaround, and instills group identity and loyalty (Kuratko et al., 1993). Innovation excels in organization with matrix-structures, information flows across the organization, and rewards that are forward-looking rather than based on past performances (Kanter, 1982).

Champions emerge from within the organization promoting new opportunities with tenacity, passion, and motivation. These champions are willing to risk their own reputation and career to ensure success (Howell, 2005). These individuals are recognized as central to innovation speed and success. A critical role of champions within the organization is one of communicating the importance of innovation throughout the organization. These champions must continually promote innovation, motivate others to support it, and acquire the resources and strategies to sustain it. (Brazeal & Herbert, 1999). These important individuals play key roles in the innovation process within organizations (Stuart, Mills, & Remus, 2009).

Howell and Higgins identify specific characteristics separating champions from non-champions. Champions clearly communicate a vision of innovation, display a passion for innovation, and are committed to motivating others to innovate (as cited in Stuart et al., 2009). New ideas either find a champion or die (Howell & Boies, 2004). These organizational champions are entrepreneurs who support and advance innovations, deal with obstacles, and function as transformational leaders in order to discover and exploit opportunities (Eyal & Kark, 2004).

Studies focused on leadership in innovative initiatives highlight the importance of leaders as a key requirements for the promotion of organization innovation (Denti & Hemlin, 2012)

Champions, those who informally and actively promote innovations, are essential for successful implementation of innovation (Howell & Boies, 2004).

Internally, organizations supporting innovation do so through encouragement, recognition, and rewards as well as providing personnel, funding, and time. Other key enablers of innovation include: (a) leadership; (b) organizational culture; (c) innovation strategy; (d) employee participation; (e) innovation resources; (f) 360 degree feedback loops; (g) partner and vendor participation in the process; and (h) innovation processes (Dervitsiotis, 2010) These enablers are influenced, guided, and determined by leaders.

Barsh et al. (2008) identify three people-management strategies they believe provide a foundation for building an innovative organization:

- innovation integration
- innovation talent
- innovation culture

First, innovation must be fully integrated into the organization's strategic management agenda and goals. Executive leaders must encourage, manage, track, and measure innovation as a core assessment of the organization's growth. Second, senior level leaders in the organization must create an environment supporting innovation through cultivation and facilitation so that innovation can emerge. Third, executive leaders must foster a culture of innovation based on trust. These three strategies are accomplished through explicit steps so that a culture emerges where employees understand the value of their ideas, feel comfortable expressing their opinions and ideas, and willingly accept an element of risk alongside their leaders (Barsh et al., 2008).

Peter Drucker (2006) identified the key actions leaders take to create innovative organizations as identified in Table 6.



Many executives are often disappointed in their organization's ability to innovate. These executives realize that innovation is essential for the growth, execution, and success of the organization (Barsh et al. 2008). Executive leaders must focus their efforts on two areas: people resources and organization culture (Barsh et al., 2008). This requires executive leaders to purposefully practice strategies to cultivate innovation into the fabric of the organization ensuring employees understand the value of ideas, the safety of expressing ideas, and the shared risk-taking responsibilities (Barsh et al., 2008). Most executive leaders fail to model or promote innovative behavior. Leaders must take steps to advance innovation such as defining the type of innovation needed to drive growth and meet objectives, include innovation in all leadership agendas and meetings, and set performance goals and metrics for innovation (Barsh et al., 2008).

Table 5

*Key Actions Leaders Take to Create Innovative Organizations*

Action	Description
Invest in purposeful, systematic innovation.	Analyze opportunities, think through the sources of innovation opportunities.
View innovation as conceptual and perceptual.	Seek, ask, and listen. Determine what the innovation should be to satisfy an opportunity.
Do not innovate for the future.	Innovate for the present.
Focus on simple innovation.	An effective innovation often does one thing only. Simple innovations work best.
Start small.	Most innovations start small and are not grandiose. They do one specific thing.
Aim innovations at leadership.	The focus is on leading, not creating a big business. If an innovation isn't aimed at leadership from the beginning it probably will not be innovative enough.

*Note.* The data in this table are from "Innovation and entrepreneurship," by P. F. Drucker, 2006, *Innovation and entrepreneurship*.

Denti and Hemlin (2012) suggest several steps leaders must take and support to facilitate innovation within their organizations as shown in Table 7.

Table 6

*Leadership Action Steps to Support Innovation Within Organizations*

Element	Description
Establish innovation policy	Establish an innovation policy and promote the policy throughout the organization.
Establish diverse team membership	Establish teams with an eye toward innovation. Ensure teams are balanced and diverse.
Provide team autonomy and creativity space	Teams need freedom and space to produce ideas and to problem-solve.
Evaluate innovation activities	Team leaders with expertise must be closely engaged in evaluating the innovation activities.

*Note.* The data in this table are from “Leadership and innovation in organizations: A systematic review of factors that mediate or moderate the relationship,” by L. Denti & S. Hemlin, 2012, *International Journal of Innovation Management*, 16(3).

Executive leadership reviews focused on innovative efforts across the organizations should be conducted once a year (Drucker, 2006). A review of all managers from every department should occur every five years to assess the contributions of each over the past five years, and the expected contribution for the next five years is a recommended action. A key question to ask during these reviews is whether or not the organization has gained and maintained innovative leadership (Drucker, 2006). According to Drucker (2006), innovative leadership means being recognized as standard-setting and having the freedom to lead. This recognition is considered the acid test for being identified an entrepreneurial and innovative leader.

In summary, this section on innovation discussed the concept of innovation and the strategies leaders can take to create a culture of innovation within organizations. In a global economy and competitive world environment, the continual success of any organization is dependent on its ability to innovate and pursue entrepreneurial activities. Innovation cannot occur without entrepreneurial and intrapreneurial activities. It is the combination of entrepreneurial and intrapreneurial activity that creates an environment of innovation. Innovation

enables organizations to change in response to internal and external influences. As a series of activities, innovation occurs over a period of time; it is not a single event. Three people-management actions are considered to be the building blocks of innovation. These actions include (a) fully integrating innovation into the strategic plan and goals of the organization, (b) tapping into the organization's talent by creating conditions to allow innovation to emerge, and (c) fostering a culture of innovation based on trust. The key enablers of innovation include leadership, organization culture, innovation strategy, employee participation, resources, feedback loops, and inclusive participation of vendors and partners. Leaders are an essential element in the promotion of organization innovation and must be visionary, strategic, and facilitate and encourage change.

### **Leadership**

Peter Drucker (2006) in his book, *Innovation and Entrepreneurship*, states the need for innovation and entrepreneurship as an essential need not only for economic reasons, but for societal reasons as well in both public service and business. Opportunities appear and disappear dynamically so the process of innovation relies on opportunities and need identification. For innovation to exist and flourish, a leader must be willing to take the helm otherwise innovation is nothing more than structure, frameworks, and words (Stevenson, 2012). Successful innovation cannot exist without strong leadership; and, inspiring the mind-set of employees is an important step in opening up an organization to discovering innovation opportunities (Stevenson, 2012). Being creative and idea generating alone is not sufficient to be innovative. Innovation requires implementation (Oke, Munshi, & Walumbwa, 2009).

Much controversy exists regarding the concepts of management processes and leadership processes. Innovation leadership involves the process of developing frameworks to create and

support innovation strategy (Stevenson, 2012). Convincing people to do the things they believe they cannot, is a key role of the innovation leader. The innovation leader must be willing to champion innovation and instill a commitment from everyone in the organization to be passionate about their work (Stevenson, 2012). Many factors affect organizational innovation. A key influence is the leadership style of senior executives (Jena & Sahoo, 2014; Jung, Chow, & Wu, 2003). Entrepreneurial leaders support teams and individuals in at least two ways: a) leader as facilitator—assisting in turning creating ideas into innovations; b) leader as manager—focusing on the when and how of innovation (Denti & Hemlin, 2012). The phrase, ‘innovate or die’ is often heard in the business world today, and many organizations face a challenging and bleak future if they don’t learn to implement and leverage innovation (Stevenson, 2012). Table 8 describes three obstacles inhibiting innovation (Stevenson, 2012).

Table 7

*Obstacles Hindering Innovation*

Obstacle	Description
Innovation terminology often results in innovation-speak.	The word innovation is often misused, and abused as a result true innovation gets lost. Leaders talk the talk, but real innovation action is lacking.
Innovation frameworks are lacking.	Internal frameworks needed for planning and innovation idea generating are missing. Innovation must be adapted to each organizational context and culture; it is not a one-size fits all.
Risk aversion.	Risk is an essential part of innovation, yet failure is not an option for many organizations. Innovation leaders strive to overcome these challenges: risk, confusion, resistance so that real innovation can emerge.

*Note.* The data in this table are from “Breaking away—A new model for innovation leadership,” by J. E. Stevenson, 2012, “Employment Relations Today, 39(2).”

While leaders have great influence on innovation, their work isn’t accomplished in a vacuum. Leaders construct the culture and environments within organizations that either promote or deter creativity and innovation (Denti & Hemlin, 2012). A combination of culture, structure, strategy, and resources within the organization influence creative activities including volume and

implementation (Robinson, 2001). The key imperative for leaders supporting new activities is to develop the structure and culture within the organization to encourage and sustain intrapreneurial activities (Robinson, 2001). Consequently, context is a critical element that interacts with a leader's effort to encourage and manage innovation (Denti & Hemlin, 2012).

In general, leaders encourage intrinsic motivation, facilitate problem-solving, and develop high work standards and high quality standards. In addition, leaders manage strategic goals, direct activities aligned to those goals, define performance expectations, and manage and implement rewards for reaching goals. It is through these endeavors that innovation leaders support individuals and teams in identifying ideas and implementing innovations while also managing goals and activities of the organization to achieve innovation (Denti & Hemlin, 2012). This duality of roles: leader as facilitator and leader as manager involves skill in both creativity and implementation, two different and opposing processes (Rosing, Frese, & Bausch, 2011). Innovation is multi-faceted and requires a focus on the processes of creativity and implementation. These two processes require two different activities: exploration and exploitation (Abdelgawad et al., 2013). Consequently, leaders must be ambidextrous in leveraging a variety of leadership styles aligned to the different phases of the innovation process: creativity and implementation (Rosing et al., 2011).

Organizational success hinges on the right leadership to drive innovation for organizational success. Leadership capabilities are essential for managing the different types of innovation activities, along with a continual push for the organization to excel and sustain their innovative edge. Leaders need to provide funding for new ideas and opportunities, the need to encourage and lead teams to identify opportunities, and they need to encourage employees to take risks. Leading innovation is one of the primary challenges facing today's leaders. Wide gaps

between the executive's desire to innovate and the ability to do so are widely documented (Barsh et al., 2008). Michael Bloomberg, former New York City Mayor, talks most about his failures, rather than his successes. His innovation leadership built a culture of innovation across New York City's departments through encouraging staff to take calculated risks (Kohli, 2012).

Different leadership styles foster distinct innovative processes (Oke et al., 2009). For example, transformational leadership styles foster creative innovative processes, while transactional leadership styles foster exploratory activities such as collaboration and partnerships to jointly develop products, services, and solutions (Oke et al., 2009). The transformational style is more appropriate for exploration activities whereas transactional styles are more suitable for exploitative activities. However, both styles are moderated by the organizational context (Oke et al., 2009). It is important for executive leaders to understand and leverage different leadership styles aligned to innovation processes and activities. For example, during the implementation stage of innovation, leaders should focus on the transaction aspect of leadership to direct the innovation efforts (Oke et al., 2009). As noted earlier in this section, leaders must be ambidextrous to foster both creativity and innovation processes (Rosing et al., 2011).

Transformational leadership is a prominent approach to leading innovation (Moolenaar et al., 2010; Moriano, Molero, Topa, & Mangin, 2014). This leadership style is often described as inspiring employees to move beyond self-interest through charisma, inspiration, intellectual stimulation, and/or individualized consideration. Numerous studies demonstrate the positive influence transformational leadership has on organizational innovation. (Gumusluoğlu & Ilsev, 2009; Moriano et al., 2014). This positive impact results from a transformational leader's ability to enhance motivation and encourage employees to challenge the status quo. In contrast, transactional leaders establish an exchange-based relationship that supports and reinforces goal

attainment intervening only when necessary (Bass, 1990; Moriano et al., 2014). Since transactional leadership does not encourage experimentation, innovation is not expected (Bass, 1990).

Kohli (2012) identifies essential steps for leaders to build and promote a culture of innovation:

- Lead by example and make innovation a number one priority across the organization.
- Ensure funding is available to enable innovation.
- Cultivate an open and permeable culture to allow boundary-spanning innovations to take root.
- Offer appropriate incentives and rewards for innovative approaches.
- Combine these elements within a comprehensive, agency-wide innovation plan.

Leadership style creates the organizational climate for entrepreneurship and innovation. (Bhattacharyya, 2006). Research suggests that many senior executives do not actively encourage and model innovation behavior (Barsh et al., 2008). According to Maidique (1980), the most common way leaders inhibit innovation is by giving lip service to innovation and failing to actually do anything about it.

In summary, this section on leadership discussed the concept of leadership as related to entrepreneurship, intrapreneurship, and innovation. Innovation cannot exist without strong leadership. Innovative leaders support teams and individuals in two ways: as a facilitator assisting in turning ideas into innovation, and as a manager focusing on the when and how of innovation. While innovation requires creativity, it also requires implementation. The duality of needs and roles create two different and opposing processes: exploration and exploitation. Innovative leaders must be capable of leveraging different leadership styles to foster both

creativity and implementation. The transformational leadership style fosters creativity, innovative processes, while a transactional leadership style fosters exploitation activities such as implementation. Leaders build and promote a culture of innovation through leading by example and making innovation a priority across the organization, ensuring funding is available for innovation efforts, cultivating an open and permeable culture to allow boundary-spanning innovation to be established, offering appropriate incentives and rewards for innovation, and combining these actions within a comprehensive organization-wide innovation plan. The key way leader inhibit innovation is through lip service and failing to follow through with specific action to cultivate innovation.

### **Entrepreneurship and Innovation in a Changing Education Landscape**

Education in California consists of public and private schools, including universities and community colleges. The California public school system is regulated at the state level, as required by legal mandate, through the California Department of Education (CDE). The department is administered by the Superintendent of Public Instruction and is governed by the State Board of Education. The Superintendent of Public Instruction is an elected position with a 4-year term. The State Board of Education (the Board) is comprised of 10 members, serving 4 year terms, appointed by the Governor of California (California Department of Education Historical Documents, 1968). The Board establishes K-12 education policy in the areas of standards, instructional materials, assessment, and accountability.

The California public school system utilizes a three tier system to support public education in the state. The tiers consist of the state, infrastructure, and local tiers. The state tier consists of the California Department of Education governing and establishing regulations, funding, and policies. The infrastructure tier consists of the County Offices of Education with



responsibility for fulfilling state and federal mandates, auditing of school district budgets, monitoring teacher credentials, attendance record certification, and a variety of services and solutions delivered to local school districts (California County Superintendents Education Service Association, 2010). The responsibilities of the California Department of Education, the County Offices of Education, and local school districts is heavily focused on compliance and governance provides little incentive for education leaders to practice entrepreneurial and innovation activities.

The divide between the capitalistic ideals of entrepreneurship and the democratic ideals of our society have created a situation where human service organizations, including schools, have little experience with entrepreneurship (Arfstrom, 2009). Entrepreneurship is a relatively new concept for public education entities (Arfstrom, 2009). Although entrepreneurship may be one of the most potentially beneficial concepts for education, many scholars have noted there is little regard for taking risks and succeeding in public education while there is significant personal and professional risks for doing so (McFadden, 2013; Smith & Landry Petersen, 2006). Before schools can leverage entrepreneurship, education leaders need to grasp its significance (Fratt, 2006).

At first glance, K-12 education and corporate organizations may not seem like they have much in common in relationship to entrepreneurship and innovation. Yet, conceptually both entrepreneurship and innovation share a need and an urgency to embrace and utilize these concepts to remain relevant and competent in a changing global environment. To deal effectively with these challenges, education leaders must have both good entrepreneurship and innovation leadership skills.

Several barriers exist in the field of education that are indeed different from the corporate world. Resistance to change is a statement commonly attributed to the American education system (Levin, 2006). Often state and local policies constrain the potential of entrepreneurial energies required to introduce, sustain, and extend innovation in American education (McGuinn, 2006). These barriers include not only policies, but also laws, rules, and practices specific to the education arena (Smith & Landry Petersen, 2006). Examples of barriers to entrepreneurship and innovation include restrictive regulations hindering new forms of schools, textbook approval processes making it difficult for all but the biggest publishers to compete, education code laws and rules, and mandated state and federal requirements to name just a few (Smith & Landry Peterson, 2006). Other barriers are less obvious such as venture capital, human capital, and compensation systems (Smith & Landry Peterson, 2006). Venture capital is needed for many innovations and entrepreneurial activities making it difficult to secure funds outside education's normal funding schema. Talented and skilled individuals are needed as well, yet hiring practices are exceedingly slow, licensing requirements can be a deterrent, and inflexible compensation systems do not reward high performers and risk-takers, and encourages individuals to stay in place for years to keep expansive benefits (McFadden, 2013; Smith & Landry Petersen, 2006).

There is strong evidence the public school system itself is a barrier to entrepreneurial activity and leadership due to its engrained bureaucratic nature. Creativity and problem-solving all but disappear within any bureaucratic structure (Smith & Landry Petersen, 2006). Education in schools generally focuses on pedagogy and curriculum. Staff at regional educational service agencies (ESAs) increasingly work with local entities to promote entrepreneurial efforts (Fratt, 2006). To effect true change in any slow-moving systems such as education, leaders must be

alert to opportunities, take risks to seize those opportunities, fill existing gaps, and organize and manage staff to fulfill an entrepreneurial vision (McFadden, 2013; Teske & Williamson, 2006).

A key challenge faced by education leaders centers on the tendency of schools to focus on instructional leadership. Instructional leadership resembles Bass's transactional leadership with its concentration on attaining organizational goals efficiently (as cited in Eyal & Kark, 2004). These goals center on student proficiency in basic skills and monitoring the activities of teachers. This type of leadership style works well for monitoring organizational routine, however, instructional leadership cannot promote the entrepreneurship needed to create new organizational realities (as cited in Eyal & Kark, 2004).

American education is a sponsored organization. As a sponsored organization, American education is provided stable and high levels of resources through various levels of government sponsored funding (Eyal & Inbar, 2003). The reality of sponsorship is that it strengthened and infuses bureaucratic methods into the system with the result of often punishing entrepreneurship and innovation. The result: schools avoid unapproved entrepreneurial and innovation activities so as not to impact or jeopardize public funding (Eyal & Inbar, 2003). Executive leaders in education must do exactly what government bureaucracies rarely do: direct public funds to new, unproven ideas, take risks, and avoid patronage (McFadden, 2013; Mitchell & Schoor, 2008). Consequently, reliance on public funding limits entrepreneurial activity within the American education system.

To encourage innovation and entrepreneurial behavior in education, policymakers must make risk-taking rewarding (McGuinn, 2006). John Chubb and Terry Moe, political scientists, argue: the very democratic control that makes public education public also limits the necessary autonomy schools need to be entrepreneurial and innovative (as cited in Smith & Landry

Petersen, 2006). School leaders need to welcome entrepreneurial behavior, create a road map for sustainability, leverage private-sector support and partnerships, seek talented employees, and foster innovation (Lumpkin & Dess, 1996). Executive leaders in education must do exactly what government bureaucracies rarely do: direct public funds to new, unproven ideas, take risks, and avoid patronage to old ways of doing business (Mitchell & Schoor, 2008).

To effect true change in any slow-moving system such as education, leaders must be alert to opportunities, take risks to seize those opportunities, fill existing gaps, and organize staff to fulfill an entrepreneurial vision (Teske & Williamson, 2006). Executive leaders in education must seek to disrupt the existing system in fundamental ways from the inside or create new opportunities on the fringes of the larger system (Teske & Williamson, 2006). Kim Smith and Julie Landry Petersen (2006) describe six principles of entrepreneurial school systems as shown in Table 9.

