Fostering a School Culture and Climate Where Creativity Can Thrive: A Case Study of an International School Principal

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Digital Object Identifier: https://doi.org/10.13023/ETD.2016.456

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FOSTERING A SCHOOL CULTURE AND CLIMATE
WHERE CREATIVITY CAN THRIVE:
A CASE STUDY OF AN INTERNATIONAL SCHOOL PRINCIPAL

DISSERTATION

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the College of Education at the University of Kentucky

By
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Vienna, Austria

Director: Dr. John Nash, Associate Professor of Educational Leadership Studies
Lexington, Kentucky

2016

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FOSTERING A SCHOOL CULTURE AND CLIMATE
WHERE CREATIVITY CAN THRIVE:
A CASE STUDY OF AN INTERNATIONAL SCHOOL PRINCIPAL

The topic of creativity in schools is increasing in popularity with many recent initiatives taking place emphasizing 21st century skills or the arts. Business literature has indicated the work environment influences worker creativity as well as identified managers as having influence over the work environment. While educational research supports the influence of the principal over the school environment, little research has specifically examined the role of the principal concerning creativity in schools.

The aim of the study was to illuminate the role of the principal in fostering creativity by examining the attributes and actions as self-reported by the principal and to gather the perspective of the teachers in the school. A guiding framework was created through combining business literature about creativity and the work environment with education literature concerning the principal's influence on the environment. A single-case, mixed-methods study was selected to examine how one international elementary school principal sought to cultivate a school culture and climate where creativity can thrive. Data sources included in-depth interviews with the principal, document collection, observations, individual interviews with three other stakeholders, a teacher survey, and teacher focus groups.

Analysis revealed a holistic understanding of the principal's attributes and actions concerning a creative culture and climate in the school as well as the teacher's perceptions. Three types of attributes were identified: Personal, Core Educational Beliefs, and Vision for the School. The themes for the first attribute, Personal, were Personal Experiences, Whole Child Emphasis, and Attitudes and Outlooks. The themes for the second attribute, Core Educational Beliefs, included Creativity is Important, People are Important, Growth is Important. The themes for the third attribute, Vision for the School, were Common Expectations for All and Goal Oriented. Concerning the teachers’ perspectives regarding the principal, her actions resulted in them feeling Respected,
Supported, and Empowered. The findings provide implications for both future research and current practitioners.

KEYWORDS: School Culture and Climate, Role of the Principal, Fostering Creativity, Attributes and Actions, Leadership for Creativity

Rachel F. Allen

November 9, 2016
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ACKNOWLEDGEMENTS

Finishing a Ph.D. program is not something anyone can do alone. It truly takes the support of an army to complete a dissertation through the form of academic and emotional support. I’d like to thank my dissertation chair, Dr. John Nash, for leading me through the process of designing a study, conducting a study, and then writing about it. Your advice and feedback throughout the entire process has been valuable. I’m thankful for your calmness amongst my thousands of questions and the steadiness of your encouragement to always keep working toward the next goal. Your interest in the subject as well as your guiding questions always pushed me further than I could have gone by myself.

I would like to thank my dissertation committee: Dr. Lars Björk, Dr. Ryan Hargrove, Dr. Jayson Richardson, and Dr. Beth Rous. Please know I asked each of you to participate because I value your unique and differing input into my work. I enjoyed my conversations with each of you throughout this endeavor as you have shared your specialties with me.

Thank you also to the other professors in the Educational Leadership Department whose classes grew my knowledge about research and reflective thinking. I am thankful for the community I found within the cohorts who have served as friends and peer reviewers during this process. Thank you to Ericka for sharing all the moments with me: from successes to when I was about to throw my computer out the window and for always being a listening ear and a positive voice.

Thank you to the principal and teachers who agreed to participate in this study.
Your insights were valuable and I truly could not have completed the study without you. Listening to your thoughts has made me want to be a better researcher and educator, to walk along side you as a support as you work through the complexity of educating students.

Finally, I want to thank all of my family and friends who have served as listening ears and inspired me along the way. To my son, who has heard “Sorry, Mommy has a meeting” many times in the past 6 months, but takes it in stride. One day you’ll understand it better. To my husband, Aaron, who has seen me through the ups and downs, who has taken on extra duties as deadlines approached and also helped me to find time to relax amongst the seeming chaos. This dissertation would not have been doable without you by my side.
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Chapter 1

Introduction to the Problem

Discussions centering on the topics of creativity and innovation have increased in recent years. A growing number of studies have been conducted and books authored concerning how these terms relate to the modern work environment, including popular titles such as Florida’s (2002) *The Rise of the Creative Class*. For the past five years, Forbes magazine has released an annual list detailing the world’s most innovative companies (Forbes Corporate Communications, 2015). Large companies, like Facebook and IDEO, are known for their creative work environments and their innovative products (Lamb, 2015). Newspapers and popular magazines have covered stories of creative people, coupling them with tips on how to be more creative in one’s own life. Along with this, business leaders have lamented that adults entering the workforce are not creative enough (Bloomberg, 2010; Jaschik, 2015).

This fascination with creativity and innovation has naturally trickled down into the field of education as an effort to ensure students are prepared for the real world. The logic is that schools should teach students to be more creative so that they enter the workforce with the skill already developing. A prime example of this trickle-down effect can be seen in the initiatives started by the Partnership for 21st Century Learning (P21). The organization has created a framework for 21st century learning that also identifies support systems for learning (P21, 2007). The group has also sought to identify exemplar schools, that they showcase on their website. Another example of a growing interest in creativity within schools is that the President's Committee on the Arts and Humanities (2011) published a paper entitled, “Reinvesting in Arts Education: Winning America’s
Future Through Creative Schools”. A year after the white paper was published, a partnership was formed between the President’s Committee on the Arts and Humanities, the U.S. Department of Education, and several foundations to support Turnaround Arts. This was an initiative focusing on using the arts in schools deemed low-achieving in order to help them increase their test scores (http://turnaroundarts.pcah.gov).

![Diagram](image)

Figure 1. The intersection of business and educational literature on creativity. Created by the author.

While creativity is a growing interest in both businesses and schools, educational literature has not kept up with the interest at the same rate as business literature. Many questions remain concerning how to define creativity in schools, how to identify creativity in schools and how to grow creativity in students. However, some of these
questions have been addressed in business literature. Therefore, the researcher will draw on research from both fields in order to provide a foundation for the current study. Figure 1 above depicts, in basic form, what business and educational literature have said to date and then highlights a specific place where the two fields can intersect.

When approaching the notion of researching creativity, it is tempting to focus on the individual level by analyzing personality, innate giftedness, intelligence, and thought patterns. However, Csikzentmihalyi (1988) made a strong case for studying the environment around the individual, stating, “To study creativity by focusing on the individual alone is like trying to understand how an apple tree produces fruit by looking only at the tree and ignoring the sun and soil that supports its life” (as cited in Karwowski, 2011, p. 37). Business literature strongly supports the notion that the work environment affects worker creativity. Amabile and Conti (1999) found that changes in a work environment, including downsizing, affected the creative output of the workers, as indicated by a creative climate survey. Martins and Terblanche (2003) created a concept map which sought to associate dimensions of culture such as strategic vision, management processes, leadership and interpersonal relationships with related determinants that influence creativity in the workplace such as purposefulness, open communication, flexibility, freedom, and availability of resources (p.70). This map is useful in that it combines measures of organizational culture with specific behaviors that have been associated in literature with creativity. Additionally, the physical environment in an organization may also influence the climate. In two related studies conducted by McCoy and Evans (2002), the results indicate a possible relationship between perceived creative environments and the creativity of work produced in that space.
An organization’s climate and culture develop over time and are the result of many factors. The head of an organization has the choice of whether to intentionally affect the climate and culture or to allow them to develop on their own. While there is some debate in the literature as to how much of a role leaders can play in changing their organizations, Burke (2008) presents an argument, based both on research and anecdotes, which supports the notion that leaders can have significant influence in regard to changing their organization. In business literature, it is well documented that managers within organizations have the ability to influence employee creativity through the culture and climate (Carmeli & Schaubroeck, 2007; Mayfield & Mayfield, 2008; Shalley & Gilson, 2004).