In summary, this section (Entrepreneurship and Innovation in a Changing Education Landscape) discussed entrepreneurship and innovation in the education environment. As a relatively new concept in public education, entrepreneurship and innovation are two of the most potentially beneficial concepts available to the education field. K-12 education and corporate organizations both share the need and urgency to embrace and utilize entrepreneurship and innovation to remain relevant in a changing, competitive global environment. Specific barriers to entrepreneurship and innovation faced by the education field includes state and local policies that limit the entrepreneurial actions of American education. These barriers include policies, laws, rules, and practices specific to the education arena. As a highly bureaucratic, sponsored organization, the public school system itself is a barrier to innovation. Leaders looking to

introduce and sustain true change in education must be alert to opportunities, take risks to seize those opportunities, and organize staff to fulfill an entrepreneurial vision.

Table 8

*Principles of Entrepreneurial School Systems*

Principle	Description
Continual learning	The work of education is never finished. As one level of performance is achieved, a new one emerges. Continuous improvement is always the priority.
Culture of meritocracy	Results are the priority. When one individual or team succeeds, others use the success to inform their own practice.
Customer-oriented	While education has many customers, parents, community, and board members, focus must always be primarily on the needs of the students—not the adults or institutions. A diverse supply of schools to meet the diverse needs of students is in order.
No monopolies or oligopolies	Inflexible practices such as monopolies and oligopolies hinder education goals through closed, unresponsive systems that aggregate power and maintain it.
Performance-driven	Schools must be both effective and efficient. Clear goals, alignment of resources, assessment, and adjustment in response to assessment must be the focus.
Responsive	Schools must be responsive to the needs of students, families, and communities.

*Note.* Data in this table are from “What is educational entrepreneurship? In M. H. Frederick (Ed.),” by K. Smith and J Landry Petersen, 2006, *Educational entrepreneurship: Realities, challenges, possibilities*.

## Chapter 2 Summary

A review of the literature regarding entrepreneurship, intrapreneurship, and innovation reveals a variety of definitions for all three concepts along with distinct similarities and differences creating confusion for those attempting to leverage the concepts. Entrepreneurship and intrapreneurship are closely related and both are necessary to realize innovation. The resulting confusion that exists from the inter-relatedness of the concepts has specific implications for education agencies seeking to develop entrepreneurial and innovative activities within their organizations. Yet, it is agreed that bringing and leveraging entrepreneurial thinking within the

organization is a necessity to drive change, renew and revitalize, inspire, and enhance the effectiveness of the organization.

Researchers have identified a variety of characteristics exhibited by entrepreneurs and intrapreneurs with a core characteristic being recognition and exploitation of opportunities. While the characteristics are similar across both concepts, a key distinction between the two is the context in which activities occur. Entrepreneurs focus their activities and interests outside the organization, while intrapreneurs focus their activities and interests within the organization. Consequently, organizations must create an environment to support entrepreneurs and intrapreneurs while combining traditional management roles as well.

Superintendents, staff, and board members of ESAs are in a position to lead entrepreneurial efforts in their regions. While entrepreneurship is a fundamental strategy for corporate organizations, the application of entrepreneurship within the education system has not been fully examined. As a sponsored agency, education is resistant to change, hierarchical in nature, and subject to distinct barriers different from the corporate world. In this environment, education leaders and staff are not encouraged to be entrepreneurial and innovative as a result of several barriers: compensation systems, policies, laws, and regulations. To encourage entrepreneurial behavior, school leaders are challenged to leverage a variety of leadership styles to accommodate and support the activities of innovation and entrepreneurship. Currently, instructional leadership is the predominant style present in schools today, and resembles a transactional leadership style. Today's education leaders must leverage leadership styles aligned to the two activities necessary for innovation and entrepreneurship: exploration and exploitation. To bring about true change, education leaders must practice ambidextrous leadership, be alert to opportunities, make entrepreneurship and innovation a priority, take risks, and lead by example.

To be able to build the ability to innovate and engage in entrepreneurial activities, education organizations need to understand the essential entrepreneurial, intrapreneurial and innovation skills and practices required of executive leaders.

### **Chapter 3: Methodology**

This research study utilizes the Delphi methodology to investigate the essential entrepreneurial practices of executive level leaders in California ESAs. This chapter identifies and describes the research design, the process of selecting participants, methods of data collection, and the data analysis process. Education leaders may use the results of this study to create a framework of practices and skills to support entrepreneurial endeavors in ESAs.

#### **Restatement of the Problem**

Given all the funding, focus, and research devoted to improving K-12 education, our system of public education remains relatively rule-bound and embroiled in politics (Hess, 2007). While there is evidence that entrepreneurial activities can and do exist within our public school system, it remains critical that ESAs no longer remain in the background providing invisible support to schools. ESAs must significantly expand the boundaries of possibilities for improving public education by engaging in innovative, entrepreneurial pursuits aimed at genuine solutions and products for public education and the local regions they service (Mead & Rotherham, 2008).

#### **Restatement of Purpose of Study**

The goal of this study is to understand how entrepreneurial ESA leaders identify business and education opportunities and processes and to share the best practices for how County Office of Education leaders can become or remain entrepreneurial in distressed economic times. Entrepreneurs and innovators across a number of industries are seeking new and better ways of supporting K-12 education, and ESAs within the education system are no exception. This mixed-methods study will examine how executive level leaders of California ESAs identify and leverage entrepreneurial opportunities with their organizations and local regions. Transforming education requires a shift in the very culture of education from one of status-quo, institutional



resistance, and bureaucracy to one of personalization, authenticity, flexibility and adaptive distributed learning experiences (KnowledgeWorks, n.d.). This can be accomplished by educational leaders through a focus on entrepreneurship within the public education system. This shift of focus changes the playing field by creating habits of innovation giving ESAs a key role in assisting schools in breaking away from traditional practices toward a new, global approach to educating our youth for a new, rapidly changing global society (Hess, 2007; Mead & Rotherham, 2008; Williams, 2006).

### **Restatement of Research Questions**

1. How do executive level leaders in California ESAs define entrepreneurship and innovation?
2. According to executive leaders in California ESAs, what core practices are necessary to cultivate a culture of change supporting entrepreneurship and innovation?
3. To what extent, if any, do executive level leaders in California ESAs recognize and address entrepreneurial opportunities (a) at an organizational level, (b) at a regional level, and (c) beyond a regional level?

### **Research Design**

This study utilizes a mixed methods technique in gathering data from executive level leaders working in California ESAs. The study follows a sequential approach to exploration utilizing qualitative data collection and analysis through a series of rounds consisting of data collection and analysis (Creswell, 2009). The Delphi method is a flexible approach commonly used in social sciences and is designed to explore new ideas utilizing a qualitative phase for exploration and quantitative phases to interpret the results of phase one. The Delphi method is a mixed methods approach involving initial interviews with the sample population followed by a

series of iterative rounds of feedback surveys seeking to gain a reliable consensus of opinion from the sample population group (Linstone & Turoff, 1975).

The Delphi Method is a flexible research technique supporting an iterative process for collecting and distilling the anonymous opinions and judgment of the sample population through data collection rounds combined with feedback (Skulmoski, Hartman, & Krahn, 2007). As a technique, the Delphi method utilizes anonymity, controlled feedback, and a structured group response process to develop consensus of opinion (Keeney, Hasson, & McKenna, 2011). Anonymity is provided on two levels: (a) participants are unknown to each other and (b) individual responses are never attributed to specific respondents. These two levels of anonymity allow each participant an opportunity to identify and react to ideas without becoming biased by the responses of other participants (Goodman, 1987). The Delphi method facilitates and structures group communication and problem-solving processes by structuring the collection and organization of opinions and judgment in a systematic format (Clayton, 1997; Linstone & Turoff, 1975). This study employs the Delphi method to explore the beliefs and understandings of experienced executive level leaders in California ESAs regarding the practices they consider essential for entrepreneurial leaders in the education profession.

### **Rationale for Delphi Method**

The Delphi method was chosen as an appropriate method for this study for several reasons. First, As a research instrument, the Delphi method works well when there is incomplete knowledge or understanding regarding a problem (Delbecq, Ven, & Gustafson, 1975). Additionally, the method is suited for research situations where practitioners are interested in understanding the best practices of others in a given field (Skulmoski et al., 2007). The concept

of essential entrepreneurship best practices of executive level leaders of California ESAs has not been fully explored.

This topic can be more fully explored through gathering and documenting the ideas, opinions, and judgments of experts to build collective knowledge. The Delphi technique allows the participants to explore their beliefs and practices related to entrepreneurship and innovation within California ESAs. Successful executive leaders in California ESAs will benefit from the opportunity to pool their knowledge in a consensus of the essential practices for entrepreneurial organizations. Thus, The Delphi method can contribute significantly to broadening knowledge about entrepreneurial practices of executive level leaders in California ESAs.

Second, the Delphi technique can be used for judgment, decision-making, forecasting, and is well suited for program planning and administration (Delbecq et al., 1975; Rowe & Wright, 1999). The Delphi method is an appropriate group method utilizing a panel study which most appropriately answers the research questions rather than individual expert responses. Linstone & Turoff (1975) identify structured communications as an effective method leading to collective human intelligence capabilities. The topic of study examines a broad and complex problem with participants representing diverse backgrounds in terms of expertise and experiences and as such, the structure communications feature of the Delphi method is beneficial to the study design.

Third, the Delphi process allows the researcher to gather initial opinions without a group meeting, compile feedback anonymously, aggregate perspective back to participants, and provide participants with opportunities to review and refine their opinions providing a richer data set. This technique provides for distributed participation of experts making it conducive to working with participants located across a large geographic area such as California.

## **Delphi Method Design**

The Delphi method evolved from experimental research originally developed by the RAND Corporation and has become a widely used tool for measuring and aiding decision-making and forecasting (Brooks, 1979; Clayton, 1997; Huang, Wu, & Chen, 2012; Okoli & Pawlowski, 2004; Rowe & Wright, 1999; Skulmoski et al., 2007). The method is mature and adaptable to a variety of research situations and arenas (Skulmoski et al., 2007). The Delphi technique is iterative, consists of a multi-step process, and facilitates the conversion of expert opinion into group consensus (Hasson, Keeney, & McKenna, 2000). The approach elicits and refines the opinions of a group of participants (Brooks, 1979). Delphi survey techniques are commonly employed in health care and social services fields due to its ability to enhance effective decision-making (Hasson et al., 2000).

Rowe and Wright (1999) identify four key features necessary for identifying techniques and procedures as Delphi method: anonymity, iteration, controlled feedback, and group response aggregation utilizing statistics. First, all participants will retain their anonymity since the participant group does not meet in a face-to-face setting allowing them the freedom to express their thoughts and opinions free from group pressure. Second, repeated rounds of questionnaires creates an iterative process allowing participants with an opportunity to consider the opinions of others and refine their views throughout the process. This iterative process generates group knowledge among all participants rather than knowledge within a single participant. Third, the Delphi method process allows each participant to gain an understanding of other experts' perspectives and provides an opportunity for them to refine, clarify, and/or change their views. Finally, the cycle of successive surveys provides opportunities for statistical aggregation of group responses and more measurable data for interpretative analysis.

The Delphi method consists of a series of rounds, analysis, compilation, and re-evaluation. Round one is comprised of identifying panel experts and requesting input to issues to be addressed in subsequent rounds. The issues can be presented as pre-selected items from the literature and/or as open-ended questions (Powell, 2003). The researcher analyzes and compiles the responses creating a new questionnaire based on the results of round one. Round two begins with the distribution of the second questionnaire, and provides an opportunity for participants to review, revise, and rank responses. Additionally, participants have an opportunity to comment on responses including their own and those of other participants. The returned questionnaires are reviewed, analyzed, and compiled by the researcher. Round three consists of the results of questionnaire two being provided back to the panel for review, ranking, and commenting by participants. Summaries for each item are provided to participants and usually include median and upper and lower quartiles (Rowe & Wright, 1999). The rounds provide participants with an opportunity to reconsider their own positions while considering the collective group knowledge, and as such, the Delphi is an iterative, cyclic process leading to group consensus. The rounds are continued until either consensus or stability is reached. Structuring group interaction through the Delphi method alleviates the issues of group dynamics, and encourages participants to consider the opinion of others.

### **Selection of Experts**

Delphi studies utilize individuals with knowledge of the specific topic under investigation. Hasson et al. (2000) define these individuals as informed individuals. The term expert is often used to describe the participants in a Delphi study (Hasson et al., 2000). For this study, participants will be purposefully selected based on their interest in the problem being researched. These individuals will have knowledge, expertise, and experience related to the topic

under investigation (Delbecq et al., 1975). This purposeful sampling is based on the researcher's knowledge about the population and is used to select the potential participants.

A major point of debate in utilizing the Delphi method is related to the identification of experts (Keeney et al., 2011). The composition of the expert panel is critical to the validity and success of the Delphi study (Butters, 2007). Since the composition of the expert panel is comprised of individuals with knowledge, expertise, and experience in the topic of study, and due to the fact that these individuals will be affected by the outcome of the study, bias may impact the results of the study (Keeney, Hasson, & McKenna, 2006). To mitigate any potential bias, this researcher will provide descriptions of each participant ensuring that judgments about bias can be made (Kennedy, 2004). Participants should meet identified criteria to include (a) knowledge and experience with the topic of research, (b) willingness to make a valid contribution and participate in the Delphi process, (c) willingness to commit to time requirements, and (d) good communication skills (Hasson et al., 2000; Skulmoski et al., 2007).

The Delphi process requires an expert panel small enough to be manageable, yet large enough to examine the variety of opinions on complex issues. The number of participants affects the potential for ideas and opinions as well as the amount of data analysis required (Hasson et al., 2000). Of key concern to the study success is the continued participation of the panelists. It is critical that participants remain engaged throughout the process. The researcher will establish a personal connection with the participants through both face-to-face interviews and video conferences for geographically dispersed individuals during round one as recommended by Hasson et al., (2000).

## **Human Subject Issues**

Participation in this study is strictly voluntary, involves an adult population that is not a protected group, and is considered minimal risk to participants. All participants in the study are executive level leaders in California ESAs. All identities of participants will remain confidential throughout the study. The following information will be included in the Invitation Letter to Participate communication: (a) information about the researcher conducting the study and the purpose of the study, (b) the potential benefits of the study, (c) information about the criteria for selection for the study participants, (d) an assurance of anonymity of both identity and collected data, (e) the anticipated time commitment, (f) the option to obtain the final study results, and (g) information on who to contact regarding their rights (see Appendix B). Participants will be required to reply to the email with their acceptance to participate and indicating an understanding of the above conditions of the study.

Participants in this study will not be asked any specific information about their organizations or their specific work at those organizations. Interview and survey questions are focused on obtaining opinions about the practices of executive level leaders in California ESAs, therefore there is minimal risk to participants. It is unlikely that disclosure of responses beyond this research would occur, such an event would not place participants at risk of any legal liability or impact financial posture. It is this researcher's belief that this study meets the requirements for an exemption under section 45 CFR 46.101(b)(2) of the United States Department of Health and Human Services federal regulations governing the protection of human subjects (United States Department of Health and Human Services, 2009).

Finally, all responses are anonymous and obtained through consensus agreement and are known only to the researcher. All findings are reported in aggregate form. Notes, interview

transcripts, recordings are held in the strictest confidence. Printed materials are maintained in a locked cabinet in the researcher's home office. Electronic materials are encrypted and password protected in electronic format on the researcher's computer. All data held by the researcher will be destroyed within three years following the study completion.

### **Population, Sample, and Sampling Techniques**

The population for this Delphi study is comprised on the executive level leaders of California ESAs and includes the superintendent, assistant superintendents, and senior level leaders of County Offices of Education (COEs). The COEs in California frequently utilize different titles for their executive level leaders ranging from superintendent, assistant superintendent, executive director, senior director, to chief officer titles. The population and sample will encompass leaders across these titles. There are 58 county offices of education in California and each COE determines and operates its own education programs. Utilizing purposeful sampling, a sample of at least 50 senior level executives within the COEs will be invited to participate. The targeted panel size for the study is 10 to 15 participants. The following criteria will be utilized to determine participation eligibility:

1. County Superintendent must have at least 1 year of experience at the County Office of Education level.
2. County Office of Education must have a budget of at least \$800,000 or minimum 250 number of employees.
3. Participating executive leaders must have at least 3 years of overall leadership experience at any level.
4. The organization must have at least one product, service or program that is offered to clients beyond their identified geographic scope of service (beyond their county).



The California County Offices of Education website was reviewed to identify the 58 COEs operating in the state of California (see Appendix A). Each COE website was reviewed to identify the County Superintendent, length of employment term at the COE, the number of employees/annual revenues, and the product, services and programs offered to the education community beyond the geographic boundaries of the COE. Utilizing this analysis and the above mentioned criteria, the County Superintendent and executive level leaders in each of the identified COEs will be invited to participate in the study. It is anticipated that at least 40 county offices of education will meet the above referenced criteria. Potential participants will be invited through email communication identifying the selection criteria, purpose of the study, the Delphi process, an opportunity to express interest in receiving the results of the research, and the expected commitment of time. Linstone and Turoff (1975) recommend providing the opportunity for participants to receive a copy of the study results as an incentive for active participation. A copy of the Email Solicitation and Invitation Letter to Participate are included in Appendix B and Appendix C. In case the above referenced recruitment does not result in at least 10 panelists, the researcher will utilize reputational sampling and contact those panelists who have accepted to request referrals for other executive level COE leaders to invite (Gray, Williamson, Karp, & Dalphin, 2007).

### **Data Collection**

To gain an understanding of who the panelists are, the researcher will conduct a background questionnaire prior to the Delphi round initiation. This questionnaire will ensure that the panelists fit the profile of an expert as identified in the participant selection criteria noted earlier in this chapter. This background questionnaire contains 5 questions about the respondent, his or her leadership experience background, number of employees at the ESA, and

entrepreneurial endeavor experiences (See Appendix C). One open-ended question provides an opportunity for participants to share any further information they feel is relevant.

The Delphi method utilizes a series of rounds in which questionnaires are utilized until consensus is reached (Beretta, 1996; Green et al., as cited in Goodman, 1987). In each round, summary results of the previous round are provided to be evaluated by the participants. The number of rounds depends upon time availability and number of questions. This Delphi study will utilize at least three iterative rounds to determine the entrepreneurial practices of executive level leaders in California ESAs. The researcher estimates the initial recruitment size to be approximately 50 potential participants with a target of 10-15 panelists. As discussed in the previous section, invitation to participate letters (see Appendix B) will be sent to the identified participants inviting them to participate and informing them of expected time commitment and engagement.

The researcher will analyze and summarize the responses of participants from each round. The summary of responses from a round will inform and guide a subsequent round of questionnaires. Each round will contain questions to elicit deeper understanding of the previous responses. This iterative process facilitates gathering diverse opinions and viewpoints ensuring the identification of important issues. At least three rounds of questioning will be undertaken as part of this study.

**Round One.** The purpose of Round One is to generate ideas and opinions and ensure that important ideas are identified. Face-to-face and video conference interviews (both recorded) will be conducted providing an opportunity to deepen the richness of data collected (Powell, 2003). This personal interaction encourages participants to remain engaged throughout the process (Hasson et al., 2000). Interviews will be conducted with the participants soliciting opinions on

the critical practices they believe are essential for executive level leaders of California ESAs. The interview process during this phase will be semi-structured utilizing various questions designed to elicit responses to fifteen (15) open-ended interview questions (see Appendix D). A matrix of the research questions aligned to the interview questions is provided in Appendix E. During the semi-structured interviews, follow-up questions and prompts will be asked to gain clarification and elaboration of ideas and opinions (see Appendix F). It is expected that a variety of opinions will be gathered to be used for subsequent rounds.

Panel participants will be sent the Informed Consent Form (see Appendix G) and the Interview Questions (see Appendix D). During the face-to-face/video conference interviews, the researcher will encourage the participants to freely express their opinions and provide multiple responses ensuring all areas of importance are covered. As responses to questionnaires are received, a thank you note with information on when to expect questionnaires and the results will be provided. Providing participants with the compiled data from each gives participants data to review prior to the next round. This process provides an opportunity for each participant to review and re-evaluate their own comments and opinions in light of those stated by the other panelists.

**Round Two.** The goal of Round Two is to encourage the panel to reflect on their responses from Round One and examine how they relate to other panelists viewpoint (see Appendix H). Due to the open-ended questions in Round One, the researcher anticipates a large amount of data for analysis and summarization. Where possible, similar practices and skills will be combined in an attempt to keep the number to a manageable and reasonable size. It is believed that the panelists will reach consensus during Round Two.

Data received from Round Two surveys will be analyzed via statistical summaries for each practices allowing panelist to compare response to each other (Hasson et al., 2000).

**Round Three.** Linstone and Turoff (1975) note that the goal of Round Three should focus on exploring areas of disagreement. The items used in this round are those that participants reached agreement on ranking of importance previously, but this consensus was not reached in Round One. The researcher may include any practices and skills added in the previous survey. The third questionnaire signals the commencement of Round Three. The new questionnaire will be sent to participants along with statistical analysis such as median values for items. Panelists will again rank the practices and skills after reviewing the group responses.

### **Validity and Reliability**

According to Pollard and Tomlin (1995), one method of ensuring the validity and reliability of the study is to invite an appropriate number of participants to participate in the study. Having the appropriate number of participates will allow patterns in responses to be uncovered yet not be overwhelming to the researcher (Custer, Scarcella, & Stewart, 1999). The collected data will be used to gain consensus on a list of practices and skills that contribute to effective entrepreneurial behavior of leaders in California ESAs.

This study and instrument validity and reliability is based on the following:

1. All participants were chosen based on their leadership experiences and skills in California ESAs.
2. At least three rounds of questionnaires will be completed and analyzed. Participants will have the opportunity to revise, modify, and thoroughly examine their responses.
3. Participants will remain anonymous; however, responses will be shared in aggregate form as group consensus.

The reliability and validity of the questionnaires is important. Reliability refers to the consistency of the survey and the repeatability of the survey (Trochim, 2006). Validity refers to whether or not the survey measures what it set out to measure (Trochim, 2006). The questionnaires must be both reliable and valid to be considered scientific. The field test and pilot study for this Delphi research were successful in confirming the validity and reliability of the questionnaire's instrumentation.

This study utilizes a mixed methods approach to data collection and analysis. A qualitative approach was used during the first phase to explore the research questions while the later phases used a quantitative approach to analyze data and reach a consensus of opinion.

### **Analytical Techniques**

This study will use a mixed methods and iterative approach to data collection consisting of a qualitative phase and a quantitative phase. During the qualitative phase, the practices and skills necessary to support entrepreneurial and innovative behavior within organizations will be identified through interviews. Based on the literature review conducted for this study, the researcher will organize and code data into 5 broad categories, for examples see Table 10.

Table 9

#### *Analysis Categories*

Analysis category	Examples
1. Opportunity recognition	Environment scanning, exploration, exploitation, idea generation, idea selection, development of new products and services, external opportunities, internal opportunities
2. Leadership	Duality of roles, modeling, focused strategic planning and execution, mission and vision, commitment to innovation
3. Financial and human resources	Funding new ideas, employee rewards for innovation, employee recruiting, employee development focused on entrepreneurial and innovative behavior
4. Proactivity	Risk-taking, tolerance for failure, pursuit of bold ideas, commitment to pursuit of new opportunities, tolerance for ambiguity, teamwork, passion and energy to make a difference

(continued)

Analysis category	Examples
5. Renewal and reinvention	Organizational change, no tolerance for status quo, continuous improvement, diversity of view, autonomy, support organizational knowledge building; reduce/eliminate non-essential restrictions on employee behavior, external opportunities, internal opportunities

Round one of this study consists of the qualitative phase and includes semi-structured interviews using open-ended questions related to the research questions. The face-to-face and Skype video interviews will be digitally recorded. The raw data from the recordings will be transcribed. The transcribed interviews will be coded based on similarity and patterns, and grouped into categories as shown in Table 10 and includes opportunity recognition, leadership, financial and human resources, proactivity, renewal and re-invention. The researcher plans to utilize a software program called NVivo to study, analyze, and archive the data as it is collected. The researcher will search for patterns providing opportunities to compare results to patterns identified in the literature or theory (Yin, 1994). Utilizing Creswell's (1998) recommendations, the researcher will follow specific steps to analyze the data such as organizing and preparing the data for analysis and coding. Data sources will be reviewed line by line, labeled, and categorized. Transcripts from the interview, notes, and other artifacts (if any) will also be coded and categorized. Coding techniques will reveal themes and assist the researcher in determining how the themes are represented and interpreted (Stake, 1995).

The quantitative phase consists of surveys created from the qualitative interview phase and includes the practices and skills identified during the qualitative phase. During the quantitative phase, participants will rank identified practices and skills over several iterative rounds. The identified practices and skills will be grouped and sequenced throughout the surveys following the categories identified in Table 10 to assist the researcher during analysis of the data. It is anticipated that at least two quantitative rounds will be utilized.

Planned quantitative analysis begins with round two and future rounds, and will consist of using the results of round one to create a Likert scale questionnaire listing the practices and skills identified through the coding process in round one (See Appendix I). Participants will rank the questionnaire information ranging from not important to extremely important. The researcher anticipates using a 5-point Likert scale. Additional space for soliciting input on any additional practices or skills the participant feels should be included but were absent. It is anticipated that descriptive statistical summaries will be utilized such as mean, median, mode, standard deviation, and inter-quartile range.

### **Chapter 3 Summary**

The Delphi method will be used to identify the practices and skills of executive level leaders in California ESAs that support entrepreneurial behavior and activities of the organization. The study explored the practices and skills of the leader participants. The Delphi method was selected since the experts bring diverse and complex opinions, ideas, and experiences to the topic of entrepreneurial behavior among leaders in California ESAs. An iterative process of repeated questionnaires submitted to the identified expert panel members will be completed to answer the research questions. The study is expected to consist of at least three rounds of open-ended questionnaires and an analysis of previous responses. It is anticipated that the study will take approximately four months to complete. The survey questions will be piloted-tested prior to each round. The researcher plans to analyze the data between rounds and report the results on each successive round. Chapter 4 summarizes the key findings of this study.

## Chapter 4: Findings

This chapter presents the findings from this study including demographic information from the study participants, a summary of the data collected in each round of the Delphi study, and an analysis of collected data.

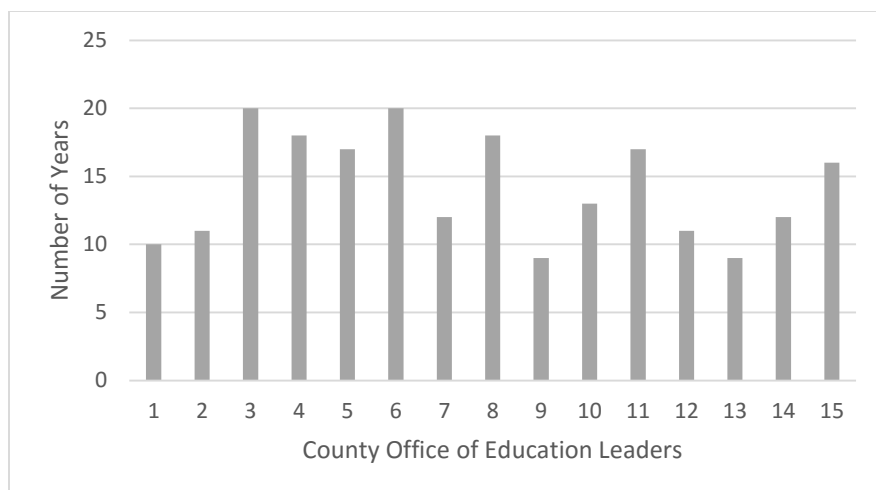
### Participant Overview

Of the 163 California Education Service Agency leaders invited to participate in the study, 15 agreed to participate. The investigator asked each participant, during the email invitation process and verified during the interview, to respond to four demographic questions:

1. How long have you been a leader, at any level?
2. Does your County Superintendent have at least 1 year of experience at the County Office level?
3. Does your County Office have at least 250 employees?
4. Does your County Office offer at least one product, service, or program to clients beyond your geographic boundary?

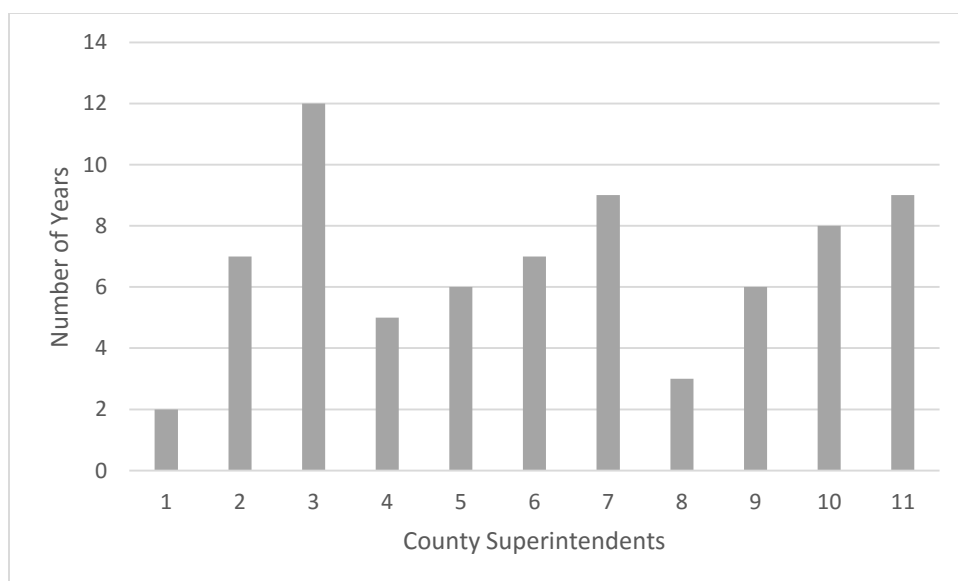
The first question, how long have you been a leader at any level, provides an indication of the experience level of the experts in this study. The participants varied in the number of years in a senior level management role (ranging from nine to 20 years), the majority have held leadership positions for more than ten years as illustrated in Figure 3. It is also noted that what constitutes a leadership, senior level, position varies depending on the size of the ESA. The average number of years was 16 and the median was 13. The combined total number of years of all participants was 243.





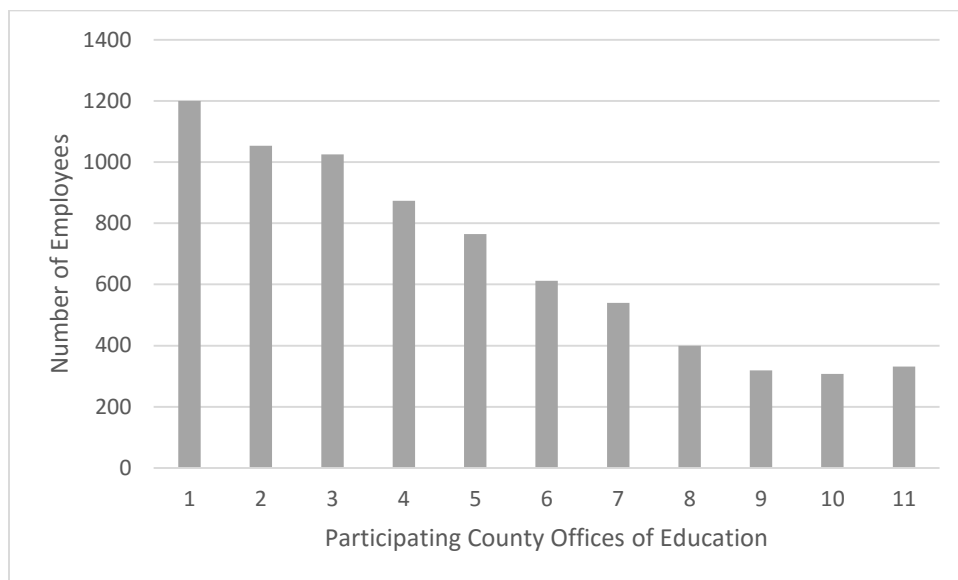
*Figure 3.* Number of years in leadership position.

Question two, gauges the experience level of the County Superintendent in each participating county office of education illustrating their level of experience with intermediary education service agencies. As seen from Figure 4, the number of years of experience varies ranging from 2 to 12 with a mean of 9 and a median of 9. It should be noted that not all participants were county superintendents, eleven (11) out of the 15 participants were county superintendents. However, all participants were executive leaders within the participating ESA.



*Figure 4.* Number of years of service for the 11 participating county superintendents.

The third question regarding the number of employees is an indicator of the size and potential influence beyond the geographic county region the ESA has. The number of employees ranged from 319 to 1200 with an average of 675 and a median of 612. The combined number of employees totaled 7426 as reflected in Figure 5.



*Figure 5.* Number of employees in the participating county offices of education.

Question four regarding the products, services, or programs offered to clients beyond individual counties relates to current entrepreneurial endeavors of the ESA. All reported at least one product, service or program offered/available to clients beyond the geographic region.

### **Round One - Interview Process**

**Interviews.** Round one of the Delphi process involved conducting interviews with each participant. Upon acceptance of the invitation to participate, each participant was contacted via email to set up face-to-face, where possible, or telephone interviews. A total of 6 interviews were conducted face-to-face and 9 were conducted via telephone. First interviews were conducted between December 1, 2014 and December 19, 2014 with the last interview conducted December 19, 2014, taking approximately 3 weeks to complete all 15 interviews.

Two days prior to the scheduled interview, an email reminder (see Appendix H) was sent to all participants along with a digital copy of the informed consent form (See Appendix G) and the interview questions (see Appendix D). Providing the interview questions in advanced allowed an opportunity for the participants to think about the topics of entrepreneurship, innovation, and leadership prior to the interview providing a richer discussion. It was noted that most participants had thought about the questions and some had made notes for use during the discussion.

The investigator began each interview by introducing herself, thanking the participants for agreeing to participate in the study, and reviewing the informed consent form pre-signed by the investigator and provided to participants with the initial invitation to participate. Copies of emails acknowledging receipt of the informed consent form and agreement to participate were kept for the investigator's files. Permission to record the interviews using digital audio recorder was requested and agreed to by all 15 participants. The purpose of the study, the Delphi process and a general timeline for each survey was reviewed with each participant. The investigator stressed the importance of each participant remaining engaged throughout the entire process. The investigator offered to answer any additional questions participants had. There were no additional questions. The interviews proceeded following this introduction.

The investigator utilized the prepared questions starting with a discussion of the concepts of entrepreneurship and innovation and moving into more detailed discussions on opportunity recognition, leadership practices, and staff practices related to entrepreneurship and innovation. Follow up questions (see Appendix F) such as *why do you consider this to be a core practice?* or *Can you clarify?* were used to gain greater depth and clarity in responses when needed. Several participant's answers were brief and to the point, others spent time going into more detail and

discussion. This can be seen in the length of the interviews which ranged from 17:44 minutes to 47:41 minutes. The mean length of interview was 29:25 minutes with a total combined length of 7 hours and 57 minutes.

A thank you email was sent to all interviewees immediately following completion of the interviews. Information regarding the next steps and anticipated receipt of the first survey were included as well. The intent of this email was to thank participants for their time and expertise, stress the importance of their continued participation, encourage engagement, and minimize attrition.

### **Round One - Results**

Twelve opportunity recognition practices, 19 leader practices, and 16 staff practices were identified as a result of the coding process. Each identified practice and/or its corresponding definition reflected actual phrases or words used by the participants during the interview process. Essential opportunity recognition practices include:

1. Research activities - ability to identify and explore planned research areas of interest to support entrepreneurial and innovation activities.
2. Environmental scanning - ability to identify trends, patterns, and relationships across and within the operating environment, continually identifying shifts in internal and external environment for impact to the organization.
3. Collaboration - establishes and seeks a variety of partnerships, grants, and alliances to support entrepreneurial and innovation opportunities.
4. Communication - ability to organize information for others to use and understand, establishes feedback loops, information flows, and utilizes social media to support entrepreneurial and innovation activities.

5. Ideation - exhibits an openness to new ideas and keeps an open mindset
6. Marketing - maintains a customer service focus, monitors competing forces, conducts market analysis
7. Future focused - recognizes that opportunities are everywhere, explores new products and solutions, is proactive, uses information to predict future events and/or outcomes
8. Data driven - ability to use data to inform decisions, conduct needs assessments and gap identification exercises, utilizes analytics, and data analysis to inform decisions
9. Strategic - sets opportunity recognition as a priority, focuses energy and resources to support innovation and entrepreneurial activities
10. Engagement - conveys a serious level of attention and commitment to entrepreneurial and innovation activities, maintains an action-oriented mindset
11. Boundary spanning - continually seeks new connections and networking opportunities, maintains and build relationships, seeks out new venues to expand opportunities
12. Strength identification - conducts SWOT analysis, reframing exercises, core forces analysis to identify opportunities

Essential leadership practices include:

1. Establishes transparent communication - actively listens, ensures people feel they are heard, acknowledge differing views
2. Articulates vision - expresses a clear vision for the future, is forward thinking
3. Life-long learner - continuously seeks opportunities to learn and grow
4. Creates alignment - establishes goal setting loops, practices formative coaching, continually ensures work aligns within the organization

5. Values human capital - values work of staff, recognizes contributions, hires the best staff, coaches and mentors staff, builds capacity in staff by providing time and resources for development activities, empowers staff to imagine new possibilities
6. Builds relationships - strong interpersonal skills, collaborative, seeks connections, works across boundaries (geographic or political)
7. Promotes healthy organization culture - holds self and staff accountable, leads by example, fosters trust, cultivates change management practices throughout the organization
8. Encourages risk-taking - comfortable taking risks, encourages staff to take risks
9. Actively seeks opportunities - identifies trends, proactively identifies issues and creates solutions, recognizes patterns and potential impact to organization
10. Seeks input - collaborative, seeks input and ideas from all stakeholders, encourages feedback and established multiple channels of communication, encourages and participates in discourse
11. Demonstrated commitment - committed to client needs, ensures unique populations are well-served
12. Focus on improvement - focuses on continuous improvement, quality management, and performance excellence
13. Implements frameworks to support entrepreneurship and innovation - establishes frameworks to assist in managing competing forces, establishes organization structures to support goals and priorities
14. Encourages and supports teamwork - encourages inputs and suggestions, offer rewards and recognition, delegate responsibilities

15. Inspirational - ability to open minds, able to inspire and motivate others, thinks outside the box, optimistic
16. Authentic - models desired behavior and attitudes, ability to be reflective, walks the talk, high level of integrity
17. Decisive - confident in decision-making, grounded in reality, makes tough decisions
18. Flexible - responsive to change and new situations
19. Intentional - thoughtful, deliberate in actions and words, makes implicit explicit, explicit about core values

#### Essential staff practices

1. Self-reliant - independent, autonomous, courageous, confident
2. Reflective - self-reflective, thoughtful in word and action
3. Risk-taker - pushes limits, challenges the status quo, tolerates risk
4. Focus on goals and mission - committed to organization core values, mission, practices
5. Learning focused - growth mindset, seeks learning opportunities
6. Self-directed - strives to make an impact, motivated, defines high goals
7. Good listener - seeks feedback, listens, strives for understanding
8. Trustworthy - honest, has integrity
9. Flexible - tolerates ambiguity, adaptable, embraces change
10. Drive - delivers results
11. Independent thinking - ability to innovate, creative, curious
12. Dedicated - exhibits passion or work, energy, positive attitude
13. Team-oriented - strong interpersonal skills, generates and shares ideas, works as a member of team rather than as an individual
14. Tenacity of spirit - resilient, persistent, determined

15. Responsibility - takes responsibility, proactive in dealing with challenges, dependable
16. Comfortable with data - utilizes research data to inform work, evidence-based, outcome and results focused

### **Round Two - Survey One**

The second round of the Delphi process started with the creation of the first survey (Round Two - Survey One). The instrument included the 12 opportunity recognition practices, 19 leadership practices, and 16 staff practices as identified during the coding process. A questionnaire was created using Survey Monkey, an online survey services (Survey Monkey, 2012). A 5-point Likert scale was included with each statement, with number 1 indicating that the practice had no importance and number 5 indicating the practice had critical importance (see Appendix J).