Amabile (1997), a prominent researcher in the field of creative climates, proposed the componential theory of creativity which identifies management practices as one of the factors that impact the work environment which in turn impacts employee creativity. Further, Amabile, Schatzel, Moneta, and Kramer (2004) identified specific behaviors leaders exhibit that employees perceive as supportive. They also found a positive relationship between perceived leader support and an individual’s creativity. Janussi and Dionne (2003) found that a leader who demonstrates unconventional behaviors is able stimulate followers to produce more creative work than leaders exhibiting other types of behavior, including transformational leadership. Each of these studies shows that there is a relationship between the leader and the formation of an environment that encourages creativity.

Unfortunately, there is significantly less literature regarding the relationship between creativity and a school’s culture and climate. However, there are many articles
that emphasize the importance of a school’s climate and culture with respect to the school effectiveness and higher student achievement (Hargreaves, 1995; MacNeil, Prater, & Busch, 2009). Hargreaves (1995) identified several typologies that can be used to interpret school cultures, but he does not identify an “ideal” type of school culture that can be associated with school effectiveness. He states that this is because the preferred characteristics of a culture will depend on their definition for success. This literature shows that the climate and culture are important to student learning. Therefore is it quite possible that the culture and climate are also important influences regarding the specific skill of creativity. However, this area remains relatively unexamined by researchers.

There is some educational research that focuses on culture, climate, and influencing student creativity, but the studies concentrate on teachers and the classroom level (Davies et al., 2013; de Souza Fleith, 2000; Karwowski, 2011). While teachers do have a more direct, measurable impact on students than school leaders, it does not mean that principals cannot impact student learning, including creativity. In terms of influencing student learning and achievement in general, research has shown that principals have many options, though most of their influence is indirect. In fact, Leithwood, Louis, Anderson, and Wahlstrom (2004) found that in terms of student achievement and school-related factors, classroom instruction is the only thing with a greater impact than the school leadership. Their study has strong implications with respect to the importance of the role of the principal and the principal’s ability to influence the entire school through leadership activities.

An area where school principals can have a more direct impact is through the school’s culture and climate (Deal & Peterson, 1990; Sebastian & Allensworth, 2012).
Leithwood and Jantzi (1990) found that principals were capable of shaping a school’s culture in order to develop specific traits such as collaboration and teamwork amongst staff. Another study discovered that the culture of the school, including a principal’s leadership, has a significant amount of influence on a teacher’s job satisfaction (S. M. Johnson, Kraft, & Papay, 2012). This study also showed that job satisfaction is related to student achievement where teachers who report high satisfaction with their work environments have students who experience a higher rate academic growth. Hallinger, Bickman, and Davis (1996) found an indirect relationship between principals and student reading achievement through their influence of the school’s culture. These studies indicate that principals can influence the climate and culture of the school, which in turn affects teachers and their classrooms and therefore student achievement.

**Purpose Statement**

In summary, research within organizations has shown that the culture and climate effects employee creativity and managers are an important influence on the work environment. Research in the area of education supports the notion that principals impact student achievement indirectly and one of the ways to do that is through shaping the climate and culture of the school. What if these two ideas are combined? What does it look like when a school principal fosters a school culture and climate where creativity can thrive? If the business and educational literature are paired, it seems quite possible that a principal can shape the culture and climate in a school in order to encourage creativity. Yet, the research in this area is almost nonexistent. For example, a systematic review of literature concerning creative learning environments by Davies et al. (2013) yielded 210 related articles. However, none of the research included in their review
discussed the role of the principal. Therefore, research is needed in order to begin to address this gap in the current literature. Due to the lack of empirical research, the purpose of this study was to understand how one international school principal seeks to foster a school culture and climate where creativity can thrive.

**Study Importance**

Studying how one school principal nurtures creativity in a school is important for several reasons. First, this is an area that is relatively unexplored empirically, but it is an area of concern within the contemporary school setting. In this way, the study will assist in closing a gap in the literature. While it is possible to infer that principals can shape the climate and culture of their schools to foster creativity. Yet, this conclusion yields further questions. What does it look like when principals try to create a climate and culture that encourage creativity? How do they act? What steps do they take? Why do they do what they do?

This is a critical area to understand. Most school principals will acknowledge that creativity is important, but there is little instruction concerning how to go about encouraging creativity. It is possible that many principals feel hindered in their efforts due to perceptions of their own lack of creativity, a feeling that Kelley and Kelley (2013) suggested is common in adults. Conducting research about how specific principals shape the culture and climate of their schools in order to encourage creativity has the potential to yield findings that could be applied by other principals. This study can be viewed as part of a substructure to support further research so that principals in the field can learn how to encourage creativity in their own schools.
In order to add to the literature concerning creativity in schools, I felt that it was important to look at how principals relate to the creativity in the school. Amongst the dissertations and articles reviewed on the topic of creativity in schools, either a theoretical framework was not offered or theories were borrowed from organizational literature. While tapping into the latter is not inappropriate, I feel strongly that frameworks from within the field of education should, at least in part, guide a study that takes place within a school. I believe that it is important to investigate the role of the principal in relation to creativity in a school in order to add to the literature concerning creativity in schools. Specifically, I think it is important to investigate not only what processes the principals use, but also what guides their thinking and reasoning. This is because principals have the ability to impact the entire school whereas a teacher’s influence is generally confined to the classroom level. This concept and its relationship to creativity will be discussed both in the frameworks below and in chapter two.

Three frameworks were used to guide different sections of this study. Since there is not currently a framework that encompasses principals, the role of the school environment, and creativity, I opted to combine two frameworks in order to guide the planning and implementation of this study. One of these frameworks is from the field of education and one is from business literature. The first is the Mediated Effects with Antecedent Effects Model by Pitner (1988), a model that demonstrates the indirect relationship between the principal and student achievement. The second is the Componential Theory of Creativity by Amabile (1983, 1997), which shows a relationship between the work environment and employee creativity. The final framework, Leadership
Behaviors to Promote Garden Variety Creativity by Mayfield and Mayfield (2008), was used to guide the writing of the interview protocols that will be used during the study. In the following sections each of these frameworks will be discussed in more detail. The combined framework will also be discussed.

**Mediated Effects with Antecedent Effects Model**

Pitner (1988) outlined five different models that researchers can use to study the relationship between principal leadership and student achievement. Two are devoted to a direct, linear relationship between the principal and student achievement. One of the direct models is a simple relationship of principal leadership to student achievement. The second direct model adds in antecedent variables that effect both principal leadership and student achievement, but this model retains the direct relationship between the principal and student. Two other models focus on mediated effects, meaning that there are variables between the principal’s leadership and student achievement. One shows a direct relationship of principals to intervening variables to student achievement while the second places antecedent variables as influence each of the other categories (a) principal leadership, (b) intervening variables and (c) student achievement. The final model shows a reciprocal relationship where principal leadership, intervening variables and student achievement all influence one another. This last model contrasts with the others in that the arrows of influence go both directions.