**Response rates.** A hyperlink to the completed survey instrument was assigned by Survey Monkey. An email to the 15 participants was sent on April 25, 2015. The communication once again thanked participants for their continued participation, instructed them on how to access the online survey instrument using the provided link, included an estimate of the time required to complete the survey, and requested the survey be completed by May 7, 2015\_(see Appendix J).

On May 7, 2015, 12\_surveys had been completed. Since the online survey was anonymous, the investigator was unable to determine who had or had not completed the survey. The investigator sent a reminder email (see Appendix K) to all 15 participants thanking those who had completed the survey and noting that they could disregard the email, and reminding those who had not yet responded that there was still time to do so. The email included a link to the online survey and a note that the responses were due by May 10, 2015. Access to Round Two



– Survey One on Survey Monkey was terminated on May 11, 2015 with all 15 participant responses complete.

### **Round Two - Survey One Analysis**

Round Two - Survey One data analysis included a review of several statistical measures (a) central tendency (mean, mode, median) and (b) levels of dispersion data (standard deviation, and inter-quartile range). Based on the design of the study, the median and interquartile range values were most important and other statistical data was not relevant to the research. A complete summary of the statistical data is included in Appendix L.

The goal of this study was to identify the essential entrepreneurial practices of executive level leaders in California ESAs. The investigator started with a review of the median scores from the survey to determine those practices participants believed had at least some level of importance. A percentage agreement approach was used to measure concurrence on the level of importance and only those practices that ranked as a 4 or greater by at least 80% of the participants were included for further analysis. As indicated in Table 11, 11 of 12 opportunity recognition practices, 16 of 19 leadership practices, and 15 of 16 staff practices met the inclusion criteria. Table 12 lists the 1 opportunity recognition practice, 3 leadership practices, and 1 staff practice that were eliminated from the study during the Round Two-Survey One phase of the study.

Table 10

*Practices Rated Important, Ranked > 4 by More Than 80% of Participants*

	% agreement
Opportunity recognition practices	
Research activities - ability to identify and explore planned research areas of interest to support entrepreneurial and innovation activities	87
Environmental scanning - ability to identify trends, patterns, and relationships across and within the operating environment, continually identifying shifts in internal and external environment for impact to the organization	93
Collaboration - establishes and seeks a variety of partnerships, grants, and alliances to support entrepreneurial and innovation opportunities	87
Communication - ability to organize information for others to use and understand, establishes feedback loops, information flows, and utilizes social media to support entrepreneurial and innovation activities	87
Ideation - exhibits an openness to new ideas and keeps an open mindset	100
Marketing - maintains a customer service focus, monitors competing forces, conducts market analysis	80
Future focused - recognizes that opportunities are everywhere, explores new products and solutions, is proactive, uses information to predict future events and/or outcomes	93
Data driven - ability to use data to inform decisions, conduct needs assessments and gap identification exercises, utilizes analytics, and data analysis to inform decisions	93
Strategic - sets opportunity recognition as a priority, focuses energy and resources to support innovation and entrepreneurial activities	80
Engagement - conveys a serious level of attention and commitment to entrepreneurial and innovation activities, maintains an action-oriented mindset	80
Boundary spanning - continually seeks new connections and networking opportunities, maintains and build relationships, seeks out new venues to expand opportunities	87
Establishes transparent communication - actively listens, ensures people feel they are heard, acknowledge differing views	87
Leadership Practices	
Articulates vision - expresses a clear vision for the future, is forward thinking	87
Life-long learner - continuously seeks opportunities to learn and grow	87
Creates alignment - establishes goal setting loops, practices formative coaching, continually ensures work aligns within the organization	93
Values human capital - values work of staff, recognizes contributions, hires the best staff, coaches and mentors staff, builds capacity in staff by providing time and resources for development activities, empowers staff to imagine new possibilities	93
Builds relationships - strong interpersonal skills, collaborate, seeks connections, works across boundaries (geographic or political)	93

(continued)

	% agreement
Promotes healthy organization culture - holds self and staff accountable, leads by example, fosters trust, cultivates change management practices throughout the organization	100
Encourages risk-taking - comfortable taking risks, encourages staff to take risks	100
Actively seeks opportunities - identifies trends, proactively identifies issues and creates solutions, recognizes patterns and potential impact to organization	93
Seeks input - collaborative, seeks input and ideas from all stakeholders, encourages feedback and established multiple channels of communication, encourages and participates in discourse	87
Focus on improvement - focuses on continuous improvement, quality management, performance excellence	80
Encourages and supports teamwork - encourages inputs and suggestions, offer rewards and recognition, delegate responsibilities	80
Inspirational - ability to open minds, able to inspire and motivate others, thinks outside the box, optimistic	93
Authentic - models desired behavior and attitudes, ability to be reflective, walks the talk, high level of integrity	100
Decisive - confident in decision-making, grounded in reality, makes tough decisions	87
Flexible - responsive to change and new situations	80
Staff practices	
Self-reliant - independent, autonomous, courageous, confident	80
Risk-taker - pushes limits, challenges the status quo, tolerates risk	93
Focus on goals and mission - committed to organization core values, mission, and practices	93
Learning focused - growth mindset, seeks learning opportunities	93
Self-directed - strives to make an impact, motivated, defines high goals	87
Good listener - seeks feedback, listens, strives for understanding	80
Trustworthy - honest, has integrity	100
Flexible - tolerates ambiguity, adaptable, embraces change	87
Drive - delivers results	93
Independent thinking - ability to innovate, creative, curious	87
Dedicated - exhibits passion or work, energy, positive attitude	100
Team-oriented - strong interpersonal skills, generates and shares ideas, works as a member of team rather than as an individual	93
Tenacity of spirit - resilient, persistent, determined	93
Responsibility - takes responsibility, proactive in dealing with challenges, dependable	93
Comfortable with data - utilizes research data to inform work, evidence-based, outcome and results focused	80

Table 11

*Practices Rated Not Important, Ranked >4 by Fewer Than 80% of Participants*

	% agreement
<b>Opportunity recognition practices</b>	
Strength identification – conducts SWOT analysis, reframing exercises, core forces analysis to identify opportunities	53
<b>Leadership practices</b>	
Demonstrated commitment - committed to client needs, ensures unique populations are well-served	67
Implements frameworks to support entrepreneurship and innovation - establishes frameworks to assist in managing competing forces, establishes organization structures to support goals and priorities	73
Intentional - thoughtful, deliberate in actions and words, makes implicit explicit, explicit about core values	73
<b>Staff practices</b>	
Reflective - self-reflective, thoughtful in word and action	67

Step two of the analysis process identified where participants reached consensus in their ranking on specific practices. The interquartile range results were used to determine consensus where the interquartile range values were less than 1.0 (< 1 IQR). Practices where consensus was achieved were considered complete and excluded from further surveys. Table 13 shows 4 opportunity recognition practices out of the remaining 11 practices achieved consensus, 3 leadership practices out of the remaining 16 achieved consensus, and 6 staff practices out of the remaining 15 achieved consensus. There were 7 opportunity recognition practices, 13 leadership practices, and 9 staff practices where consensus was not achieved and these were included in the Round Three - Survey Two phase of the study (see Table 14).

Table 12

*Items in Round Two - Survey One in Which Consensus Was Achieved*

	Median	IQR
<b>Opportunity recognition practices</b>		
Research activities - ability to identify and explore planned research areas of interest to support entrepreneurial and innovation activities.	4	0

(continued)

	Median	IQR
Communication - ability to organize information for others to use and understand, establishes feedback loops, information flows, and utilizes social media to support entrepreneurial and innovation activities	4	0
Marketing - maintains a customer service focus, monitors competing forces, conducts market analysis	4	0
Engagement - conveys a serious level of attention and commitment to entrepreneurial and innovation activities, maintains an action-oriented mindset	4	0
<b>Leadership practices</b>		
Creates alignment - establishes goal setting loops, practices formative coaching, continually ensures work aligns within the organization	4	0.5
Values human capital - values work of staff, recognizes contributions, hires the best staff, coaches and mentors staff, builds capacity in staff by providing time and resources for development activities, empowers staff to imagine new possibilities	5	0.5
Focus on improvement - focuses on continuous improvement, quality management, performance excellence	4	0
<b>Staff practices</b>		
Self-reliant - independent, autonomous, courageous, confident	4	0
Focus on goals and mission - committed to organizational core values, mission, and practices	4	0.5
Learning-focused - growth mindset, seeks learning opportunities	4	0
Self-directed - strives to make an impact, motivated, defines high goals	4	0
Dedicated - exhibits passion for work, energy, positive attitude	4	0.5
Comfortable with data - utilizes research data to inform work, evidence-based, outcome and results focused.	4	0

Table 13

*Items in Round Two - Survey One Where Consensus Was Not Achieved*

	Median	IQR
<b>Opportunity recognition practices</b>		
Environment scanning—ability to identify trends, patterns, and relationships across and within the operating environment, continually identifies shifts in internal and external environment for impact to organization	5	1
Collaboration—establishes and seeks a variety of partnerships, grants, and alliances to support entrepreneurial and innovation opportunities	5	1
Ideation—exhibits an openness to new ideas and keeps an open mindset	4	1
Future focused—recognizes that opportunities are everywhere, explores new products and solutions, is proactive, uses information to predict future events and/or outcomes	5	1
Data driven—ability to use data to inform decisions, conduct needs assessments and gap identification exercises, utilizes analytics and data analysis to inform decisions	5	1

(continued)

	Median	IQR
Strategic—sets opportunity recognition as a priority, focuses energy and resources to support innovation and entrepreneurial activities	4	1
Boundary spanning—continually seeks new connections and networking opportunities, maintains and builds relationships, seeks out new venues to expand opportunities	4	1
<b>Leadership practices</b>		
Establishes transparent communication - actively listens, ensures people feel they are heard, acknowledges differing views	4	1
Articulates vision - expresses a clear vision of the future, is forward thinking	5	1
Life-long learner - continuously seeks opportunities to learn and grow	5	1
Builds relationships - strong interpersonal skills, collaborative, seeks connections, works across boundaries (geographic or political)	4	1
Promotes healthy organization culture - holds staff and self-accountable, leads by example, fosters trust, cultivates change management practices throughout the organization	5	1
Encourages risk-taking - comfortable taking risks, encourages staff to take risks	4	1
Actively seeks opportunities - identifies trends, proactively identifies issues and creates solutions, recognizes patterns and potential impact to organization	5	1
Seeks input - collaborative, seeks input and ideas from all stakeholders, encourages feedback and establishes multiple channels of communication, encourages and participates in discourse	4	1
Encourages and supports teamwork - encourages inputs and suggestions, offer rewards and recognition, delegate responsibilities	5	1
Inspirational - ability to open minds, able to inspire and motivate others, thinks outside the box, optimistic	5	1
Authentic - models desired behaviors and attitudes, ability to be reflective, walks the talk, high level of integrity	4	1
Decisive - confident in decision-making, grounded in reality, makes tough decisions	4	1
Flexible - responsive to change and new situations	5	1
<b>Staff practices</b>		
Risk-taker - pushes limits, challenges the status quo, tolerates risk	4	1
Good listener - seeks feedback, listens, strives for understanding	4	1
Trustworthy - honest, has integrity	5	1
Flexible - tolerates ambiguity, adaptable, embraces change	4	1
Drive - delivers results	5	1
Independent thinking - ability to innovate, creative, curious	5	1
Team oriented - strong interpersonal skills, generates and shares ideas, works as a member of team rather than as an individual	5	1
Tenacity of spirit - resilient, persistent, determined	4	1
Responsibility - takes responsibility, proactive in dealing with challenges, dependable	4	1

### **Round Three - Survey Two**

Round three began with the creation of survey two. Round Three – Survey Two included 7 opportunity recognition practices, 13 leadership practices plus 5 additional leadership practices added by 3 participants during Round Two – Survey One responses for a total of 18 leadership practices, and 9 staff practices that had not achieved consensus in Round Two - Survey One. Survey two included a 5-point Likert scale for each item, where 1 indicated no importance and 5 indicated critical importance. Additionally, the median score for each practice was provided along with the practice description allowing participants to see the panel’s responses from Round Two – Survey One (see Appendix M).

Response rates. Survey two was emailed to all 15 participants on June 3, 2015 (see Appendix N). The email message informed participants that of the 47 practices included in the first questionnaire, 5 practices were eliminated due to low scores (considered not essential) and 9 practices achieved consensus on the degree of importance. The remaining 33 items that did not reach consensus on Round Two - Survey One were included on survey two, as well as 5 new items suggested by 3 participants. The survey was accessible through the link included in the email message. Participants were asked to consider the median scores with each practice and to reassess their rating on each item. The deadline for completing the survey was 6/11/2015 (9 days).

On 6/11/2015, 6 surveys had been completed. Since the online survey was anonymous, the investigator was unable to determine who had or had not completed the survey. The investigator sent a reminder email on 6/11/2015 (see Appendix O) to all 15 participants thanking those who had completed the survey and letting them know they could disregard the email if they had already completed the survey, and reminding those who had not yet responded that there was

still time to do so. The email included a link to the online survey with an extended deadline of 6/16/2015 (6 days). Access to the round three-survey two questionnaire on Survey Monkey was terminated on 6/17/2015 with all 15 participant responses complete.

### **Round Three - Survey Two Analysis**

The median importance rating and interquartile range was calculated for each item on the survey. Analysis of Round Three - Survey Two followed the same determinants for consensus as Round Two - Survey One. The interquartile range results were examined and consensus was determined to have been achieved when the interquartile range values were less than 1.0 (<1.0 IQR). Practices with an IQR of less than 1.0 were considered complete and were excluded from any further surveys. As indicated in Table 15, consensus was achieved on 1 out of 7 opportunity recognition skills, 6 out of 18 leadership practices including 5 new practices added in Round Two - Survey One, and 2 out of 9 staff practices. There were 6 opportunity recognition practices, 12 leadership practices, and 7 staff practices where consensus was not achieved and these were included in the Round Four – Survey Three phase of the study (see Table 16).

Table 14

#### *Items in Round Three - Survey Two in Which Consensus Was Reached*

	Median	IQR
Opportunity recognition practices		
Boundary spanning	4	0.5
Leadership practices		
Articulates vision	5	0
Promotes healthy organization culture	5	0.5
Encourages risk-taking	4	0.5
Flexible	5	0.5
Instinct	4	0
Employee evaluation	4	0
Staff practices		
Risk-taker	4	0
Trustworthy	5	0



Table 15

*Items in Round Three - Survey Two in Which Consensus Was Not Achieved*

	Median	IQR
<b>Opportunity recognition practices</b>		
Environment scanning	5	1
Collaboration	5	1
Ideation	4	1
Future focused	5	1
Data driven	5	1
Strategic	4	1
<b>Leadership practices</b>		
Establishes transparent communication	4	1
Life-long learner	5	1
Build relationships	5	1
Actively seeks opportunities	5	1
Seeks input	4	1
Encourages and supports teamwork	5	1
Inspirational	5	1
Authentic	5	1
Decisive	5	1
Cultivate culture	4	1
Resource allocation	4	1
Employee recognition	4	1
<b>Staff practices</b>		
Good listener	4	1
Flexible	5	1
Drive	5	1
Independent thinking	5	1
Team oriented	5	1
Tenacity of spirit	4	1
Responsibility	4	1

**Round Four - Survey Three**

Round four began with the creation of survey 3. Survey 3 included 6 opportunity recognition practices, 12 leadership practices, and 7 staff practices that had not achieved consensus in Round Three - Survey 2. Survey 3 included a 5-point Likert scale for each item, where 1 indicated no importance and 5 indicated critical important. Additionally, the median

score for each practice was provided along with the practice description allowing participants to see the participant's responses from survey 2 (see Appendix P).

**Response rates.** Survey 3 was emailed to all 15 participants on July 1, 2015 (see Appendix Q). The email message informed participants that of the 34 practices included in the second questionnaire, 0 practices were eliminated due to low scores (considered not essential) and 9 practices achieved consensus on the degree of importance. The remaining 25 items that did not reach consensus were included on Round Four - Survey Three. The survey was accessible through the link included in the email message. Participants were asked to consider the median scores with each practice and to reassess their rating on each item. The deadline for completing the survey was July 8, 2015 (8 days). On July 8, 2015, all 15 surveys had been completed. Access to Round Four – Survey 3 on Survey Monkey was terminated on July 9, 2015 with all 15 participant responses complete.

#### **Round Four - Survey Three Analysis**

The median importance rating and interquartile range was calculated for each item on the Round Four - Survey Three. Analysis of Survey 3 followed the same determinants for consensus as previous surveys. The interquartile range results were examined and consensus was determined to have been achieved when the interquartile range values were less than 1.0 (<1.0 IQR). Practices with an IQR of less than 1.0 were considered complete with consensus reached. As indicated in Table 17, consensus was achieved on 2 out of 6 remaining opportunity recognition skills, 5 out of 12 remaining leadership practices, and 2 out of 7 remaining staff practices.

Table 16

*Items in Round Four - Survey Three in Which Consensus Was Reached*

	Median	IQR
<b>Opportunity recognition practices</b>		
Collaboration	5	0.5
Future focused	5	0.5
<b>Leadership practices</b>		
Life-long learner	5	0.5
Build relationships	5	0
Seek opportunities	5	0.5
Decisive	5	0.5
Employee recognition	4	0.5
<b>Staff practices</b>		
Drive	5	0.5
Flexible	5	0.5

There were 4 opportunity recognition practices, 7 leadership practices, and 5 staff practices where consensus was not reached (See Table 18), consequently the data was analyzed for stability. The IQR values from the first, second, and third surveys were compared to determine if there was less than a 15% change indicating stability was achieved. As Table 19 indicates, there was no change in the value or percentage of the IQR scores between the three surveys indicating that stability was achieved. At this point, the findings were considered complete and the study was terminated. According to Brooks (1979), typically there is little to no change after four rounds of responses from the participants, and most studies can be concluded at this point in the process. In the unlikely event that consensus or stability had not been reached by the fourth round, the study was to be terminated.

Table 17

*Items in Round Four - Survey Three in Which Consensus Was Not Achieved*

	Median	IQR
<b>Opportunity recognition practices</b>		
Environment scanning	5	1
Ideation	4	1
Data driven	5	1
Strategic	4	1
<b>Leadership practices</b>		
Transparent communications	4	1
Seeks input	4	1
Encourages and supports teamwork	5	1
Inspirational	5	1
Authentic	5	1
Cultivate culture	4	1
Resource allocation	4	1
<b>Staff practices</b>		
Good listener	4	1
Independent thinking	5	1
Team	5	1
Tenacity of spirit	4	1
Responsibility	4	1

Table 18

*Items Included in Round Four - Survey Three Where Stability Was Reached*

	IQR scores			Change in IQR score	
	Survey 1	Survey 2	Survey 3	Value	% change
<b>Opportunity recognition practices</b>					
Environmental Scanning	1	1	1	0	0
Ideation	1	1	1	0	0
Data driven	1	1	1	0	0
Strategic	1	1	1	0	0
<b>Leadership practices</b>					
Transparent communications	1	1	1	0	0
Seeks input	1	1	1	0	0
Encourages and supports teamwork	1	1	1	0	0
Inspirational	1	1	1	0	0
Authentic	1	1	1	0	0
Cultivate culture	1	1	1	0	0
Resource allocation	1	1	1	0	0

(continued)

	IQR scores			Change in IQR score	
	Survey 1	Survey 2	Survey 3	Value	% change
Staff practices					
Good listener	1	1	1	0	0
Independent thinking	1	1	1	0	0
Team oriented	1	1	1	0	0
Tenacity of spirit	1	1	1	0	0
Responsibility	1	1	1	0	0

## Final Results

The final results for this study were achieved at the end of Round Four. A final list of 7 opportunity skills, 14 leadership practices, and 10 staff practices considered essential by the participants in this study is presented in Table 20. Table 20 is organized using the median scores and the IQR results. Data was sorted first with a focus on the consensus median score signifying the participant's assessment of the importance of the specific practice; the higher the value, the greater the importance. Data was then further sorted using the IQR values indicating the degree to which participants agreed on the level of importance of the practice; the lower the IQR value, the greater the level of agreement. Practices with a median score of 5 are considered the most critical practices (13 practices) for executive level leaders in California ESAs to practice. Practices with a median score of 4 are considered important practices (18 practices).