For this study, I selected the fourth model that was described and is shown in Figure 2. This model was selected because it relates well to the assumptions that I make in the study. It shows an indirect influence between the principal and student achievement, which is supported by educational literature. Within this study, the
The intervening variable I have selected to focus on is the culture and climate of the school. As briefly discussed in this chapter and further detailed in chapter 2, research supports that principals can influence students through the culture and climate. Additionally, this model recognizes that there are antecedent variables that influence each component. While principals are able to influence students, they are not the only variable and I believe this is an important truth to recognize.

![Mediated Effects with Antecedent Effects Model](image)


**Componential Theory of Organizational Creativity and Innovation**

Amabile (1983, 1997) proposed this theory as a way to understand how the work environment influences individual worker and group creativity. Figure 3 shows three areas of the work environment, (a) resources, (b) organizational motivation, and (c) management practices impacting individual/team creativity in the areas of (a) task motivation, (b) expertise, and (c) creativity skills. This theory was used as the basis for a survey instrument that Amabile, Conti, Coon, Lazenby, and Herron (1996) created, called the KEYS to Innovation, that assess employee perceptions of the work environment in relation to creativity. Amabile (1983, 1997) componential theory is meaningful and often referenced in studies concerning creativity because her research has shown that the environment impacts creativity, countering the idea that one should just study the individual. Additionally, the theory implies that with the correct influences and overlaps,
anyone can show some level of creativity (Amabile, 1997).

I selected this framework to guide the study because it shows how management practices can impact creativity. When applied to this study, it can show that principals are a part of the school’s environment, which impacts creativity. Additionally, this framework is complimentary to Pitner (1988) model described above because both frameworks support the notion of leadership influencing the environment, which then influences creativity.

Combined Framework

For this study, I combined the two frameworks as a way to focus the area of inquiry, which is shown in Figure 4. This framework is not meant to provide a full explanation of the events that occur within a school that encourage creativity. Instead, my framework helps focus study by specifying what areas will and will not be considered. As a result of framing my research using models by Pitner (1988) and Amabile (1983, 1997), I recognize a chain of influence as well as the fact that principals are not uniquely responsible for influencing the culture and climate of the school and students.

Grayed boxes in Figure 4 indicate the areas I intend to explore in this study. This study will focus on the specific antecedent of “attributes” of a school principal. It will look at the relationships between the attributes and the principal and in turn how the principal influences the specific intervening variable of the school’s culture and climate. The entire focus of the study will be on how each of these areas relates to encouraging creativity. For this study, I selected to not consider how other outside variables influence the culture, climate and student achievement. This would result in a very large study and as there is little research in the area, I believe that it is important to first conduct focused, deeper research that can then be built upon. I also opted to not study creative outcomes, of either students or teachers. There is currently not an instrument available that reliably assesses whether teachers and/or students are producing creative work. There is the KEYs instrument created by Amabile et al. (1996), however it assesses perceptions of the environment and not actual outcomes. Therefore, this section of the framework will not be addressed by this study.

I see this final framework as a guide that shows me how to think about the study.
It guides my research questions, my data collection and the analysis. It also provides a familiar, meaningful vocabulary to use when discussing the current study so that it is more accessible by others interested in creativity and education.

Figure 4. Combined Guiding Framework. Note: This figure illustrates the combination of Pitner’s (1988) and Amabile’s (1997) models as a combined guiding framework.

Leadership Behaviors to Promote Garden Variety Creativity

In addition to the two frameworks that guided the design of the study, the instrument design was in part based on the work of Mayfield and Mayfield (2008). Through a review of the literature, they created a framework identifying leader behaviors that encourage creativity. It is depicted in Figure 5. The framework has five categories of behaviors, (a) coaching, (b) securing resources, (c) motivating, (d) goal setting, and (e) feedback. The authors point out that leaders exhibiting a combination of these behaviors will not guarantee creativity, but instead that the behaviors create an environment where creativity is more likely to flourish. As my study focuses on what principals do in their schools to encourage creativity, I believe that this framework fits well with the desired outcomes of the study. This framework was used during the initial screening process for participants as well as the design of the interview, observation and focus group protocols. How the framework influenced instrument design will be discussed in more detail in chapter 3.

Research Questions

The role of the principal was selected as the focus of this study and the setting selected was a single case of an international school principal at the elementary level. An international school setting was selected due to fewer regulations than American public schools and due to their availability to the researcher. A principal at the elementary level was an outcome of the participant selection process. Please refer to chapter three for a more detailed rationale and description of the setting of the research study. With the purpose of the study and the setting in mind, four research questions were composed to
1) What are the attributes of an elementary international school principal who is seeking to foster a school culture and climate where creativity can thrive? This question was drawn from the first box in the guiding combined framework. It paid attention to the beliefs, values, life experiences, worldview, and defining characteristics. In simple form, this question asked, “what is the principal like?”

2) How does this principal describe her efforts to foster a school culture and climate where creativity can thrive? This question reflected the second and third boxes of the combined framework. It focused on the principal’s influence on the culture and climate through her behaviors and actions. This question also sought to discover intentional acts by the principals. Only the principal herself can indicate intentionality. Others can simply observe what happens and confirm or deny the outcomes. It is impossible to know whether someone acted a certain way on purpose without asking them.

3) How does the principal’s attributes relate to her described efforts? This question follows the entire combined framework and sought to look at the relationship between espoused attributes and actions. The model proposed by Pitner (1988) indicates that there is a relationship between antecedents, the principal and then their leadership in the school. Therefore, it is important to acknowledge the influence attributes have on leadership behavior. Additionally, it is critical to see if and how the first two questions tie together, especially for the applicability of the research. It would not help another principal to foster creativity if it was found that the attributes and efforts
of the principal in this study did not align. As this question pairs the first two together, it helps to create a full picture of what the relationship looks like between a principal’s attributes and leadership.

4) How do the teachers in the school perceive the efforts of their principal to foster a climate and culture that encourages creativity, both for them and their students? This question was primarily for triangulation, though it was possible that it could add new data. It is beneficial to examine if the teachers perceive the principal is doing what she says that she is. In other words, is the principal achieving her desired end? This question provided a new perspective and tied creativity more directly to the students. It also allowed for hindrances to creativity and suggestions for improvement can be explored, as perceived by teachers.

**Study Design**

The purpose of this research is to understand how school principals foster a culture and climate within their school where creativity can thrive. I selected a single site case study design that uses mixed-methods. The sample consisted of one international school principal who was identified as encouraging creativity in her school. The study focused on the role of the principal in creating a school culture and climate that encourage creativity. What does it look like when this principal tries to create a climate and culture where creativity can thrive? How does she act? What steps does she take? Why does she do what she does? My primary interest was in the behaviors and actions of the principal and a secondary interest was in the reasoning behind the actions. Together, these clarifications show that I am interested in intentional behaviors and actions, not
those that are only a byproduct of personality traits. While personality certainly factors into behavior, personality is not something that is generally changeable.

While the details of the study design will be explained in chapter three, here a brief overview of the study methods is presented. As the focus of the study was on the role of the principal, the principal was the unit of analysis. In this way, all of the data collection focused on the principal. Primarily due to difficulty in finding participants who were qualified for the study, the research was conducted as a single site case study of one international school principal at the elementary level. Data collection included in-depth interviews with the principal, the collection of documents that the principal authored, observations of the principal as possible, and interviews with several other stakeholders. Additionally, a survey of the teachers in the school was given to evaluate their perceptions of the principal’s actions and teacher focus groups were conducted in order to supplement the survey data. Transcripts were made of all interviews and focus groups while field notes were written during observations. Analysis of the qualitative data was conducted inductively where the narratives were coded for themes. These themes were then explored for relationships and a final visual is presented in chapter four. The quantitative data, which was the teacher survey, was analyzed using basic statistical methods and reported in a descriptive in nature.

**Summary**

This chapter has introduced the idea of increasing creativity in schools. It was shown that business literature has revealed both the importance of the culture and climate as well as the role of a manager in encouraging creativity. However, there is very little research concerning creativity in schools or the influence that a principal may have in this
area. However, there is research that supports the idea that principals can influence the culture and climate of the school. It is therefore assumed that it is possible for principals to influence the culture and climate of a school in order to encourage creativity. This study seeks to illuminate this area by conducting a multiple case study of principals in order to examine how they go about encouraging creativity in their schools through shaping the culture and climate. While some literature was discussed in this introduction to the study, the following chapter will further delve into the concepts of creativity, culture, climate, and the role of the principal.
Chapter 2

Literature Review

This study investigated how one international school principal goes about fostering a school culture and climate where creativity can thrive. It was previously introduced that creativity is a growing field of interest and that there is a good amount of literature in the business field concerning work environments that support a creative culture and climate. However, it was also discussed that there is very little literature directly related to this topic in the field of education. This chapter will take each of the ideas presented in chapter one and expound upon them through a thorough review of the literature. Definitions of terms will be included within the literature review. Prior to the discussion of the literature a short explanation of how this literature review was conducted is presented. This chapter is organized conceptually and will discuss the following themes: creativity, the importance of culture and climate to creativity, a leader’s influence on a culture and climate for creativity, and a school principal’s influence on the culture and climate. The chapter will end by setting forth implications of the reviewed literature and explain how the current study will contribute to the current body of research.

Conducting the Literature Review

The purpose of this literature review was to synthesize and evaluate research related to the topics of creativity, creative cultures and climates, the role of a business manager in workplace culture and climate, and the role of the school principal in influencing a school culture and climate. Throughout the review larger generalizations are made and holes identified that exist within current research. This review focused on
empirical literature, but will also cite contemporary books, new articles and opinion pieces as they pertain to the subject. A few articles of opinion were cited in relation to defining terms. All journal articles were distributed in peer-reviewed publications.

This review was conducted through the use of a variety of sources. Databases, such as EBSCOhost and Academic Search Complete, were used to locate many of the articles. Searches for additional literature were conducted through Google Scholar and the general search function within the University of Kentucky libraries system. Using these sources provided access to peer-reviewed journal articles as well as books and news articles. Search terms were numerous and included combinations of innovation/innovative, creativity/creative, schools, organizations, businesses, leaders, principals, culture, and climate. A few examples of the combinations are (a) creative climate, (b) innovative school principals, and (c) creative cultures in organizations.

Qualitative and quantitative studies were included in the review as well as systematic literature reviews as long as they pertained to the subject matter being investigated.

Discussion of Creativity

As discussed in the first chapter, it is common to see the terms creativity and innovation used when reading news headlines about current successful organizations and schools. Articles vary in focus, but it is not unusual to see the leader of an innovative company quoted, a profile of a creative school or a list of characteristics of creative people. Yet, the terms creativity and innovation are rarely defined within articles, especially within the context of organizations and schools. This does not mean that scholarly literature has not sought to define the term. There are in fact many definitions of creativity, though there is considerable overlap within those definitions (Plucker,
Kaufman, & Beghetto, 2015). In this section, the term creativity will first be defined and its nature explored. Then the discussion will turn to creativity within the context of organizations, schools, and leadership.

**Definition**

Plucker, Beghetto, and Dow (2004) detailed several questions and myths related to defining creativity within the context of educational psychology, concluding that many of the problems related back to the lack of a clear definition for the term. They explored a variety of definitions within related literature and compared ideas in order to come up with their own definition, “creativity is the interaction along aptitude, process and environment by which an individual or group produces a perceptible product that is both novel and useful as defined within a social context” (Plucker et al., 2004, p.90). When referring to organizations, Talbot (1997) defined creativity as “making a change that sticks (for a while)” (p. 181). Puccio, Mance, and Murdock (2011) added that creativity is “the production of original ideas that serve some purpose” (p. 13). In the context of creative products, Amabile (1983) stated they were “a product or response will be judged as creative to the extent that (a) it is both a novel and appropriate, useful, correct, or valuable response to the task at hand and (b) the task is heuristic rather than algorithmic” (p. 360). For use in an assessment instrument, Amabile et al. (1996) defined creativity simply as “the production of novel and useful ideas in any domain” (p. 1155). While the word choice and context of the definitions vary, almost all of them include the idea of something that has not been seen or made before that is also functional in relation to a context. This means that creativity is judged, in part, based upon the environment which surrounds it (Plucker et al., 2015). For the purpose of this study, creativity will be defined
as “the generation of ideas that are new and useful within the context where they were generated.”

It is necessary to briefly discuss creativity in relation to innovation. The terms are often used synonymously, especially in non-empirical literature. Due to the equivalent usage of the words they were each used as search terms while this literature review was conducted. However, the terms are distinct. As described above, creativity centers on idea formation, usefulness, and context. However, innovation is related to translating ideas into something that can actually be used (Amabile et al., 1996; Hunter, Bedell, & Mumford, 2007). Thus, creativity is conceptual whereas innovation deals with processes.

**Nature of Creativity**

Most often creativity is associated with traditional art forms. While the visual and performing arts are a place known openly encouraging creativity, it is certainly as equally important in other fields. Yager (1989) considered creativity to be important in science education. In their study comparing artwork by Chinese and American students, Niu and Sternberg (2003) found that the work by American students was judged as more creative by both Chinese and American judges. The authors suggested three factors which could influence the creative differences, including (a) social values, (b) educational practices within the school, and (c) emphasis on standardized tests (Niu & Sternberg, 2003).

While some people seem to have more natural creative tendencies than others, the ability to think creatively is also something that can be taught (Hargrove, 2012; Lin, 2011). Sternberg and Lubart (1991) believed that creativity is not just within the nature of a person, but that it can also be nurtured. In their opinion piece, the authors identify six areas that can be used to support the growth of creativity: (a) intelligence, (b) knowledge,
(c) intellectual style, (d) personality, (e) motivation, and (f) environmental context. The authors stated that creativity is not the function of one thing, but instead the result of several elements working together and therefore they advocate that schools work to purposefully develop creative traits in students such as divergent thinking, teaching knowledge for use instead of knowledge for exams, and risk-taking (Sternberg & Lubart, 1991). Taking the possibility of growth a step further, Sternberg and Williams (2003) argued that it is important for a person to continue to develop creatively instead of reaching a certain level of achievement and then becoming comfortable, thus ceasing to grow. For Sternberg and Williams, growth is comprised of continually encountering new ideas, taking risks and striving to think “outside-the-box.”

**Creativity in Organizations**

In a short review of how creative and innovative businesses are identified in news articles, I found that each media outlet used different measures. For example, Forbes used an algorithm that anticipates a company’s income and compares it to the company’s current value in order to determine their annual list of innovative companies (Dyer & Gregersen, 2015). The Boston Consulting group determined their list by surveying 1,500 senior-level executives and weighting the scores (Ringel, Taylor, & Zablit, 2015). Finally, Fast Company used computer software to scan articles, blogs, and patents. They then used reporters to supplement the data output from the software to determine their 2016 list of innovative companies (Fast Company, 2016). There are not any published lists of top creative companies; all articles found used the term innovative. As can be seen, there are many different ways that creativity and innovation is evaluated within an
organization. The following two sections will seek to define creativity within an organization and to describe what creativity looks like within an organization.