Table 19

### *Final List of Essential Entrepreneurial Practices of Executive Level Leaders*

	Median	IQR
Opportunity recognition practices		
Collaboration - establishes and seeks a variety of partnerships grants, and alliances to support entrepreneurial and innovation opportunities	5	0.5
Future focused - recognizes that opportunities are everywhere, explores new products and solutions, is proactive, uses information to predict future events and/or outcomes	5	0.5
Research activities – ability to identify and explore planned research areas of interest to support entrepreneurial and innovation activities	4	0

(continued)

	Median	IQR
Communication – ability to organize information for others to use and understand, establishes feedback loops, information flows, and utilizes social media to support entrepreneurial and innovation activities	4	0
Marketing – maintains a customer service focus, monitors competing forces, conducts market analysis	4	0
Engagement – conveys a serious level of attention and commitment to entrepreneurial and innovation activities, maintains an action-oriented mindset	4	0
Boundary spanning – continually seeks new connections and networking opportunities, maintain and build relationships, seeks out new venues to expand opportunities	4	0.5
<b>Leadership Practices</b>		
Articulates vision – expresses a clear vision for the future, is forward thinking	5	0
Promotes healthy organization culture – holds self and staff accountable, leads by example, fosters trust, cultivates change management practices throughout the organization	5	0
Flexible – responsive to change and new situation	5	0.5
Values human capital – values work of staff, recognizes contributions, hires the best staff, coaches and mentors staff, builds capacity in staff by providing time and resources for development activities, empowers staff to imagine new possibilities	5	0.5
Life-long learner – continuously seeks opportunities to learn and grow	5	0.5
Builds relationships – strong interpersonal skills, collaborates, seeks connections, works across boundaries (geographic or political)	5	0.5
Actively seeks opportunities – identifies trends, proactively identifies issues and creates solutions, recognizes patterns and potential impact to organization	5	0.5
Decisive – confident in decision-making, grounded in reality makes tough decisions	5	0.5
Focus on improvement – focuses on continuous improvement, quality management, performance excellence	4	0
Instinct – follow gut feeling and instinct, take calculated risks based on instincts	4	0
Employee evaluation – recognize and encourage risk-taking as part of the evaluation process	4	0
Encourages risk taking – comfortable taking risks, encourages staff to take risks	4	0.5
Create alignment – establishes goal setting loops, practices formative coaching, continually ensures work aligns within the organization	4	0.5
Employee recognition – recognize employees as whole rather than based on workplace roles, give credit for success to team and individuals	4	0.5
<b>Staff Practices</b>		
Trustworthy – honest, has integrity	5	0
Flexible – tolerates ambiguity, adaptable, embraces change	5	0.5
Drive – delivers results	5	0.5
Self-reliant – independent, autonomous, courageous, confident	4	0
Learning focused – growth mindset, seeks learning opportunities	4	0

(continued)

	Median	IQR
Self-directed – strives to make an impact, motivated, defines high goals	4	0
Comfortable with data – utilizes research data to inform work, evidence-based, outcome and results focused	4	0
Risk-taker – pushes limits challenges the status quo, tolerates risk	4	0
Dedicated – exhibits passion for work, energy, positive attitude	4	0.5
Focus on mission and goals – committed to organization core values, missions, and practices	4	0.5

## Summary

A panel of 15 senior level California County Office of Education leaders identified 7 opportunity recognition practices, 14 leadership practices, and 10 staff practices they believe are essential practices for executive level leaders in County Offices of Education to possess. Of the 12 opportunity recognition practices originally identified through the interview process, 1 was eliminated based on low scores during Round Two - Survey One. Of the 19 leadership practices originally identified through the interview process, 3 were eliminated based on low scores during Round Two - Survey One. Of the 16 staff practices originally identified through the interview process, 1 was eliminated based on low scores during Round Two - Survey One.

## Chapter 5: Discussion, Conclusions, Recommendations

### Overview

The purpose of this study was to examine the practices of executive level leaders in Education Service Agencies (ESAs) in California. The study utilized a design process that included identification, shared evaluation and re-evaluation, and consensus among the participants to identify the most essential practices of executive level leaders in California ESAs. The results of this study indicate a total of 13 essential practices identified by participants as critically important (essential) for executive level leaders in California ESAs. This chapter discusses the views held by the participants on the three areas of focus: opportunity recognition, leadership practices, and staff practices, reviews the results regarding the 31 identified essential practices, examines the findings of interest, outlines implications of the findings, provides recommendations for future research, and presents general conclusions.

The following 6 research questions were addressed in this study:

1. How do executive level leaders in California ESAs define entrepreneurship and innovation?
2. To what extent, if any, do executive level leaders in California ESAs recognize and address entrepreneurial opportunities within the organization?
3. To what extent, if any, do executive level leaders in California ESAs recognize and address entrepreneurial opportunities within their regions?
4. To what extent, if any, do executive level leaders in California ESAs recognize and address entrepreneurial opportunities beyond their organization and regions?
5. According to executive level leaders in California ESAs, what core practices are essential for creating an entrepreneurial environment within California ESAs?



6. According to executive level leaders in California ESAs what practices (both internal and external) impact the entrepreneurial behavior of staff in California ESAs?

### **Defining Entrepreneurship and Innovation**

Question one of the interview questions was designed to prompt reflection on how the participants defined entrepreneurship and innovation, and how the two concepts relate to one another. Each interviewee clearly articulated their understanding of entrepreneurship and innovation; primarily identified entrepreneurship as the starting of a new fiscal opportunity based on new ideas and products usually resulting in new business creation; and, innovation as a process to create new ideas and products. The interviews revealed that all participants were closely aligned in their understanding of the concepts of entrepreneurship and innovation understanding that entrepreneurship involves the establishment of a new entity for monetary gain, and innovation as generating new ideas and new ways of doing things but not necessarily for monetary gain. Participants from the interviews were clear that entrepreneurship and innovation work best in tandem and are complementary and several expressed this as the concepts not being exclusionary of each other.

The idea of intrapreneurship was a new concept to 13 of the study participants, but was a known concept to 2 of the participants. Since the concept of intrapreneurship emerged in the late 1990s, it was not surprising to this investigator that the majority of participants were unfamiliar with the concept of intrapreneurship. Given the newness of the concept of intrapreneurship, the researcher provided an explanation of intrapreneurship to facilitate discussion. The explanation provided the needed foundation for discussion, however, it was clear from the responses that participants struggled to understand the differences between entrepreneurship and intrapreneurship, and more importantly the application of intrapreneurship to their organizations.

This may be a result of the “mixed” environments of Education Service Agencies in California. These organizations provide services to their own students in the Juvenile Court and Community School programs they operate; they provide services to the school districts within their regional areas; and they provide services to their own organization to support education work. This “mix” of work appeared to make it difficult for participants to clearly articulate, understand, and define intrapreneurship. It was clear from the participant’s discussion of entrepreneurship and intrapreneurship was that participants view them as co-existing and working together to achieve the organization’s mission.

### **Activities of ESAs Beyond Their Geographic Regions**

While the ESAs participating in this study all had at least one service or product that was offered beyond their geographic region, all stated that going beyond their geographic boundaries was only done if there was agreement with other ESAs involved. It was clear from the interview discussions that ESAs within California are very cognizant of political and competitive implications of reaching beyond their regions impacting the entrepreneurial activities of other ESAs. All participants mentioned some form of agreements between the ESAs not to infringe on their areas without a specific agreement to do so. Because education is a sponsored agency, as noted elsewhere in this document, there is no specific need for ESAs to be entrepreneurial from a financial standpoint.

This does bring into question the purpose of entrepreneurial activities within ESAs, and this investigator believes that financial gain is not a motivator for an ESA to develop innovation or entrepreneurial pursuits even though ESAs can and do charge fees for their services. Rather, innovation and entrepreneurial activities in ESAs are focused more on the need to innovate to improve education and help all student achieve their potential. Two areas stood out where

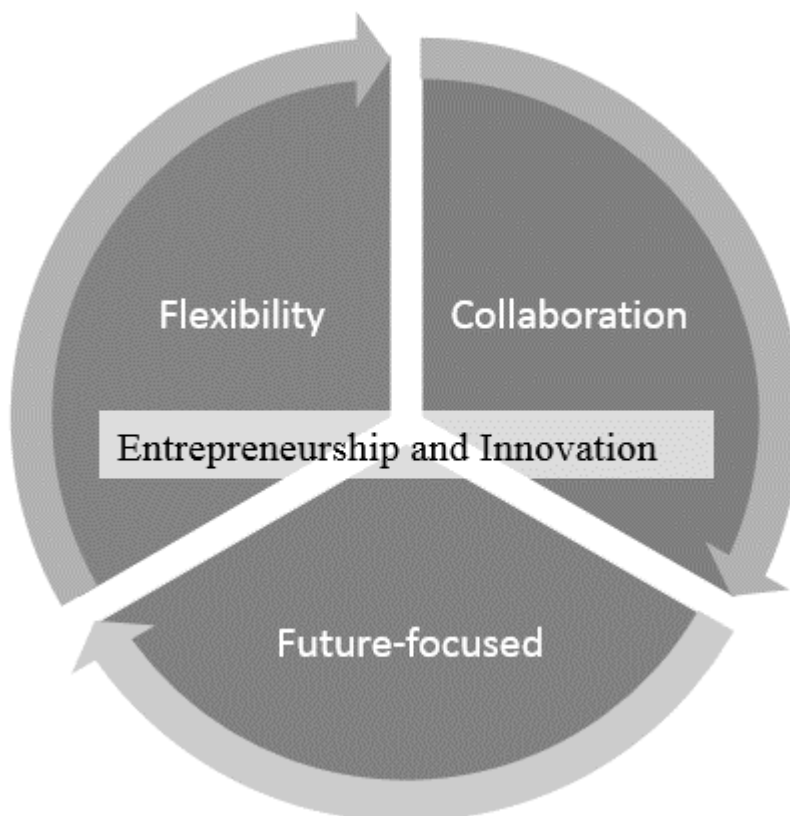
individual ESAs can and do extend outside their regional areas: professional development and information systems. Both areas provide economic rationale to provide to other ESAs for either economies of scale as is the case with information systems and/or due to specific expertise as is the case for some professional development needs.

### **Three Practices Overarching All Domains**

Leaders have been talking about the increasing rate of change for years, but escalating complexity is a new and emerging trend. Not only is the rate of change increasing, so too is complexity (Anderson, 2011). The research questions were used to prompt and encourage discussion among participants around the domains practices considered essential in each of the domain areas in promoting and supporting entrepreneurship and innovation. In reviewing the results from the study and the interview process this investigator identified the essential practices in three domains: opportunity recognition, leadership, and staff. An additional analysis of the results sought to look at the data from a broader context to identify essential practices common to all three domains. This additional analysis identified 3 essential practices overarching the domains: collaboration, flexibility and future-focused. Together, these three practices build the capacity within education organizations to respond to a constantly changing environment. Combined, the three practices transcend the individual domains and allow the organization to be connected both internally and externally. These three practices connect the systems, data, and people to ideas, knowledge, and insight both inside and outside the organization (IBM, 2008). Together, they create a framework for education leaders to infuse entrepreneurial and innovative activities throughout the organization (see Figure 6).

Innovation, flexibility, collaboration, and change mutually influence one another. Innovation cannot exist without change. Collaboration requires flexibility. Flexibility is a

necessary condition for change but alone is not sufficient for innovation since it is influenced and impacted by change yet balanced by flexibility (Marx, 2006). True innovation is virtually impossible without collaboration, and collaboration yields results by fostering innovation (IBM, 2008). These overarching practices emerged as recurrent themes throughout the study and interviews across the domain areas. A brief look at the three overarching practice follows.



*Figure 6.* Three overarching components of entrepreneurship and innovation in California County Offices of Education.

**Collaboration.** The descriptive phrase included in the survey read *establishes and seeks a variety of partnerships, grants, and alliances to support entrepreneurial and innovation opportunities*. Collaboration was identified as an essential practice by the participants in the opportunity recognition domain. However, participants consistently referenced the need for collaboration in support of entrepreneurship and innovation regardless of the domain under

discussion (see Appendix R). In some cases, this was referred to as strategic partnerships, stakeholder input, collaborative relationships, understanding how to work as a team, sharing, and so on (see Appendix R).

Transactional leadership activities, as noted earlier in this dissertation, foster exploratory activities such as collaboration and partnerships to jointly develop products, services, and solutions clearly showing the connection collaboration plays across the three domains: opportunity recognition, leadership, and staff. Innovative companies have learned to leverage collaboration and this investigator's broader analysis of the data has identified collaboration as an overarching practice.

It should be noted that collaboration, as a practice, was not necessarily evident at the staff levels of the study. At the staff level, individuals frequently strive for individual excellence, thus impacting the level and amount of collaboration at the middle levels of the organization. It should also be noted that some individuals in this study may have had a stronger mindset for collaboration than others and this is seen in the data, specifically in the area of staff practices. However, leaders within and across the ESAs leverage collaboration as a tool to interact with, partner with, and collectively develop solutions and products for the benefit of all. Some individuals in the study

**Flexible.** The descriptive phrases included in the survey read *responsive to change and new situations, and tolerates ambiguity, adaptable, and embraces change*. This was an essential practice identified in the leadership domain and the staff domain respectively. However, participants often referenced the need to be flexible in support of entrepreneurship and innovation regardless of the domain under discussion (see Appendix R).

Creating a game-changing product or service requires a highly collaborative process (Davis, 2014). Successful use of collaboration occurs when the control of the product or service is rotated back and forth between partners and/or team members. While the concept of rotating control back and forth highlights the power of collaboration in creating innovation, and while that fits into our view of collaboration as overarching across the three domains, it also highlights the importance and need for flexibility, thus tying these two practices together in support of entrepreneurship and innovation.

**Future focused.** Future-focused was coded as a practice in the opportunity recognition domain and reads *recognizes that opportunities are everywhere, explore new products and solutions, is proactive, and uses information to predict future events and/or outcomes.*

In a review of the results of the interviews and surveys, this investigator noted that the future-focused practice spans all three domains: opportunity recognition, leadership, and staff practices. Participants consistently referenced the need for being cognizant of the future in support of entrepreneurship and innovation regardless of the domain under discussion. Participants stated examples such as looking beyond the horizon, understanding the trends in the making, seeking new opportunities, setting vision, empowering to imagine new possibilities, open mindset, and so on (see Appendix R).

Vision setting and identifying trends and patterns are skills needed to support entrepreneurship and innovation. These practices establish the foundation for creating a vision for the future and enable organizations to create and sustain innovation and entrepreneurial activities. A review of the literature in the areas of future-focused practices identified vision setting, identifying trends and patterns as essential practices needed for entrepreneurship and innovation. Similar to Silicon Valley, education agencies are relatively a silo, and just like in the

tech industry, education agencies need to reach outside the ecosystem and draw expertise across a wide breath of other areas. In order to do this, education leaders must leverage a vision for the future.

### **Findings of Interest**

In addition to the 13 essential (critically important) practices identified in this study and the 3 practices overarching all domain areas, there are several additional findings of interest. These include practices that were eliminated at the conclusion of the Round Two Survey One (considered not important), areas of discrepancy (discrepancies between what was discussed in the interviews and the resulting survey responses), and practices that were added at the end of Round 2 Survey 1 that were similar to existing practices included in the survey.

### **Practices Not Considered Important**

Of interest to this study are the practices that were eliminated with Round Two, Survey One. The goal of this study was to identify those practices of entrepreneurial executive leaders in California ESAs considered to be essential for leaders. The 5-point Likert scale used in the surveys asked the participants to rank each practice using a range that at the lowest end indicated that the practice had no importance and at the highest end indicated the practice had critical importance. The percentage agreement criteria established for Round 2 Survey 1 required that the median value for a practice rank of 4 or greater by at least 80% of the participants was necessary for the practice to be considered important. There was 1 opportunity recognition practice, 3 leadership practices, and 1 staff practice that did not meet the selection criteria and were therefore eliminated from the study. Five practices were eliminated: strength identification, demonstrate commitment, implement frameworks to support entrepreneurship and innovation; intentional, reflective. A discussion of these 5 eliminated practices follows.

**Strength identification.** This practice did not rank as essential by the participants. Only 53% of the participants gave this practice a rating of 4 or greater. However, SWOT analysis and reframing exercises were identified in the interviews by several participants as essential. It is unclear why this practice did not meet the selection criteria given the references to the practice during several interviews and the fact that both SWOT and reframing were terms used in the description of this practice. It should be noted that strength identification itself is not a specific practice identified in the literature as important for opportunity recognition or as a characteristic of entrepreneurs and innovators thus supporting the lower agreement percentage received in the study.

**Demonstrate commitment.** This practice did not rank as essential by the participants. Only 67% of the participants gave this practice a rating of 4 or greater. While this leadership practice did not meet the selection criteria, many participants mentioned the importance of understanding the needs of their clients, several mentioned the importance of meeting the needs of unique student population, and all mentioned being committed to the students they serve. The low agreement percentage for this practice may be an indication that during the interviews and rounds, the term demonstrate commitment, did not equate or translate well to the provided description.

**Implement frameworks to support entrepreneurship and innovation.** Only 73% of the participants gave this practice a rating of 4 or greater. While this particular practice fell short of the criteria for inclusion, it was close to the 80% required for inclusion. This is a surprising finding since there is much in the literature about the importance of leaders being purposeful and systematic in their planning to support entrepreneurship and innovation in organization (Barsh et al., 2008; Drucker, 2006). This investigator believes one explanation for this practice not



reaching a rating of 4 or higher by 80% or more of the participants may be due to participants having had difficulty applying the idea of frameworks and structure to entrepreneurship and innovation. There is the possibility that the participants view entrepreneurship and innovation as a more spontaneous occurrence, need for a more organic process at the start, or a need for free-wheeling approaches to spark innovation. Some participants may have viewed the idea of frameworks and structure as counter-productive to support innovation and entrepreneurship.

**Intentional.** This practice did not rank as essential by the participants. Only 73% of the participants gave this practice a rating of 4 or greater. This practice fell short of the criteria for inclusion, but was close to the 80% cut off mark. During the interviews, several participants commented on the importance of making the implicit explicit or commented about being deliberate and intentional stating these practices were essential, however, the overall group did not agree. Barsh et al. (2008) suggests leaders must purposefully practice strategies to cultivation innovation into their organization. Additionally, Stevenson (2012) identifies the lack of innovation focus in organization as a barrier to innovation. One possible explanation for this discrepancy may relate to participants having difficulty thinking about intentionality and specific planning as something related to innovation, rather believing that innovation is more free-flowing, creative, and not necessarily planned. This relates closely back to earlier comments related to why frameworks and structure as a means to support entrepreneurship and innovation was not identified as essential.

**Reflective.** Only 67% of participants gave this practice a rating of 4 or greater. Participants mentioned phrases such as continuous reflection, being very reflective, choosing words wisely to support innovation and entrepreneurship, and having others reflect as well. This

investigator believes that participants perceive this as a skill important for leadership but not essential to support entrepreneurship or innovation.

### **Areas of Inconsistency**

**Similar concepts, defined differently.** One of the challenges in discussing entrepreneurship, innovation, and leadership is that the same practice can often be described in different ways. For example, the practice of cultivating culture was added by participants as an essential practice at the end of Round 2 Survey 1. The description read *intentional focus on creating and reinforcing desired culture on entrepreneurship and innovation*. The practice of promoting a healthy organization culture was a practice identified through the interview coding process. This practice was included as part of Round 2 Survey 1 and the description read *holds self and staff accountable, leads by example, fosters trust, cultivates change management practices throughout the organization*. It is clear that both practices are related, yet defined differently and may account for the addition of cultivate culture as a practice at the end of Round 2 Survey 1. The practice, promote healthy organization culture, reached consensus at the end of Round 3 Survey 2 with a median score of 5 and an IQR of 0 indicating the participants strongly agreed this practice was of critical importance. However, the practice, cultivate culture, added at the end of Round 2 Survey 1 did not reach consensus as critically important with a median score of 4 and an IRQ of 1. This investigator believes the inconsistent treatment was a result of similar concepts being defined differently due to the closely related definitions in the survey.