**Definitions.** A definition for a creative organization is not provided in the literature, however dimensions of them have been described and studied. Additionally, there is no agreement among scholars concerning what the primary characteristics of creativity in an organization are due to the complexity of the topic. Some researchers even used different indicators for creativity and innovation in an organization within the same study. For example, Wineman, Hwang, Kabo, Owen-Smith, and Davis (2014) identified separate factors to judge innovation for each of the three organizations in their study. For two of them, the researchers used items such as number of patents awarded or publications. For the third organization, the researchers were unable to list specific factors due to the project-based nature of the work (Wineman et al., 2014). A definition and specific criteria were also lacking from the study of Argentinian nonprofits by Jaskyte and Riobó (2004). They sought to identify characteristics of innovative organizations through gathering the perceptions of employees. The sample was selected by contacting a graduate program for recommendations of organizations and then participants were selected for interviews through a snowball technique. Jaskyte and Riobó (2004) admitted there is not a set definition for the term *innovative organizations* and thus did not seek to define it themselves or set up parameters on which to base their participant selection. Furthermore, the findings revealed a lack of agreement concerning a general understanding of what innovation is and what it looks like within an organization. Instead they found that differences of opinion varied across the type of organization and the job of the person interviewed (Jaskyte & Riobó, 2004).
**Descriptions.** In terms of describing creative organizations, most articles focus on a few characteristics instead of aiming to describe a comprehensive understanding. While there is some overlap in the various lists such as a concern for employees and the work environment, there is little agreement concerning a full description of what a creative or innovative organization is.

Popular websites and magazines have published lists such as “10 Practices from the Most Innovative Organizations” (Burkus, 2013) and “Building a Creative Organization” (Arnold, 2010); Burkus (2013) cited a survey study as the source for his list that includes the use of technology, an “idea-finding” program, training for creativity and associating innovation and compensation. Arnold (2010) proposed a four-part framework for organizations to use in building creativity, (1) knowing everyone is creative, (2) implement a creative process, (3) products tied to the consumer and (4) organizational climate. In an interview, Linda Hill of Harvard Business School stated that innovative organizations are ones that have mastered “creative abrasion, creative agility, and creative resolution” (Cook, 2014, para. 22). She explained that creative abrasion is about workers participating in debates and dealing with diverse ideas. Creative agility is about experimentation and reflection. Creative resolution is when an organization seeks to resolve problems that come up in win-win fashion instead of through compromise. Ripley and Ripley (1992) focused on empowerment as a key part of innovation in organizations. The authors stated that empowerment is a management strategy, includes leaders providing a mission and vision for the organization and identify self-managing teams as one indicator of empowerment within an organization.
Relatedly, there have been several research studies that deal with organizational creativity and their physical space. McCoy and Evans (2002) conducted a two-part study concerning physical environments. First participants rated photographs of rooms based on how creative they thought they would be in that space. An analysis of the preferences suggested that people prefer environments with views of nature, visual details and warm colors when considering creative potential. In the second part of the study, McCoy and Evans (2002) conducted two types of creativity tests, the Torrance Test for Creative Thinking (TTCT) and a collage-making exercise, in two different spaces. One space was rated highly for potential creativity and one rated low for creative potential in the first part of the study. While the results were mixed concerning the TTCT scores, much higher creativity scores for the collages came from the room rated with the higher creativity potential (McCoy & Evans, 2002).

Building on an organization’s physical space, the arrangement of a building can also influence creativity in an organization. Wineman et al. (2014) studied how the arrangement of the physical space in three separate organizations influenced the ability of workers to network and share ideas. They found that how people were related to one another in terms of distance and walking patterns affected their ability to be innovative. It is interesting to note that the variables that influenced the workers were different for each of the organizations they studied. In two of the organizations Wineman et al. (2014) found that employees closer to high-use spaces were more likely to produce innovative work, but in the third organization the opposite was true. As their study was only of three organizations that were each in different fields, their results cannot be generalized to a larger population. They could hint at how creativity may look different in each
organization and that there is not a one-size fits all approach to encouraging creativity in the workplace. Nonetheless, the results are interesting and warrant further investigation.

Creativity in Schools

There is significantly less literature on creative schools when compared to creative organizations. Fasko (2001) traced the history of thinking in regard to creativity in schools from 1950-1990s and concluded that more research should be done in the area of creativity in terms of learning styles, student interest and teacher attitudes. There are relatively few articles that discuss schools as creative in the general sense and even fewer seek to define creativity. Tubin (2008) seemed to define innovative schools as ones that are new and “established based on novel pedagogy” (p. 651). While Giles and Hargreaves (2006) did not explicitly define innovative schools they imply a similar definition in the introduction of their study. In their article innovative schools are described as new schools that were created purposefully to break from the traditional mode of schooling while generally subscribing to a specific idea such as student-centeredness, orientation toward community or emphasis on collegiality (Giles & Hargreaves, 2006). Another way that schools are referred to as innovative in the literature is if they are implementing information, communication and technology (ICT) programs (Sharija & Watters, 2012). The underlying assumption from these articles seems to be that using technology in schools is innovative, however an explicit explanation is lacking.

Importance of Culture and Climate to Creativity

Similar to the terms creative and innovative, climate and culture are often used interchangeably in literature. However they are distinct concepts. Gruenert (2008) likens the climate to attitude and culture to personality. Within an organization, both culture and
climate are present; they are interdependent, but they are also different. The following sections will define the terms culture and climate. Then literature regarding the relationship between the culture, climate, and creativity will be discussed within both the context of organizations and then P-12 education. It will end by exploring literature related to studio culture at the university level, which is a special subset of the learning environment and a place where creativity is emphasized.

**Defining and Differentiating Terms**

The climate of an organization will be dependent upon its culture, however it is possible to change one and not the other. Gruenert (2008) described the climate as the “collective mood… of a group of people” (p. 57). Hoy (1990) referred to the climate as “the set of internal characteristics that distinguishes one school from another and influences the behavior of its members” (p. 152). The National School Climate Center (2016) website added that school climates are built upon the experiences of each group of stakeholders, including parents, students and school staff. For the purpose of this study, climate will be defined as the way an organization feels, both to its members and to those outside. While it is possible for individuals to feel differently about the same organization, there is often a shared attitude that is perceived by those that interact with the organization. This is the climate.

Similar to climate, there are many definitions for culture that can be found in the literature. The simplest is perhaps by Deal and Kennedy identified a simple definition, “the way we do things around here” (as cited in Bolman & Deal, 2003, p. 243). Culture embodies assumptions and unwritten expectations held by members, it is seen through actions and interactions, and is also passed onto new members (Gruenert, 2008; Martins...
Hoy (1990) stated that there is disagreement over what is shared within an organization’s culture, but that what is shared holds the organization together and provides its identity. This study defines an organization’s culture as a set of beliefs, norms, and values embraced by it. Culture often affects the climate by informing members how they are to feel or what attitudes they should have regarding certain situations. Culture has deep roots due to the established pattern of behaviors (Deal & Peterson, 1990) and is much more difficult to change than the climate (Gruenert, 2008).