A leadership practice identified during participant interviews identified the practice: value human capital. At the end of Round 2 Survey 1, participants added two additional practices closely related to the practice, value human capital. These practices were employee recognition and employee evaluation. The description for employee recognition read *recognize employees as*

*individuals rather than based on workplace roles, give credit for success to team and individuals.* The description for employee evaluation read *recognize and encourage risk-taking as part of the evaluation process.* Once again, the newly added practice descriptions are closely related to the original, value human capital, and this investigator believes the inconsistent treatment was a result of similar concepts being defined differently due to closely related definitions and concepts in the survey.

### **Investigator Observations**

The literature clearly states that an essential practice necessary for both entrepreneurial behavior and innovation is the ability to take risks (Bygrave & Hofer, 1991; Drucker, 2006; Kuratko et al., 1993; Lavaroni & Leisey, 2000; Sayeed & Gazdar, 2003; Srivastava & Agrawal, 2010; Sun & Pan, 2011). Surprisingly, the participants in this study rated this practice with a median score of 4 and an IQR of .5 for leaders, and a median score of 4 and an IQR of 0 for staff. One possible explanation for the lower median score is mostly likely due to American education being a sponsored organization. As a sponsored organization, stable and high levels of resources are available from various government sponsored funding sources. Consequently, our participants may not view risk-taking as a critically important practice in the education field given that funding and resources are generally assured.

Finally, the practice of encouraging and supporting teamwork, identified as a leader practice, read *encourages input and suggestions, offer rewards and recognition, and delegate responsibilities.* While being team-oriented was a practice identified for staff and read *strong interpersonal skills, generates and shares ideas, works as a member of team rather than as an individual.* The results of the study showed that participants were not able to reach consensus on the practice of teamwork for leaders or staff with both leadership and staff practices receiving

median scores of 5 and IQR of 1 indicating disagreement on the level of importance of the practice. As mentioned earlier in this chapter, collaboration is one of the three overarching practices across the three domains; and, since teamwork requires collaboration, this may explain why teamwork was not considered an essential practice given the descriptions and concepts between collaboration and teamwork were similar.

During the course of the interview process, several of the participants elaborated on topics not directly related to the research questions, the investigator found these provided insights into the challenges presented by the growing achievement gap evident in education today. Two of those topics are presented below.

**Diversity in student populations.** According to several of the participants, one challenge that is facing education organizations is an increasing diversity in the student population. This is a widely expressed challenge articulated by many in the education field. Participants shared and discussed the major impact that the diversity in student populations impacts school's ability to innovate and be entrepreneurial. This researcher acknowledges that student populations are increasingly more and more diverse, and that this diversity in population makes it even more critical to continually seek new and innovative ways to address the diversity. During the interviews, participants also understood that to meet the diversity challenge, innovative methods of teaching and learning would be needed. A few participants expressed their belief that to be successful in the future, education organizations will have to adjust not only how students are taught, but also the structure of education and teacher preparation.

**Empirical data.** A few participants commented on the need for teachers and administrators to be better versed in the use of performance indicators as a means to improve schools. For many years the mission of education, to increase high school graduation rates and

increase the number of students entering college, was the key driver and measure. As one participant explained it this way, “There’s certainly a different climate in education today. We’re going to have to get better at really measuring the impact of the work we do with students. Anecdotal stuff doesn’t cut it anymore” (Participant 3, December 1, 2014). “High rates of graduation make you feel good, but that alone no longer suffices as a measure of student success” (Participant 8, December 12, 2014). This observation indicates that while the practice of *being data driven* was not identified as an essential practice, it will become an increasingly important practice in the future. It is noted by the investigator that the practice of being data driven was included in the opportunity recognition category, but was not included as a practice of leaders and staff. At the end of Round 4 Survey 3, being data driven received a median score of 5 with an IQR of 1 indicating some disagreement that it was a critically important practice.

### **Implications of Findings**

Over the past several years, ESAs have felt the tightening of the economic environment on their ability to initiate new programs, solutions, staffing, and resources. As funding decreases and/or stagnates, ESAs are still being asked to do more but with less. As the achievement gap among students continues to increase, there will be an increasing focus on leveraging entrepreneurial and innovation opportunities to address the gap. Additionally, as the need to impact student achievement and provide equity of resources for all students, a greater emphasis will be placed on the overall effectiveness and efficiency of education operations and the ability of ESAs to adapt to the changing education landscape.

The findings in this study indicate that participants have a good understanding of the entrepreneurial and innovation practices required to meet future organizational challenges. The identified entrepreneurial and innovation practices (opportunity recognition practices, leadership

practices, and staff practices) were easily defined and in most cases mirrored the practices cited in the literature. There was a very high level of agreement among the participants in the selection of the practices that were considered either important or critically important as indicated by the average interquartile range value of 0.35 across all identified 47 practices.

The real challenge in looking toward the future will be to develop and enhance the entrepreneurial and innovation practices of leaders in ESAs. While it was evident from this study that participants have a good understanding of the required practices necessary to be both entrepreneurial and innovative, it was also evident from the interviews that participants have not always explicitly and intentionally identified those practices as a priority for themselves, their organizations, or their staff. Currently, entrepreneurship and innovation are an auxiliary outgrowth of other activities, yet given the research and the results of this study, much would be gained from strategically implementing leader actions to support these practices (Denti & Hemlin, 2012).

Longer term implications will be felt in the education landscape as globalization and competition continue to increase and put pressure on the already stressed American education system. Staff and leaders at all levels of education need to seek, identify, and implement new and innovative ideas to improve learning opportunities, and to address the achievement gap through game-changing transformations within the education system.

### **Recommendations for Utilization of Findings**

The need for ESAs to significantly expand the boundaries of possibilities for improving public education through innovative, entrepreneurial practices aimed at genuine solutions for public education as described by Mead & Rotherham (2008), has never been more urgent. This

study provides an overview of the key practices necessary to support entrepreneurship and innovation in the K-12 education environment.

The findings outlined in this study may be used by executive level leaders in California ESAs to assist in strengthening and transforming education organizations to better leverage entrepreneurial and innovation opportunities. The findings for essential practices for opportunity recognition offers a set of essential practices for seeking and finding new entrepreneurial and innovation opportunities that can easily be applied by executive leaders to their organizations. Using these practices will bring more opportunities into ESAs providing and strengthening student learning throughout the state. The findings of the essential practices of executive leaders in ESAs offers specific practices for leaders to implement, support, and expand initiatives supporting student learning. The findings for staff provide ESAs with essential practices to identify when hiring new staff, when designing training opportunities for staff, and when assembling teams for the purpose of developing innovative and entrepreneurial solutions and products.

### **Areas for Future Research**

The results of this study suggest several areas for additional research to expand our understanding of the role of entrepreneurship and innovation to support and transform education organizations. This study focused on a small group of educational leaders in California County Offices of Education. This study could be expanded in several ways. First, it would be interesting to expand the study to all level of leaders across California County Offices of Education to gain a better understanding of how middle managers view executive leader practices related to entrepreneurship and innovation. Second, the study could be expanded to study all executive level leaders in ESAs across the country providing a fuller understanding of differences among

different regions of the country. Finally, an alternative study could be conducted of executive level leaders in school districts across California to gain an understanding of site level entrepreneurship and innovation.

## **Conclusions**

To effect true change in any slow-moving system such as education, leaders must be alert to opportunities, take risks to seize those opportunities, fill existing gaps , and organize and manage staff to fulfill an entrepreneurial vision (McFadden, 2013; Teske & Williamson, 2006). As a result of increasing pressure for education to provide better equity of resources to all students, close the achievement gap, and prepare students to be successful in a future where most jobs have yet to be defined, ESA leaders must leverage and implement the practices identified in this study to meet the current and future needs of students and society.

This study identifies the essential entrepreneurship and innovation practices of executive level leaders in California County Offices of Education (ESA). Recognizing and understanding these practices are considered a valuable step in building capacity within ESAs to support entrepreneurship and innovation.

In the area of important opportunity recognition practices, the finding in this study presented 2 practices considered critically important, and 5 practices considered important for ESA leaders to leverage to support entrepreneurship and innovation in their organizations (see Table 20). These practices generally support what was found in the literature and indicate the practices are fairly well understood and easy to describe and quantify. In the area of important leadership and staff practices, the findings in this study presented 11 considered critically important for leaders and staff; and, 13 considered important for ESA leaders and staff. Once



again, the results of the study in the area of leaders and staff indicates these practices are understood by the participants.

A highlight of this research was the identification of 3 overarching practices that spanned all three domain areas (opportunity recognition, leadership, and staff). The overarching practices were collaboration, flexibility, and future-focused. Many education organizations today are trying to operate from a reactive approach to face challenges. Many remain stuck in old methods of collaboration, where content and ideas are owned and protected, and/or where staff make themselves valuable through what they know. These old methods slow success, and slow if not stop innovation. Instead, organizations need to focus on improving ways to encourage participation throughout the organizations and better leverage resources through collaboration, flexibility, and future-focus practices, thus enabling ESAs to leverage content, ideas, and resources to foster innovation. The identified overarching practices (collaboration, flexibility, and future-focused), support schools and leaders in meeting the complexity of demands evident in the education environment.

ESAs are best served when their environments encourage and cultivate opportunities for entrepreneurship and innovation. Leaders focusing attention on entrepreneurship and innovation will assure that practices are in place to cultivate and encourage such behaviors among leaders and staff. As ESAs become more economically strapped, yet have more requests for services, entrepreneurship and innovation will become increasingly important to support student learning and to close the achievement gap. The results of this study will assist ESA leaders in creating and sustaining organizations that are entrepreneurial and innovative.

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## APPENDIX A

## Listing of the California County Offices of Education

COUNTY	COUNTY OFFICE
<b>ALAMEDA</b>	Alameda County Office of Education
<b>ALPINE</b>	Alpine County Office of Education
<b>AMADOR</b>	Amador County Office of Education
<b>BUTTE</b>	Butte County Office of Education
<b>CALAVERAS</b>	Calaveras County Office of Education
<b>COLUSA</b>	Colusa County Office of Education
<b>CONTRA COSTA</b>	Contra Costa County Office of Education
<b>DEL NORTE</b>	Del Norte County Office of Education
<b>EL DORADO</b>	El Dorado County Office of Education
<b>FRESNO</b>	Fresno County Office of Education
<b>GLENN</b>	Glenn County Office of Education
<b>HUMBOLDT</b>	Humboldt County Office of Education
<b>IMPERIAL</b>	Imperial County Office of Education
<b>INYO</b>	Inyo County Office of Education
<b>KERN</b>	Kern County Office of Education
<b>KINGS</b>	Kings County Office of Education
<b>LAKE</b>	Lake County Office of Education
<b>LASSEN</b>	Lassen County Office of Education
<b>LOS ANGELES</b>	Los Angeles County Office of Education
<b>MADERA</b>	Madera County Office of Education
<b>MARIN</b>	Marin County Office of Education
<b>MARIPOSA</b>	Mariposa County Office of Education
<b>MENDOCINO</b>	Mendocino County Office of Education
<b>MERCED</b>	Merced County Office of Education
<b>MODOC</b>	Modoc County Office of Education
<b>MONO</b>	Mono County Office of Education
<b>MONTEREY</b>	Monterey County Office of Education
<b>NAPA</b>	Napa County Office of Education
<b>NEVADA</b>	Nevada County Office of Education
<b>ORANGE</b>	Orange County Office of Education
<b>PLACER</b>	Placer County Office of Education
<b>PLUMAS</b>	Plumas County Office of Education
<b>RIVERSIDE</b>	Riverside County Office of Education
<b>SACRAMENTO</b>	Sacramento County Office of Education



<b>SAN BENITO</b>	San Benito County Office of Education
<b>SAN BERNARDINO</b>	San Bernardino County Office of Education
<b>SAN DIEGO</b>	San Diego County Office of Education
<b>SAN FRANCISCO</b>	San Francisco County Office of Education
<b>SAN JOAQUIN</b>	San Joaquin County Office of Education
<b>SAN LUIS OBISPO</b>	San Luis Obispo County Office of Education
<b>SAN MATEO</b>	San Mateo County Office of Education
<b>SANTA BARBARA</b>	Santa Barbara County Office of Education
<b>SANTA CLARA</b>	Santa Clara County Office of Education
<b>SANTA CRUZ</b>	Santa Cruz County Office of Education
<b>SHASTA</b>	Shasta County Office of Education
<b>SIERRA</b>	Sierra County Office of Education
<b>SISKIYOU</b>	Siskiyou County Office of Education
<b>SOLANO</b>	Solano County Office of Education
<b>SONOMA</b>	Sonoma County Office of Education
<b>STANISLAUS</b>	Stanislaus County Office of Education
<b>SUTTER</b>	Sutter County Office of Education
<b>TEHAMA</b>	Tehama County Office of Education
<b>TRINITY</b>	Trinity County Office of Education
<b>TULARE</b>	Tulare County Office of Education
<b>TUOLUMNE</b>	Tuolumne County Office of Education
<b>VENTURA</b>	Ventura County Office of Education
<b>YOLO</b>	Yolo County Office of Education
<b>YUBA</b>	Yuba County Office of Education

## APPENDIX B

### Invitation Letter to Participate

As you may know, there has been a lot of discussion over the past several years regarding the need for schools to be more entrepreneurial and innovative. There are multiple factors contributing to this entrepreneurial and innovation shortfall requiring continued investigation and research. Identifying the essential practices of successful entrepreneurial and innovation executive level leaders of California County Offices of Education requires education leaders establish these practices within their organization to cultivate a culture of entrepreneurship and innovation.

I would like to invite you to participate in a study I am conducting for the completion of my doctoral dissertation at Pepperdine University. The purpose of the study is to solicit the opinions of executive level leaders in California County Offices of Education to identify the specific practices they believe are important for entrepreneurship and innovation at the K-12 education level.

You are eligible to participate in this study if:

1. You have been a leader, at any level, for at least three years.
2. Your County Superintendent has at least 1 year of experience at the County Office Level.
3. Your organization has at least 250 employees.
4. Your organization has at least one product, service, or program offered to clients beyond your county.

This study will be conducted using a Delphi research process, which includes an in-person/video conference interview and two or three rounds of follow-up data collection via on-line questionnaires. I estimate that the interview will take approximately 30 minutes, and the questionnaires 15 minutes each. The anticipated time frame for this study is to begin interviews in August, 2014 and complete the final round of data collection in December 2014. All executive level leaders who participate will receive a copy of the complete study if desired.

I am hopeful that the practices identified in this study can be used by Education Services Leaders to cultivate entrepreneurial and innovative behavior within their organizations. If you are interested in participating in this study, please complete the request for contact information in the body of the original email and send back by using the reply function.

Your participation is completely voluntary and you may withdraw from the study at any time. Your participation in this study will remain confidential, and your name and the name of your organization will not be disclosed in the written findings. I hope this study is of interest to you and thank you in advance for your participation.

Best,

Karen Connaghan

Doctoral Student, Pepperdine University

## APPENDIX C

## Email Solicitation

Dear XXX,

I am a doctoral candidate in the Organizational Leadership program at Pepperdine University currently working on my dissertation. The reason for this email is that I am looking for executive level leaders in California County Offices of Education that would be interested in participating in my study to identify the essential entrepreneurial and innovation practices of County Office of Education leaders.

If you are interested in learning more, please read the attached single page document. If you would like to participate, hit the reply function on your email, complete the information below, and send this email back to be by XXXXX.

I appreciate your consideration and hope to hear back from you.

Best,

Karen Connaghan, Doctoral Candidate

Thank you for your interest in participating in this study. The requested contact information below will be used to schedule an interview. The three demographic questions will be used as collective background data for the study. Your individual responses will be confidential and will not be linked to you or your institution in any written materials.

Name:

Organization:

Preferred Email:

Preferred Phone #:

1. How many years have you served in an executive level management position at the County Office of Education level?
2. How many employees does your County Office of Education have?
3. How many years of overall leadership experience, at any level, do you have?
4. How many products, services, processes, or services does your County Office of Education provide, for cost, to other education agencies (schools, districts, charters, other ESAs) outside your region?
5. Please share any additional information you feel is relevant.

## APPENDIX D

## Interview Questions

**Concepts** – Concepts of entrepreneurship and innovation

1. Can you briefly define your concept of entrepreneurship and innovation?
  - (a) How are the concepts different?
  - (b) How are they similar?
2. The term intrapreneurship refers to entrepreneurial activity that occurs within an organization supporting new products, services and solutions. To what extent, if any, do you differentiate entrepreneurial activity from intrapreneurial activity?
3. Can you describe how the concepts work together?

**Services/Products** – Exploration of programs, products, solutions, and services opportunities

4. How do you recognize and identify entrepreneurial opportunities?
  - (a) How do you identify opportunities within your organization?
  - (b) How do you identify opportunities within your region?
  - (c) How do you identify opportunities beyond your geographic boundary?
5. To what extent, if any, is there a need to differentiate opportunity identification needs based on organization, region, or broader geographic boundary?

**Core Practices** – Practices supporting entrepreneurship and innovation.

6. Current practices - When thinking about entrepreneurship and innovation in education today, what core practices do you value?
  - (a) Which core practices are present in your staff?
  - (b) How do you recognize the presence of the core practices in your staff?

7. Essential practices – Ultimately, what core practices would you consider essential for entrepreneurial organizations?
  - (a) Of these, what core practices would you consider essential for leaders?
  - (b) Describe how your leadership style supports entrepreneurship and innovation.
  - (c) Of these, what core practices are essential for staff?
  
8. Future practices – When thinking about the future of education, what core practices are most important to sustain and/or attain?
  - (a) How do you cultivate these in yourself?
  - (b) How do you cultivate these in your organization?
  - (c) How can you support and encourage staff to utilize these practices?

## APPENDIX E

## Research and Interview Questions

Research Questions	Interview Questions
<p>RQ1 How do executive level leaders in California ESAs define entrepreneurship and innovation?</p>	<ol style="list-style-type: none"> <li>1) Can you briefly define your concepts of entrepreneurship and innovation?               <ol style="list-style-type: none"> <li>(a) In your opinion, how are the concepts different?</li> <li>(b) In your opinion, how are the concepts similar?</li> </ol> </li> <li>2) The term intrapreneurship refers to entrepreneurial activity that occurs within an organization supporting new products, services, and solutions. To what extent, if any, do you differentiate entrepreneurial activity from intrapreneurial activity?</li> <li>3) Can you describe how the concepts work together?</li> </ol>
<p>RQ2 To what extent, if any, do executive level leaders in California ESAs recognize and address entrepreneurial opportunities (a) at an organizational level, (b) at a regional level, and (c) beyond a regional level?</p>	<ol style="list-style-type: none"> <li>1) How do you recognize and identify entrepreneurial opportunities?               <ol style="list-style-type: none"> <li>(a) within your organization?</li> <li>(b) within your region?</li> <li>(c) beyond your geographic boundaries?</li> </ol> </li> <li>2) To what extent, if any, does your approach to opportunity identification differ based on a focus within the organization, within the region, or beyond the geographic boundary?</li> <li>3) To what extent, if any, is there a need to differentiate opportunity identification needs based on organization, region, or broader geographic boundary?</li> </ol>

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RQ3 According to executive leaders in California ESAs, what core practices are necessary to cultivate a culture of change supporting entrepreneurship and innovation?

- 1) When thinking about entrepreneurship and innovation in education today, what core practices do you value?
    - (a) Of these, which core practices are present in your staff?
    - (b) How do you recognize the presence of the core practices in your staff?
  - 2) Ultimately, what core practices would you consider essential for entrepreneurial organizations?
    - (a) Of these, which core practices would you consider essential for leaders?
    - (b) Describe how your leadership style supports entrepreneurship and innovation.
    - (c) Of these, which core practices would you consider essential for staff?
  - 3) When thinking about the future of education, what core practices are most important to sustain and/or attain?
    - (a) How do you cultivate these in yourself?
    - (b) How do you cultivate these within your organization?
    - (c) How can you support and encourage staff to utilize these practices?
-



## APPENDIX F

## Interview Follow Up Questions

Follow up questions: The researcher at her discretion may ask as many of these non-leading follow-up questions as necessary to gain a better understanding:

1. Why do you consider that to be a core practice?
2. Why do you consider that to be an important practice to cultivate?
3. Can you give me an example?
4. Can you elaborate?
5. Can you clarify?
6. Can you tell me more?
7. Can you explain that further?
8. What can you tell me about....?

## APPENDIX G

## Informed Consent

The following information is provided to help you decide whether you wish to participate in this study.

The purpose of this study is to solicit opinions from executive level leaders in California County Offices of Education regarding specific entrepreneurial and innovation practices they believe are important for education services agencies to practice. This study is conducted in partial fulfillment of the requirements for the degree of Doctor of Education in Organizational Leadership at Pepperdine University. The practices identified in this study will have value in creating internal development programs to promote and cultivate entrepreneurial and innovative behavior within ESAs.

In order for me to use what I learn from you in my research and publications. I am required to ask for your permission to be interviewed. You should be aware that your participation in this study is strictly voluntary. You are free to decide not to participate or to withdraw at any time without affecting your relationship with me, Pepperdine University, or any other entity. You will receive no monetary compensation to participate in this study.

The foreseeable risks or potential discomfort to you as a result of participating in this study are minimal. The records of this study will be kept private and stored securely such that only the principal investigator will have access to these records. Your participation will be confidential, and at no time will you or your organization be identified in the written findings. Upon your request, I will provide a copy of any published papers or professional presentation that take place as a result of this study.

With your permission, I will be recording this interview. You are under no obligation to answer every question, and please feel free to ask me to stop or resume taping this discussion at any point in our conversation. The digital recording from this interview will be transcribed by the principal investigator. This information will be kept strictly confidential and will be available only to the principal investigator. The transcription service will delete all files once they are transcribed and sent back to me. May I record this interview?

Please feel free to ask any questions about this study before we begin, during the course of the study, or after this interview has been completed by contacting Karen Connaghan, Principal Investigator at [REDACTED], or Dr. Kent Rhodes, dissertation chairperson, at [REDACTED]. For information regarding your rights, contact [REDACTED], Manager, GPS IRB and Dissertation Support at Pepperdine University at (310) 568-5753

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Principal Investigator's Signature Date

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Participant's Signature Date

## APPENDIX H

## Email Reminder to Participants for Interview Date/Time

Dear

Once again, thank you for agreeing to participate in my dissertation study. I truly appreciate your willingness to share your knowledge and expertise.

Our interview is scheduled on \_\_\_\_\_ at \_\_\_\_\_. The interview will take approximately 20 minutes. It will consist of a series of open ended questions related to leadership, innovation, education and entrepreneurship. The questions were developed from a review of literature.

I will use the responses from all participants to identify the relevant themes and topics. These themes and topics will be used by me to create our first survey.

For your convenience, I have attached a copy of the interview questions along with copy of the informed consent form previously provided.

I look forward to working with you. Again, thank you for your participation.

Karen Connaghan

Doctoral Candidate, Pepperdine University

## APPENDIX I

## Email to Participants with Link to First Online Survey

Subject: Dissertation Study – Essential Entrepreneurial Practice of Executive Leaders in COEs – Survey Response Required by 5/7/2015

Dear

Thank you for agreeing to be a participant in my dissertation study to identify the essential entrepreneurial practices of executive leaders in California County Offices of Education.

Below is the link to a survey in which you will find a list of those leadership and management practices that you and other leaders have identified as important practices to support entrepreneurship and innovation. It should take approximately 10 minutes to complete. Please submit your responses by Thursday, May 7, 2015, in order for your input to be included in the study.

<https://www.surveymonkey.com/s/RJK5DDL>

Your participation in this study is voluntary. You are free to decide not to participate or to withdraw at any time without affecting your relationship with me, Pepperdine University or any other entity.

Again, thank you for your participation,

Karen Connaghan

Doctoral Candidate, Pepperdine University

## APPENDIX J

## Round Two - Survey One

Essential Entrepreneurial and Innovation Practices of Executive Leaders in California County Offices of Education	
Entrepreneurship and Innovation Opportunity Recognition Practices	
<p>Please rate the importance of each of the following essential opportunity recognition activities/practices in terms of their importance for executive level leaders in California County Offices of Education, where 1 indicates no importance and 5 indicates critical importance</p>	
<p>* 1. Research activities - ability to identify and explore planned research areas of interest to support entrepreneurial and innovation activities</p>	<p>no importance <span style="float: right;">critical importance</span></p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>* 2. Environmental scanning - ability to identify trends, patterns, and relationships across and within the operating environment, continually identifies shifts in internal and external environment for impact to organization</p>	<p>no importance <span style="float: right;">critical importance</span></p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>* 3. Collaboration - establishes and seeks a variety of partnerships, grants, and alliances to support entrepreneurial and innovation opportunities</p>	<p>no importance <span style="float: right;">critical importance</span></p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>* 4. Communication - ability to organize information for other others to use and understand, establishes feedback loops, information flows, and utilizes social media to support entrepreneurial and innovation activities</p>	<p>no importance <span style="float: right;">critical importance</span></p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>* 5. Ideation - exhibits an openness to new ideas and keeps an open mindset</p>	<p>no importance <span style="float: right;">critical importance</span></p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>* 6. Marketing - maintains a customer service focus, monitors competing forces, conducts market analysis</p>	<p>no importance <span style="float: right;">critical importance</span></p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>

- \* 7. Future focused - recognizes that opportunities are everywhere, explores new products and solutions, is proactive, uses information to predict future events and/or outcomes

no importance

critical importance

- \* 8. Data driven - ability to use data to inform decisions, conduct needs assessments and gap identification exercises, utilizes analytics and data analysis to inform decisions

no importance

critical importance

- \* 9. Strategic - sets opportunity recognition as a priority, focuses energy and resources to support innovation and entrepreneurial activities

no importance

critical importance

- \* 10. Engagement - conveys a serious level of attention and commitment to entrepreneurial and innovation activities, maintains an action-oriented mindset

no importance

critical importance

- \* 11. Boundary spanning - continually seeks new connections and networking opportunities, maintains and build relationships, seeks out new venues to expand opportunities

no importance

critical importance

- \* 12. Strength identification - conducts SWOT analysis, reframing exercises, core forces analysis to identify opportunities

no importance

critical importance

## Essential Entrepreneurial and Innovation Practices of Executive Leaders in California County Offices of Education

### Entrepreneurial and Innovation Leadership Practices

Please rate the importance of each of the following essential entrepreneurial and innovation leadership practices in terms of their importance for executive level leaders in California County Offices of Education, where 1 indicates no importance and 5 indicates critical importance.

- \* 13. Establishes transparent communication - actively listens, ensures people feel they are heard, acknowledges differing views
 

no importance critical importance
- \* 14. Articulates Vision - expresses a clear vision of the future, is forward thinking
 

no importance critical importance
- \* 15. Life Long Learner - continuously seeks opportunities to learn and grow
 

no importance critical importance
- \* 16. Creates alignment - establishes goal setting loops, practices formative coaching, continually ensures work aligns within the organization
 

no importance critical importance
- \* 17. Values human capital - values work of staff, recognizes contributions, hires the best staff, coaches and mentors staff, builds capacity in staff by providing time and resources for development activities, empowers staff to imagine new possibilities
 

no importance critical importance
- \* 18. Builds relationships - strong interpersonal skills, collaborative, seeks connections, works across boundaries (geographic or political)
 

no importance critical importance

\* 19. Promotes healthy organization culture - holds self and staff accountable, leads by example, fosters trust, cultivates change management practices throughout the organization

no importance critical importance

\* 20. Encourages risk-taking - comfortable taking risks, encourages staff to take risks

no importance critical importance

\* 21. Actively seeks opportunities - identifies trends, proactively identifies issues and create solutions, recognizes patterns and potential impact to organization

no importance critical importance

\* 22. Seeks input - collaborative, seeks input and ideas from all stakeholders, encourages feedback and establishes multiple channels of communication, encourages and participates in discourse

no importance critical importance

\* 23. Demonstrated commitment - committed to client needs, ensures unique populations are well-served

no importance critical importance

\* 24. Focus on improvement - focuses on continuous improvement, quality management, performance excellence

no importance critical importance

\* 25. Implements frameworks to support entrepreneurship and innovation - establishes frameworks to assist in managing competing forces, establishes organization structures to support goals and priorities

no importance critical importance

\* 26. Encourages and supports teamwork - encourages inputs and suggestions, offer rewards and recognition, delegate responsibilities

no importance critical importance



- \* 27. Inspirational - ability to open minds, able to inspire and motivate others, thinks outside the box, optimistic

no importance

critical importance

- \* 28. Authentic - models desired behavior and attitudes, ability to be reflective, walks the talk, high level of integrity

no importance

critical importance

- \* 29. Decisive - confident in decision-making, grounded in reality, makes tough decisions

no importance

critical importance

- \* 30. Flexible - responsive to change and new situations

no importance

critical importance

- \* 31. Intentional - thoughtful, deliberate in actions and words, makes implicit explicit, explicit about core values

no importance

critical importance

## Essential Entrepreneurial and Innovation Practices of Executive Leaders in California County Offices of Education

### Entrepreneurial and Innovation Staff Practices

Please rate the importance of each of the following essential entrepreneurial and innovation staff practices in terms of their importance for executive level leaders in California County Offices of Education where 1 indicates no importance and 5 indicates critical importance.

- \* 32. Self-reliant - independent, autonomous, courageous, confident

no importance

critical importance

- \* 33. Reflective - self-reflective, thoughtful in word and action

no importance

critical importance

- \* 34. Risk taker - pushes limits, challenges the status quo, tolerates risk

no importance

critical importance

- \* 35. Focus on goals and mission - committed to organization core values, mission, and practices

no importance

critical importance

- \* 36. Learning focused - growth mindset, seeks learning opportunities

no importance

critical importance

- \* 37. Self-directed - strives to make an impact, motivated, defines high goals

no importance

critical importance

- \* 38. Good listener - seeks feedback, listens, strives for understanding

no importance

critical importance

* 39. Trustworthy - honest, has integrity
no importance <span style="float: right;">critical importance</span>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
* 40. Flexible - tolerates ambiguity, adaptable, embraces change
no importance <span style="float: right;">critical importance</span>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
* 41. Drive - delivers results
no importance <span style="float: right;">critical importance</span>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
* 42. Independent thinking - ability to innovate, creative, curious
no importance <span style="float: right;">critical importance</span>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
* 43. Dedicated - exhibits passion for work, energy, positive attitude
no importance <span style="float: right;">critical importance</span>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
* 44. Team oriented - strong interpersonal skills, generates and shares ideas, works as a member of team rather than as an individual
no importance <span style="float: right;">critical importance</span>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
* 45. Tenacity of spirit - resilient, persistent, determined
no importance <span style="float: right;">critical importance</span>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
* 46. Responsibility - takes responsibility, proactive in dealing with challenges, dependable
no importance <span style="float: right;">critical importance</span>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
* 47. Comfortable with data - utilizes research data to inform work, evidence-based, outcome and results focused
no importance <span style="float: right;">critical importance</span>
<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>

**Essential Entrepreneurial and Innovation Practices of Executive Leaders in California  
County Offices of Education****Other**

48. Are there any other opportunity recognition, leadership or staff practices that you believe are critically important for entrepreneurship and innovation in California County Offices of Education? If so, please list them below, including as much detail as possible.

## APPENDIX K

## Reminder Email to Participants with Link to First Online Survey

Subject: Dissertation Study Survey Reminder

Dear

Thank you for agreeing to be a participant in my dissertation study to identify the essential entrepreneurial practices of executive leaders in California County Offices of Education.

On April 25, 2015, I sent you an email with a link to the survey that includes a list of the entrepreneurial and innovation practices that has been identified as important by our expert panel. If you have completed the survey, thank you for your participation and please disregard this email.

If you have not yet completed the survey, please accept this as a friendly reminder to complete the survey with an extension to May 10, 2015.

Below is the link to a survey in which you will find a list of those entrepreneurial and innovation practices that you and other leaders have identified as important practices to support entrepreneurship and innovation. It should take approximately 10 minutes to complete. Please submit your responses by May 10, 2015 in order for your input to be included in the study.

<https://www.surveymonkey.com/s/RJK5DDL>

Your participation in this study is voluntary. You are free to decide not to participate or to withdraw at any time without affecting your relationship with me, Pepperdine University or any other entity.

Again, thank you for your participation,

Karen Connaghan

Doctoral Candidate, Pepperdine University

APPENDIX L

Complete Statistical Data

Round 2 - Survey 1																				
Opportunity Recognition Practices																				
	Research Activities	Environment Scanning	Collaboration	Communication	Ideation	Marketing	Future focused	Data driven	Strategic	Engagement	Boundary spanning	Strength identification								
# ≥ 4	13	14	13	15	12	14	14	14	12	12	13	8								
% Agreement (80%)	87%	93%	87%	100%	80%	93%	93%	93%	80%	80%	87%	53%								
Mean	4.07	4.53	4.47	4.47	3.93	4.53	4.47	4.47	4.2	3.93	4.27	3.6								
Median	4	5	4	4	4	5	5	5	4	4	4	4								
Mode	4	5	5	4	4	5	5	5	4	4	5	3.5								
SD	0.59	0.83	0.74	0.29	0.51	0.59	0.64	0.64	0.94	0.88	0.88	0.83								
1 Quartile	4	4	4	4	4	4	4	4	4	4	4	3								
3 Quartile	4	5	4	5	4	5	5	5	5	4	5	4								
Quartile Range	0	1	1	0	1	1	1	1	1	0	1	1								
Leadership Practices																				
	Transparent communication	Articulates vision	Articulates life long learner	creates alignment	values human capital	builds relationships	promotes healthy org culture	encourages risk taking	Actively seeks opps	Seeks input	Demonstrates commitment	Focus on improvement	Implement frameworks	encourages teamwork	Inspirational	Authentic	Decisive	Flexible	Intentional	
# ≥ 4	13	13	13	14	14	14	14	15	15	14	13	12	11	12	14	15	13	12	11	
% Agreement (80%)	87%	87%	87%	93%	93%	93%	100%	100%	100%	93%	87%	80%	73%	80%	93%	100%	87%	80%	73%	
Mean	4.2	4.53	4.4	4.13	4.67	4.4	4.53	4.4	4.47	4.47	4.27	3.87	4	3.87	4.33	4.33	4.33	4.4	4.13	
Median	4	5	5	4	5	4	5	4	5	4	4	4	4	4	5	4	4	4	5	4
Mode	4	5	5	4	5	4	5	4	5	4	4	4	4	4	5	4	4	5	5	4
SD	0.68	0.74	0.74	0.62	0.63	0.63	0.52	0.51	0.64	0.71	0.74	0.65	0.83	0.82	0.64	0.52	0.72	0.83	0.83	
1 Quartile	4	4	4	4	4	4	4	4	4	4	3	3	3	4	4	4	4	4	4	3
3 Quartile	5	5	5	4.5	5	5	5	5	5	5	4	4	4	5	5	5	5	5	5	5
Quartile Range	1	1	1	0.5	0.5	1	1	1	1	1	1	0	0.5	1	1	1	1	1	1	2
Staff Practices																				
	Self reliant	Reflective	Risk-taker	Focus on goals & mission	Learning focused	Self directed	Good listener	Trustworthy	Flexible	Drive	Independent thinking	Dedicated	Team oriented	Tenacity of spirit	Responsibility	Comfortable with data				
# ≥ 4	12	10	14	14	14	13	12	15	15	13	14	15	14	14	14	12				
% Agreement (80%)	80%	67%	93%	93%	93%	87%	80%	100%	100%	87%	93%	100%	93%	93%	93%	80%				
Mean	4	3.8	4.33	4.2	4.07	4	4.13	4.6	4.33	4.47	4.4	4.27	4.53	4.4	4.27	3.93				
Median	4	4	4	4	4	4	4	4	4	5	4	4	4	4	4	4				
Mode	4	4	4	4	4	4	4	4	5	5	5	4	4	4	4	4				
SD	0.65	0.86	0.62	0.56	0.7	0.76	0.74	0.51	0.72	0.64	0.74	0.6	0.64	0.63	0.59	0.59				
1 Quartile	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4				
3 Quartile	4	4	5	4.5	4	4	5	5	5	5	5	4.5	5	5	5	4				
Quartile Range	0	1	1	0.5	0	0	1	1	1	1	1	0.5	1	1	1	0				

Round 3 - Survey 2																		
Opportunity Recognition Practices																		
	Environment scanning	Collaboration	Ideation	Future focused	Data driven	Strategic	Boundary spanning											
# ≥ 4	14	14	13	15	13	14	12											
% Agreement (80%)	93%	93%	87%	100%	87%	93%	80%											
Mean	4.47	4.47	4.27	4.67	4.47	4.33	4.07											
Median	5	5	4	5	5	4	4											
Mode	5	5	4	5	5	4	4											
SD	0.64	0.64	0.7	0.49	0.74	0.62	0.7											
1 Quartile	4	4	4	4	4	4	4											
3 Quartile	5	5	5	5	5	5	4.5											
Quartile Range	1	1	1	1	1	1	0.5											
Leadership Practices																		
	Transparent communication	Articulates vision	Lifelong learner	Builds relationships	Promotes healthy org culture	Encourages risk taking	Actively seeks opps	Seeks input	Encourages teamwork	Inspirational	Authentic	Decisive	Flexible	Cultivate culture	Resource allocation	Instinct	Employee recognition	Employee evaluation
# ≥ 4	13	15	14	15	15	15	14	15	14	14	15	14	14	15	15	15	12	12
% Agreement (80%)	87%	100%	93%	100%	100%	93%	100%	93%	100%	93%	100%	93%	93%	100%	100%	80%	80%	80%
Mean	4.2	4.8	4.6	4.53	4.8	4.2	4.53	4.27	4.6	4.53	4.6	4.53	4.67	4.33	4.4	3.87	4.13	3.93
Median	4	5	5	5	5	4	5	4	5	5	5	5	5	4	4	4	4	4
Mode	4	5	5	5	5	4	5	4	5	5	5	5	5	4	4	4	4	4
SD	0.68	0.41	0.63	0.52	0.41	0.56	0.52	0.59	0.51	0.64	0.51	0.64	0.62	0.49	0.51	0.74	0.92	0.8
1 Quartile	4	5	4	4	5	4	4	4	4	4	4	4	4	4	4	4	4	4
3 Quartile	5	5	5	5	5	4.5	5	5	5	5	5	5	5	5	5	5	5	5
Quartile Range	1	0	1	1	0	0.5	1	1	1	1	1	1	1	1	1	1	1	1
Staff Practices																		
	Risk taker	Good listener	Trustworthy	Flexible	Drive	Independent	Team orient	Tenacity	Responsibility									
# ≥ 4	13	14	15	14	14	13	15	15	15									
% Agreement (80%)	87	93	100	93	93	87	100	100	100									
Mean	4	4.27	4.8	4.53	4.6	4.47	4.67	4.33	4.47									
Median	4	4	5	5	5	5	5	4	4									
Mode	4	4	5	5	5	5	5	4	4									
SD	0.53	0.59	0.41	0.64	0.63	0.74	0.49	0.52	0.52									
1 Quartile	4	4	5	4	4	4	4	4	4									
3 Quartile	4	5	5	5	5	5	5	5	5									
Quartile Range	0	1	0	1	1	1	1	1	1									