**Culture and Climate in Organizations**

In order to help describe creative organizations, it is helpful to also explore the description of climates and cultures that encourage creativity. The logic in this examination is that a culture and climate that encourage creativity will bring forth organizations that are creative. Perhaps due to this thought flow, most of the literature concerning creativity and organizations is focused on the culture and/or climate. Martins and Terblanche (2003) completed a literature review to discover what characteristics of an organization might promote creativity and innovation. They proceeded to create a concept map where they paired dimensions of organizational culture with dimensions that influence creativity. Their work is interesting because it sought to combine the literature concerning creativity and literature about organizational culture. However, it is of note that much of the literature they reviewed was theoretical itself and only a small percentage of the reviewed literature was empirical.

When discussing the climate of an organization in relation to creativity it is important to discuss the influential work of Amabile. Several studies and articles were written which advocated for looking beyond individual factors that influence creativity.
and then proposed a framework that combines worker motivation, personal factors, and environmental characteristics each as influencers to creativity (Amabile, 1983, 1997). This framework was termed the Componential Theory of Organizational Creativity and was used as one of the guiding frameworks for this study. The Componential Theory was then used as a starting point to develop a creative climate assessment known as the KEYS® (Amabile et al., 1996). During the development of the KEYS instrument, which was designed to assess employee perceptions of workplace creativity, Amabile et al. (1996) determined which areas of an organization stimulate and hinder creativity. The areas identified as those that stimulate creativity were: (a) the organizational culture, (b) supervisor encouragement, (c) support within the workgroup, (d) availability of resources, (e) challenge and (f) autonomy. The areas identified as hindering creativity were (a) issues within the organizations culture and (b) negative workload pressure. The KEYS assessment measures levels of creativity and productivity through employee self-reporting. The KEYS is a way to assess whether the employees within an organization feel that it is creative as a whole as well as whether they are comfortable with personally being creative.

This is different from other creative assessments that only look at an individual’s creative thinking. When testing the validity and reliability of the KEYS, Amabile et al. (1996) found that employees report different perceptions of a work environment when working on project that is highly creative versus one that is lowly creative. Overall the KEYS assessment is considered a highly effective way of determining whether employees believe that the organization is creative (Mathisen & Einarsen, 2004).
**Culture and Climate in P-12 Schools**

The search for literature related to schools, culture, climate and creativity yielded more articles than a general search for creative schools. Sternberg and Lubart (1996) identified six areas that advance creativity in students, including the environment around them. The authors also stated that, for the most part, schools do a poor job at creating environments that arouse creativity. Perhaps the most comprehensive resource regarding creativity in schools is a report on creativity and innovation in the member states of the European Union (Cachia, Ferrari, Ala-Mutka, & Punie, 2010). The report detailed a rigorous, multi-year research project that included a literature review, analysis of each European Union member state’s curriculum for the terms creativity and innovation, workshops, in-depth interviews with experts, and a teacher survey. The report identified eight areas of enablers, or things that increase the likelihood that creativity and innovation will occur: (a) assessment, (b) culture, (c) curriculum, (d) individual skills, (e) teaching and learning format, (f) teachers, (g) technology, and (h) tools. The report also stated that the presence of all or most of the enablers does not guarantee creativity, but instead paves the way for it be to more likely to happen. The claim that the presence of certain factors or behaviors in the environment are make it more likely for creativity to occur was also made by Mayfield and Mayfield (2008) in reference to leader behaviors. This framework was reviewed in the first chapter as a framework that guided the participant selection process and interview instruments for this study. Finally, the report by Cachia et al. (2010) stated that the culture of a school dictates “which types of learning are considered valuable and encouraged, which types of teaching are expected and supported and whether people and schools are open-minded about trying and
developing different ways of learning and teaching” (p. 40). This statement provides a strong argument for considering the culture when looking for creativity in a school setting.

Dai et al. (2012) found that students from high and low socioeconomic backgrounds experience not only a well-researched academic gap, but also a creativity gap. However, their study did not separate out parental education levels and other out-of-school environmental factors from school characteristics, so a direct linkage between school environment and creative development was not shown. Nevertheless, their study does demonstrate that environmental factors play a part in a student’s creative development. Kim and Hull (2012) studied high school dropouts to see if there was a relationship between creative preferences and leaving school. Their results indicated that students who are more creative are more likely to drop out of school. Using the reasons students provide for leaving, such as a dissatisfaction with school rules and teacher behavior, it is possible that creative students who drop out are dissatisfied with the school environment. This could indicate that the lack of a creative climate and culture can have an adverse effect on student learning, but more studies should be completed before conclusions are drawn.

**Culture and Climate in the Studio**

Studies are courses where large projects are given and then students have a portion of, or perhaps the entire, semester to complete the assignment. These courses require students to create a project related to their field, such as a piece of artwork, a complete blueprint or a scale-model of a building designed by the student. When projects are completed, the class typically participates in a critique where the professor and
sometimes other students comment on one another’s work before receiving a grade. In this way, the studio experience is very different from the regular academic classroom of lectures, note-taking and written tests. Participating in a studio is a common experience for university students in fields such as architecture, design and visual art, one that focuses on acquiring skills through practice (Schön, 1984).

A studio course is an immersion into a culture where creativity is a main concern. If planned well, the studio will be a place where creativity is at its height due to the promotion of factors that enable creativity and diminishing of those that hinder it. In the past 15 years, interest has increased concerning studio culture, especially within the field of architecture. Architecture can be viewed as a unique field since its practitioners are required to straddle the academic divide between rationality and artistic design since the end product is supposed to be both artful and practical (Schön, 1984, 1988). Several task forces were created by the American Institute of Architecture Students (AIAS) to explore what studio experiences were like and how they could be changed. In 2002 a report was released citing a general negative view of studio culture and issuing a challenge to create a more positive culture within the studio setting (Koch, Schwennsen, Dutton, & Smith, 2002). The report defined studio culture as “the experiences, habits, and patterns found within the architecture design studio” (p. 3). It identified a pattern of negative culture which had developed within studios including heavy workload, lack of change to keep up with current trends and an emphasis on solo work resulting in competition between students. At the end the authors propose that five values be adopted in the studio (a) optimism, (b) respect, (c) sharing, (d) engagement and (e) innovation.

Following the call to rethink studio culture, the AIAS held a summit in 2004.
Included in the overview report was a chart that outlined the steps for several professional architect associations to take in order to improve studio culture (Kellogg, 2004). One of the steps was the National Architectural Accrediting Board (NAAB) would begin to require programs to include a written policy about studio culture in their application starting in 2004. After the requirement was implemented, a second task force surveyed accredited programs (28% response rate) and found that 91% of the responding programs had implemented studio culture policies (AIAS Task Force on Studio Culture, 2008). It was also reported that improvements had been made to develop positive studio cultures, but there was still much room for growth. As one of the task members, Ava Abramowitz emphasized, “As studio culture sets the framework for architect learning and collaboration, the act of creating that culture must be conscious and continuous” (AIAS Task Force on Studio Culture, 2008, p. 5).

Today most accredited architecture programs list a studio culture policy on their website. However, the NAAB and AIAS have not provided specific recommendations concerning what programs should include in their policies on studio culture. The norms, values and procedures are decided within each individual program. In an effort to distinguish any similarities within the policies, I completed a quick review of the ones from the top 10 undergraduate and graduate architecture program as identified by ArchDaily, a well-known information source for architects (Rosenfield, 2015). While each school’s policy is unique, the most often listed characteristics, with three or more mentions, were (a) commitment to the design process, (b) health and safety, (c) respect, (d) time management and/or life balance, (e) collaboration and (f) academic integrity.

The AIAS task forces are not the only researchers exploring the notion of studio
culture. Schön’s work is cited throughout the AIAS reports although he does not always speak directly about culture. It was his belief that studio teachers should teach students to be reflective throughout the design process (Schön, 1984). By reflective, he emphasized the need for students to be able to experience learning through experimenting and possible failure (Schön, 1984; Wang, 2010). In a later article, Schön (1988) contrasted the studio with a typical academic view, commenting that a culture of reflective practice should be distinct from the positivist academic culture. He envisioned the studio as a place where the professor is a coach aiding students in thinking about their designs and working through problems that may arise during the process. Schön (1988) singled out the leader of the studio as important, stating “the coach’s ability to avoid or dissolve learning [issues] depends on the behavioral world he helps create” (p. 6).

Wang (2010) advocated for a more intricate way of viewing architecture and the studio culture. Instead of just embracing the arguments presented by Schön (1984, 1988) concerning a more subjective nature or making architecture more rigorous by leaning toward positivism, he suggests embracing a paradigm of complexity. Wang presented several features of studio culture that he believes are important, such as (a) collaboration, (b) tolerance of ambiguity, (c) creativity, (d) physical materials, and (e) emotional connection to the work. Brown and Godlewska (2014) wrote a short article for ArchDaily citing a lack of real change during the 10 years following the AIAS initiatives. The authors then provided their own list of principles that should be adopted by studio cultures including (a) agency, (b) balance, (c) flexibility, (d) diversity, (e) interactivity, (f) interdisciplinarity, and (g) sustainability. Many other researchers have focused on a specific aspect of studio culture such as collaboration and communication (Vyasad, Veer, &
There is no one set list of desirable studio culture characteristics. While perhaps frustrating, the lack of agreement within the field of architecture also reflects how each culture is unique. This is not a surprise since organizational cultures are generally distinct from one another (Bolman & Deal, 2003). This concept of differences between organizations was also mentioned previously in the section on creativity in organizations. The idea in both places is that creativity or culture will look slightly different in each organization due to the uniqueness of each place. Despite the lack of consensus regarding positive studio cultures, many of the characteristics mentioned in the review above are repeated and have applicability to creative cultures in a school setting.

**Leader Influence on a Culture and Climate for Creativity**

This next section continues the discussion of culture, climate and creativity by specifically looking at the role of the leader. It is assumed that leaders in organizations have the ability to influence the culture and climate. Therefore, the following sections will review literature regarding both leadership with organizations and school leadership.

**Organizational Leadership**

Studies concerning leadership and creativity are quite varied in terms of definitions, type of organization, and what about the leader is studied. Sometimes it is the characteristics of the leader while other times the studies focus on outward behaviors. For example, Amabile (1983, 1997) included management practices as one of the three influences on the work environment in the Componential Theory of Creativity. A literature review by Mumford, Scott, Gaddis, and Strange (2002) pointed out that traditionally the leader has not been considered in light of creative work and instead
creativity has been solely associated with workers. However, they proposed that leaders of creative people are active in producing creative ideas, though in a different form than their employees. It is necessary for leaders to orchestrate the ideas and the organizational setting so that the two work together and this is achieved through evaluating ideas and providing thoughtful feedback (Mumford et al., 2002). With their literature review, Mumford et al. (2002) showed that leaders are responsible both for creating an environment where creativity flows and responding creatively to the ideas presented to them.

**Leader attributes.** The attributes of a leader are many. There are descriptive data such as gender or age as well as more abstract qualities such as espoused beliefs and personality traits. A question that often comes up in research is, do these characteristics make a difference within an organization? In short, the answer seems to be that a leader’s traits do matter. However, there is debate over which attributes matter most, or at all, when it comes to creativity. Yan, Chuan-Hoo, Hock-Hai, and Tan (2006) found that a Chief Information Officer’s (CIO) characteristics, including both demographic and personality factors, accounted for 63% of the variance concerning the organization’s innovative use of information technology. This was after accounting for organizational differences such as size, budget and age of the department.

Mathisen, Einarsen, and Mykletun (2012) chose to study both leader traits and leader behavior. They examined how a leader’s creativity might predict organizational creativity through examining restaurant chefs and their employees. Data analysis indicated a positive correlation between a leader’s behavior and personality characteristics and the creative behavior and creative output of the restaurant. However,
after completing a multiple regression, the personality variable was no longer significant (Mathisen et al., 2012). This could mean that how a leader acts has a greater impact on the creativity in the organization than a leader’s personality. This study and the one just previously mentioned, by Yan et al. (2006), pointed to evidence that a leader’s creativity impacts the creativity in the organization. However, Mathisen et al. (2012) took the concept a step further in their analysis of specific characteristics whereas Yan et al. (2006) kept leader attributes as a single variable. It is interesting that the results were similar because the first study used self-reporting from CIOs in Singapore while the second study had multiple data points including leader self-reporting, employee reporting, and external reporting of restaurants in Norway. Thus, the types of data collected, the type of organization, and cultures were different. However, the studies had similar results.

In his article, Schlesinger (2010) contrasted two recent Director Generals of the British Broadcasting Corporation (BBC). The first director general, Birt, was known as an effective manager while the second, Dyke, was known to be creative. Schlesinger (2010) described Dyke as a visionary leader whose aim was for the BBC to become the most creative organization in the world. Thus, Dyke sought to change the culture of the organization. This change was motivated by Dyke’s personal beliefs about leadership and management as well as his prior experiences (Schlesinger, 2010). The author also notes that Dyke preferred open communication and little formality when working with others in the organization whereas Birt had been very formal. While this article is specific to two leaders of an organization, it frequently compares and contrasts the traits of the two leaders.
Director Generals such as personal beliefs of the leader, creating a vision, prior leadership experiences, and communication.

**Leader behavior.** While there is literature to support claims that the traits of a leader are important to their personal creativity and their ability to lead creatively, a leader’s behavior has also been found to influence an organization. Mayfield and Mayfield (2008) examined related literature to create a model of the behaviors leaders can use to promote creativity. They showed that actions such as coaching, securing resources, direct motivation, goal setting or providing feedback are not guaranteed to cause creativity. Instead Mayfield and Mayfield (2008) compared the behaviors to laying a foundation or cultivating fertile ground where creativity would be most likely to flourish. Therefore, their research implies that leaders exhibiting those behaviors are more likely to encourage worker creativity than leaders who do not. Though the characteristics listed were different, this was the same conclusion reported by Cachia et al. (2010) in their report on creativity in European Union member states’ schools.

There are also several studies linking transformational leadership to creativity. Jung, Chow, and Wu (2003) surveyed 32 Taiwanese electronics companies and found a positive relationship between leaders exhibiting transformational leadership and the innovation of the organization. However, Janussi and Dionne (2003) discovered in their experimental study that a leader who demonstrates unconventional behaviors can stimulate their followers to produce more creative work than leaders exhibiting other types of behavior, including transformational leadership. This study does differ slightly from other studies that point to the large influence of transformational leadership. However, the study by Janussi and Dionne (2003) still points back to the importance of
how a leader acts, similar to what was found by Mathisen et al. (2012) concerning the restaurant chefs in Norway.

Employee perceptions of their leaders also seem to influence creativity in organizations. For example, the perceived expectations of a leader were found to effect whether employees engaged in creative work (Carmeli & Schaubroeck, 2007). Also, Amabile et al. (2004) completed an exploratory study that sought to identify leader behaviors that contributed to employee perceptions of support. Leader behaviors that employees perceived as supportive were providing emotional support, seeking employee advice in decision-making, monitoring progress, and positive recognition (Amabile et al., 2004). These studies show that leader behavior is not the only factor, but that it is also important to consider how employees perceive their behaviors.