Round 4 - Survey 3												
Opportunity Recognition Practices												
	Environment scanning	Collaboration	Ideation	Future focused	Data driven	Strategic						
# ≥ 4	13	13	14	15	14	12						
% Agreement (80%)	87%	93%	93%	100%	80%	80%						
Mean	4.53	4.6	4.33	4.73	4.33	4.2						
Median	5	5	4	5	5	4						
Mode	5	5	4	5	5	5						
SD	0.74	0.74	0.62	0.46	0.82	0.94						
1 Quartile	4	4.5	4	4.5	4	4						
3 Quartile	5	5	5	5	5	5						
Quartile Range	1	0.5	1	0.5	1	1						
Leadership Practices												
	Transparent communications	Life long learner	Builds relationships	Seeks opps	Seeks input	Encourages teamwork	Inspirational	Authentic	Decisive	Cultivate culture	Resource allocations	Employee recognition
# ≥ 4	12	15	15	15	14	14	14	14	15	15	14	12
% Agreement (80%)	80%	100%	100%	100%	93%	93%	93%	93%	100%	100%	93%	80%
Mean	4.13	4.73	4.73	4.73	4.27	4.47	4.47	4.6	4.73	4.33	4.33	4.07
Median	4	5	5	5	4	5	5	5	5	4	4	4
Mode	4	5	5	5	4	5	5	5	5	4	4	4
SD	0.74	0.46	0.46	0.46	0.59	0.64	0.64	0.63	0.46	0.49	0.62	0.7
1 Quartile	4	4.5	5	4.5	4	4	4	4	4.5	4	4	4
3 Quartile	5	5	5	5	5	5	5	5	5	5	5	4.5
Quartile Range	1	0.5	0	0.5	1	1	1	1	0.5	1	1	0.5
Staff Practices												
	Good listener	Flexible	Drive	Independent	Team oriented	Tenacity	Responsibility					
# ≥ 4	12	13	14	15	14	15	15					
% Agreement (80%)	80	87	93	100	93	100	100					
Mean	4.27	4.6	4.67	4.6	4.6	4.4	4.4					
Median	4	5	5	5	5	4	4					
Mode	5	5	5	5	5	4	4					
SD	0.8	0.74	0.62	0.51	0.63	0.51	0.51					
1 Quartile	4	4.5	4.5	4	4	4	4					
3 Quartile	5	5	5	5	5	5	5					
Quartile Range	1	0.5	0.5	1	1	1	1					



## APPENDIX M

## Round Three - Survey Two

Entrepreneurship and Innovation Opportunity Recognition Practices	
<p>Please rate the importance of each of the following essential opportunity recognition activities/practices in terms of their importance for executive level leaders in California County Offices of Education, where 1 indicates no importance and 5 indicates critical importance</p>	
<p>* 1. Environmental scanning - ability to identify trends, patterns, and relationships across and within the operating environment, continually identifies shifts in internal and external environment for impact to organization.</p>	<p>MEDIAN SCORE = 5</p>
<p>no importance</p>	<p>critical importance</p>
<p>* 2. Collaboration - establishes and seeks a variety of partnerships, grants, and alliances to support entrepreneurial and innovation opportunities</p>	<p>MEDIAN SCORE = 5</p>
<p>no importance</p>	<p>critical importance</p>
<p>* 3. Ideation - exhibits an openness to new ideas and keeps an open mindset</p>	<p>MEDIAN SCORE = 4</p>
<p>no importance</p>	<p>critical importance</p>
<p>* 4. Future focused - recognizes that opportunities are everywhere, explores new products and solutions, is proactive, uses information to predict future events and/or outcomes</p>	<p>MEDIAN SCORE = 5</p>
<p>no importance</p>	<p>critical importance</p>
<p>* 5. Data driven - ability to use data to inform decisions, conduct needs assessments and gap identification exercises, utilizes analytics and data analysis to inform decisions</p>	<p>MEDIAN SCORE = 5</p>
<p>no importance</p>	<p>critical importance</p>

\* 6. Strategic - sets opportunity recognition as a priority, focuses energy and resources to support innovation and entrepreneurial activities

MEDIAN SCORE = 5

no importance

critical importance



\* 7. Boundary spanning - continually seeks new connections and networking opportunities, maintains and build relationships, seeks out new venues to expand opportunities

MEDIAN SCORE = 4

no importance

critical importance



### Entrepreneurial and Innovation Leadership Practices

Please rate the importance of each of the following essential entrepreneurial and innovation leadership practices in terms of their importance for executive level leaders in California County Offices of Education, where 1 indicates no importance and 5 indicates critical importance.

- \* 8. Establishes transparent communication - actively listens, ensures people feel they are heard, acknowledges differing views

MEDIAN SCORE = 4



- \* 9. Articulates Vision - expresses a clear vision of the future, is forward thinking

MEDIAN SCORE = 5



- \* 10. Life Long Learner - continuously seeks opportunities to learn and grow

MEDIAN SCORE = 5



- \* 11. Builds relationships - strong interpersonal skills, collaborative, seeks connections, works across boundaries (geographic or political)

MEDIAN SCORE = 4



- \* 12. Promotes healthy organization culture - holds self and staff accountable, leads by example, fosters trust, cultivates change management practices throughout the organization

MEDIAN SCORE = 5



- \* 13. Encourages risk-taking - comfortable taking risks, encourages staff to take risks

MEDIAN SCORE = 4



<p>* 14. Actively seeks opportunities - identifies trends, proactively identifies issues and create solutions, recognizes patterns and potential impact to organization MEDIAN SCORE = 5</p> <p>no importance <span style="float: right;">critical importance</span></p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>* 15. Seeks input - collaborative, seeks input and ideas from all stakeholders, encourages feedback and establishes multiple channels of communication, encourages and participates in discourse MEDIAN SCORE = 4</p> <p>no importance <span style="float: right;">critical importance</span></p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>* 16. Encourages and supports teamwork - encourages inputs and suggestions, offer rewards and recognition, delegate responsibilities MEDIAN SCORE = 5</p> <p>no importance <span style="float: right;">critical importance</span></p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>* 17. Inspirational - ability to open minds, able to inspire and motivate others, thinks outside the box, optimistic MEDIAN SCORE = 5</p> <p>no importance <span style="float: right;">critical importance</span></p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>* 18. Authentic - models desired behavior and attitudes, ability to be reflective, walks the talk, high level of integrity MEDIAN SCORE = 4</p> <p>no importance <span style="float: right;">critical importance</span></p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>* 19. Decisive - confident in decision-making, grounded in reality, makes tough decisions MEDIAN SCORE = 4</p> <p>no importance <span style="float: right;">critical importance</span></p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>* 20. Flexible - responsive to change and new situations MEDIAN SCORE = 5</p> <p>no importance <span style="float: right;">critical importance</span></p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>

21. Cultivate Culture - intentional focus on creating and reinforcing desired culture of entrepreneurship and innovation. NEW QUESTION

No importance

Critical importance

22. Resource Allocation - identify potential resources both human and financial. NEW QUESTION

No importance

Critical importance

23. Instinct - follow gut feeling and instinct, take calculated risks based on instincts. NEW QUESTION

No importance

Critical importance

24. Employee recognition - recognize employees as whole rather than based on workplace roles, give credit for success to team and individuals. NEW QUESTION

No importance

Critical importance

25. Employee evaluation - recognize and encourage risk-taking as part of the evaluation process. NEW QUESTION

No importance

Critical importance

### Entrepreneurial and Innovation Staff Practices

Please rate the importance of each of the following essential entrepreneurial and innovation staff practices in terms of their importance for executive level leaders in California County Offices of Education where 1 indicates no importance and 5 indicates critical importance.

- \* 26. Risk taker - pushes limits, challenges the status quo, tolerates risk

MEDIAN SCORE = 4

no importance critical importance

- \* 27. Good listener - seeks feedback, listens, strives for understanding

MEDIAN SCORE = 4

no importance critical importance

- \* 28. Trustworthy - honest, has integrity

MEDIAN SCORE = 5

no importance critical importance

- \* 29. Flexible - tolerates ambiguity, adaptable, embraces change

MEDIAN SCORE = 4

no importance critical importance

- \* 30. Drive - delivers results

MEDIAN SCORE = 5

no importance critical importance

- \* 31. Independent thinking - ability to innovate, creative, curious

MEDIAN SCORE = 5

no importance critical importance

- \* 32. Team oriented - strong interpersonal skills, generates and shares ideas, works as a member of team rather than as an individual

MEDIAN SCORE = 5

no importance

critical importance



- \* 33. Tenacity of spirit - resilient, persistent, determined

MEDIAN SCORE = 4

no importance

critical importance



- \* 34. Responsibility - takes responsibility, proactive in dealing with challenges, dependable

MEDIAN SCORE = 4

no importance

critical importance



## Other

35. Are there any other opportunity recognition, leadership or staff practices that you believe are critically important for entrepreneurship and innovation in California County Offices of Education? If so, please list them below, including as much detail as possible.



## APPENDIX N

## Email to Participants with Link to Second Online Survey

Subject: Dissertation Study – Essential Entrepreneurial Practice of Executive Leaders in COEs – Survey Two Response Required by 6/11/2015

Dear

Once again, I want to thank you for your participation in my doctoral study in identifying the essential entrepreneurial practices of executive leaders in California County Offices of Education.

The responses to the first survey have been analyzed. Of the 47 essential practices included in the survey, 5 were eliminated due to low scores (rated not essential) and 9 achieved consensus on the degree of importance. The remaining 33 items did not reach consensus, and are included on the follow-up survey linked below. In addition, during the first round, 5 new items were suggested by several participants, and those items have been included on this second survey.

Please consider the median scores for the items listed on this second-round survey and reassess your importance rating for each item. As before, a score of 1 indicates no importance, and a score of 5 indicates critical importance. In order for your input to be included in the study, I will need to have the survey completed by June 11, 2015.

<https://www.surveymonkey.com/s/D89G83M>

If at the conclusion of this survey the results show consensus on the remaining 33 items, the study will be considered complete. If consensus is not reached, there will be one final survey and then the study will be terminated at that time. When the study is complete, I will send you a copy of the final results.

If you have any questions or concerns about the study, please do not hesitate to contact me by email at [karen.connaghan@pepperdine.edu](mailto:karen.connaghan@pepperdine.edu)

Thank you for your willingness to participate in this study; it is very much appreciated.

Best regards,

Karen Connaghan

Doctoral Candidate, Pepperdine University

## APPENDIX O

## Reminder Email to Participants with Link to Second Online Survey

Subject: Dissertation Study Survey Reminder

Dear

Thank you for agreeing to be a participant in my dissertation study to identify the essential entrepreneurial practices of executive leaders in California County Offices of Education.

On June 3, 2015, I sent you an email with a link to the survey that includes a list of the entrepreneurial and innovation practices that has been identified as important by our expert panel. If you have completed the survey, thank you for your participation and please disregard this email.

If you have not yet completed the survey, please accept this as a friendly reminder to complete the survey with an extension to June 16, 2015.

Below is the link to a survey in which you will find a list of those entrepreneurial and innovation practices that you and other leaders have identified as important practices to support entrepreneurship and innovation. It should take approximately 10 minutes to complete. Please submit your responses by June 16, 2015, in order for your input to be included in the study.

<https://www.surveymonkey.com/s/D89G83M>

Your participation in this study is voluntary. You are free to decide not to participate or to withdraw at any time without affecting your relationship with me, Pepperdine University or any other entity.

Again, thank you for your participation.

Karen Connaghan

Doctoral Candidate, Pepperdine University

## APPENDIX P

## Round Four - Survey Three

Entrepreneurship and Innovation Opportunity Recognition Practices	
<p><b>Please rate the importance of each of the following essential opportunity recognition activities/practices in terms of their importance for executive level leaders in California County Offices of Education, where 1 indicates no importance and 5 indicates critical importance</b></p>	
<p>* 1. Environmental scanning - ability to identify trends, patterns, and relationships across and within the operating environment, continually identifies shifts in internal and external environment for impact to organization.</p> <p><b>MEDIAN SCORE = 5</b></p>	<p>no importance <span style="float: right;">critical importance</span></p>
<p>* 2. Collaboration - establishes and seeks a variety of partnerships, grants, and alliances to support entrepreneurial and innovation opportunities</p> <p><b>MEDIAN SCORE = 5</b></p>	<p>no importance <span style="float: right;">critical importance</span></p>
<p>* 3. Ideation - exhibits an openness to new ideas and keeps an open mindset</p> <p><b>MEDIAN SCORE = 4</b></p>	<p>no importance <span style="float: right;">critical importance</span></p>
<p>* 4. Future focused - recognizes that opportunities are everywhere, explores new products and solutions, is proactive, uses information to predict future events and/or outcomes</p> <p><b>MEDIAN SCORE = 5</b></p>	<p>no importance <span style="float: right;">critical importance</span></p>
<p>* 5. Data driven - ability to use data to inform decisions, conduct needs assessments and gap identification exercises, utilizes analytics and data analysis to inform decisions</p> <p><b>MEDIAN SCORE = 5</b></p>	<p>no importance <span style="float: right;">critical importance</span></p>

\* 6. Strategic - sets opportunity recognition as a priority, focuses energy and resources to support innovation and entrepreneurial activities  
MEDIAN SCORE = 4

no importance

critical importance



### Entrepreneurial and Innovation Leadership Practices

Please rate the importance of each of the following essential entrepreneurial and innovation leadership practices in terms of their importance for executive level leaders in California County Offices of Education, where 1 indicates no importance and 5 indicates critical importance.

- \* 7. Establishes transparent communication - actively listens, ensures people feel they are heard, acknowledges differing views

MEDIAN SCORE = 4

no importance critical importance

- \* 8. Life Long Learner - continuously seeks opportunities to learn and grow

MEDIAN SCORE = 5

no importance critical importance

- \* 9. Builds relationships - strong interpersonal skills, collaborative, seeks connections, works across boundaries (geographic or political)

MEDIAN SCORE = 4

no importance critical importance

- \* 10. Actively seeks opportunities - identifies trends, proactively identifies issues and create solutions, recognizes patterns and potential impact to organization

MEDIAN SCORE = 5

no importance critical importance

- \* 11. Seeks input - collaborative, seeks input and ideas from all stakeholders, encourages feedback and establishes multiple channels of communication, encourages and participates in discourse

MEDIAN SCORE = 4

no importance critical importance

- \* 12. Encourages and supports teamwork - encourages inputs and suggestions, offer rewards and recognition, delegate responsibilities

MEDIAN SCORE = 5

no importance

critical importance

- \* 13. Inspirational - ability to open minds, able to inspire and motivate others, thinks outside the box, optimistic

MEDIAN SCORE = 5

no importance

critical importance

- \* 14. Authentic - models desired behavior and attitudes, ability to be reflective, walks the talk, high level of integrity

MEDIAN SCORE = 4

no importance

critical importance

- \* 15. Decisive - confident in decision-making, grounded in reality, makes tough decisions

MEDIAN SCORE = 4

no importance

critical importance

16. Cultivate Culture - intentional focus on creating and reinforcing desired culture of entrepreneurship and innovation.

MEDIAN SCORE = 4

no importance

Critical Importance

17. Resource Allocation - identify potential resources both human and financial.

MEDIAN SCORE = 4

No importance

Critical importance

18. Employee recognition - recognize employees as whole rather than based on workplace roles, give credit for success to team and individuals.

MEDIAN SCORE = 4

No importance

Critical importance

### Entrepreneurial and Innovation Staff Practices

Please rate the importance of each of the following essential entrepreneurial and innovation staff practices in terms of their importance for executive level leaders in California County Offices of Education where 1 indicates no importance and 5 indicates critical importance.

- \* 19. Good listener - seeks feedback, listens, strives for understanding

MEDIAN SCORE = 4

no importance critical importance

- \* 20. Flexible - tolerates ambiguity, adaptable, embraces change

MEDIAN SCORE = 5

no importance critical importance

- \* 21. Drive - delivers results

MEDIAN SCORE = 5

no importance critical importance

- \* 22. Independent thinking - ability to innovate, creative, curious

MEDIAN SCORE = 5

no importance critical importance

- \* 23. Team oriented - strong interpersonal skills, generates and shares ideas, works as a member of team rather than as an individual

MEDIAN SCORE = 5

no importance critical importance

- \* 24. Tenacity of spirit - resilient, persistent, determined

MEDIAN SCORE = 4

no importance critical importance

\* 25. Responsibility - takes responsibility, proactive in dealing with challenges, dependable

MEDIAN SCORE = 4

no importance

critical importance





## APPENDIX Q

## Email to Participants with Link to Third Online Survey

Subject: Dissertation Study – Essential Entrepreneurial Practice of Executive Leaders in COEs – Survey Three Response Required by 7/8/2015

Dear

Once again, I want to thank you for your participation in my doctoral study in identifying the essential entrepreneurial practices of executive leaders in California County Offices of Education.

The responses to the first survey have been analyzed. Of the 34 essential practices included in the survey 2, 0 were eliminated due to low scores (rated not essential) and 9 achieved consensus on the degree of importance. The remaining 25 items did not reach consensus, and are included on the follow-up survey linked below.

Please consider the median scores for the items listed on this second-round survey and reassess your importance rating for each item. As before, a score of 1 indicates no importance, and a score of 5 indicates critical importance. In order for your input to be included in the study, I will need to have the survey completed by July 8, 2015.

<https://www.surveymonkey.com/r/F38PJ5V>

The study will be terminated at the end of this round and results will be shared with all participants once analysis is completed.

If you have any questions or concerns about the study, please do not hesitate to contact me by email at [karen.connaghan@pepperdine.edu](mailto:karen.connaghan@pepperdine.edu)

Thank you for your willingness to participate in this study; it is very much appreciated.

Best regards,

Karen Connaghan

Doctoral Candidate, Pepperdine University

## APPENDIX R

### Entrepreneurship and Innovation Overarching Practices across Opportunity Recognition, Leadership, and Staff Domains

#### **COLLABORATION** – Essential practice identified for opportunity recognition

##### Sample collaboration elements in leadership practices domain

- Cross-organizational dialogue among divisions
- Collaboration with leaders across the county, community organizations, and government roundtable discussions
- Making new connections to get us out of our silos to create new opportunities for students
- Stakeholder input often reveals new opportunities
- Engage internal and external stakeholders to understand what it would take to bring an opportunity to our county
- Seeking input and suggestions
- Develop capacity within our organization to help other organizations with particular kinds of challenges.

##### Sample collaboration elements in staff practices domain

- Working together for the greater good
- Knowing how to work together
- Sharing ideas and suggestions with others
- Working as a team to generate new ideas
- Understanding collaborative tools to support work

#### **FUTURE-FOCUSED** – Essential practice identified for opportunity recognition

##### Sample future-focused elements in leadership practices

- Setting a vision of the future
- Looking to the future
- Identifying trends and challenges
- Using data to predict future needs

##### Sample future-focused elements in staff practices domain

- Build collaborative relationships as a means to support trust
- Understanding and using data to support future challenges
- Learning new skills to meet future needs
- Encouraging to imagine what's next

**FLEXIBILITY** – Essential practice identified for leadership and staff

Sample flexibility elements in opportunity recognition practices domain

- It's important we aren't stuck on the particulars of today, being flexible allows us to look at what's coming next.
- Look beyond sustaining and maintaining the status quo
- Have an open mindset

## APPENDIX S

## GPS IRB Exemption Notice

# PEPPERDINE UNIVERSITY

## Graduate & Professional Schools Institutional Review Board

September 29, 2014

Karen Connaghan

Protocol #: E0714D01

Project Title: Essential Entrepreneurial and Innovation Practices of Executive Leaders in California Education Service Agencies

Dear Ms. Connaghan:

Thank you for submitting your application, *Essential Entrepreneurial and Innovation Practices of Executive Leaders in California Education Service Agencies*, for exempt review to Pepperdine University's Graduate and Professional Schools Institutional Review Board (GPS IRB). The IRB appreciates the work you and your faculty advisor, Dr. Rhodes, have done on the proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations (45 CFR 46 - <http://www.nihtraining.com/ohsr/site/guidelines/45cfr46.html>) that govern the protections of human subjects. Specifically, section 45 CFR 46.101(b)(2) states:

(b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:

**Category (2) of 45 CFR 46.101**, research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at <http://www.pepperdine.edu/irb/graduate/>).

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact Kevin Collins, Manager of the

Institutional Review Board (IRB) at [gpsirb@pepperdine.edu](mailto:gpsirb@pepperdine.edu). On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

A handwritten signature in cursive script that reads "Thema Bryant-Davis".

Thema Bryant-Davis, Ph.D.  
Chair, Graduate and Professional Schools IRB

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives  
Mr. Brett Leach, Compliance Attorney  
Dr. Kent Rhodes, Faculty Advisor