**Section summary on organizational leadership.** When combined, these studies just discussed show that leaders can and do make a difference concerning employee creativity. While a leader’s attributes certainly matter, several of the studies also showed that it is not just a leader’s characteristics that influence creativity, but also their behaviors. This is important because it is often believed that personality traits are more or less fixed, but behavior can be altered. If a leader’s behavior has the ability to influence creativity in the workplace, then that means that leaders should be able to adopt certain behaviors in order to encourage creativity.

**School Leadership**

When it comes to creativity in schools, much of the literature focuses on classroom level and the influence of teachers on students (de Souza Fleith, 2000; Karwowski, 2011; Lin, 2011). In fact, a systematic literature review on the topic of
creative learning environments yielded no studies discussing leadership or the principal (Davies et al., 2013). In my own search, most articles refer to creative school leaders in terms of school-wide arts based initiatives (Sterman, 2013), in terms of a specific act such as forming a school-community partnership (Goldring & Sims, 2005), or concerning the implementation of technology (Sharija & Watters, 2012). There was one article though, by Goertz (2000), that looked at the creative behaviors of principals. To complete the study, Goertz (2000) used the results from an assessment by the National Association of Secondary School Principals to identify four effective principals. The principals were then interviewed and Goertz (2000) found that they each exhibited traits of creativity in their leadership, such as “passion for work, independence, originality, flexibility, wide range of interests, goal setting, intelligence, and motivation” (Goertz, 2000, p. 158). Therefore, this study lists attributes of school principals who exhibit some creative behavior.

The role of the principal is sometimes discussed in studies concerned with how a culture and climate influence creativity or innovation. However, most of those studies are still focused on teachers and the classroom level and simply touch on the role of the principal. For example, Cachia et al. (2010) framed school leadership within an enabling relationship where principals have the power to encourage or discourage how teachers nurture creativity in the classroom. Bryk, Camburn, and Louis (1999) noted in their study of elementary schools in Chicago that school principals play an important role in encouraging teachers to innovate through bringing about a school environment supportive of it as well as through their presence in the school. Moolenaar, Daly, and Sleegers (2010) were a little different through their proposal that principals can grow an
innovative school culture through transformational leadership. Each of these studies seems to point to the principal’s ability to shape the school climate and culture so that they encourage creativity, yet there are not any articles that specifically explore the topic.

### Summary on Leader Influence on a Culture and Climate for Creativity

The first part of this section detailed studies relating to the attributes and behaviors of leaders within business organizations. Here, the research suggested that both the attributes of leaders as well as their behaviors influence worker creativity. This includes not only a leader’s behaviors, but also how employees perceive those actions. Literature regarding school leaders and creativity is thin, yet those that do exist also point to a school leader as an important factor in creating school environments where creativity can thrive. Together, the literature from both organizations and schools demonstrate the importance of the leader, specifically a leader’s attributes and actions. However, questions remain concerning what behaviors do school leaders exhibit when fostering an environment for creativity? What do those actions look like in practice? How does a school leader’s attributes relate to the actions they do? While some preliminary research has been completed, there are still several holes that need to be addressed concerning school leadership, the work environment, and creativity.

### School Principal’s Influence on the Culture and Climate

As previously discussed, there is limited literature concerning school principals and their specific influence on creativity. Since teachers spend more time with individual students, their impact is much easier to measure and there have been several research studies concerning a teacher’s impact on creativity. However, this does not mean that principals cannot and do not influence students. The final section of this literature review
will turn to focus on the role of the principal in shaping a school climate and culture, temporarily leaving the notion of creativity. Here the importance of the principal and how principals influence the culture and climate will be explored.

**Importance of the School Principal**

When reflecting on how a principal can influence a culture and climate in order to encourage creativity, it is important to consider the indirect relationship that principals have with students. Research is generally conducted at the classroom level because the direct relationship between teachers and students is easier to measure. However, Leithwood et al. (2004) found that in terms of student achievement and school-related factors, classroom instruction is the only thing with a greater impact than the school leadership. Their study has strong implications with respect to the importance of effective principals. Although the relationship between principals and students is indirect, principals do impact students and their learning. Not only do principals impact students, but their influence is not trivial.

While it is difficult to measure how principals impact students there are models that can guide researchers (Hallinger & Heck, 1996). Leithwood and Riehl (2005) made the case for a principals’ indirect but significant impact on student learning by reviewing studies that showed specific parts of a school, such as school mission, curriculum and parent-community relationships. They state that though the studies did not directly study principal leadership, all of the areas evaluated were ones that principals can exert influence over (Leithwood & Riehl, 2005).
Influencing the Climate and Culture

A healthy school culture and climate is associated with higher student achievement (Hargreaves, 1995; MacNeil et al., 2009). How school principals shape the climate and culture in the school and how teachers perceive it can positively or negatively affect student academic growth. S. M. Johnson et al. (2012) found that the culture of the school, including a principal’s leadership, has a significant amount of influence on a teacher’s job satisfaction. In turn, their study also showed that job satisfaction is related to student achievement. This means that teachers who report high satisfaction with their work environments have students who experience a higher rate academic growth than students whose teachers who report little satisfaction with their work environment (S. M. Johnson et al., 2012). In this way, the climate and culture of the school influence teachers and their classrooms, which in turn effects student achievement.

Although schools are distinctive, researchers have been able to identify general characteristics and actions of effective school leaders who cultivate healthy cultures and climates (Blase & Blase, 2000; Lashway, Mazzarella, & Grundy, 2006). In fact, researchers have established that there are many aspects of a school climate and culture that principals can influence (Deal & Peterson, 1990). Leithwood and Jantzi (1990) found that principals are capable of shaping a school’s culture in order to develop specific traits such as collaboration and teamwork amongst staff. In their study, Hallinger et al. (1996) identified an indirect relationship between principals and student reading achievement through their influence of the school’s culture.

A principal’s behavior can have a sizeable effect on teachers’ ability to teach in the classroom. Blase and Blase (2000) discovered that teachers perceived the
characteristics of encouraging reflection and professional growth as contributing to their success in the classroom. It is of note that many of the descriptors used by Blase and Blase (2000) concerning these two traits align with Mayfield and Mayfield’s (2008) framework about how leaders can create an environment that stimulates creativity. This was the framework that was described in chapter one as guiding the participant selection and instrument design for the current study. Specific examples are the use of feedback, making suggestions, sharing stories, and providing resources. In contrast, principals that exhibit abusive behaviors, ranging from ignoring a teacher’s thoughts to conducting unfair evaluations, have a negative effect on teachers both professionally and personally (Blase & Blase, 2002). Therefore, the way in which a principal acts can create an environment that either supports or hinders teachers in regard to their ability to succeed with students in their individual classrooms. Thus, a principal has the ability to alter the climate of a school through exhibited behaviors.

In a study concerning the relationship between school climate and teacher empowerment, Sweetland and Hoy (2000) found collegial leadership, meaning the principal respects teacher professionalism and supports their work, was one of the top two influencers on teacher empowerment. Though only a portion of the complete study, this shows a relationship between the principal, the school climate, and how teachers are able to work. In addition, Tschannen-Moran and Hoy (1998) found principal behavior is a primary factor in whether teachers trust them. This was tied to the principal’s collegial behavior, as discussed above. Therefore, there is a relationship between how a principal acts and the climate of the school, as perceived by the teachers.
Principals can have a meaningful influence on the climate and culture of their school. Hargreaves (1995) established several typologies that are useful to identify school climates. However, he does not make the case for an ideal type. It is therefore up to each principal to determine what the best culture and climate for a school is. The differences, however, do not mean that principals who are successful should not be studied. Instead, it is important to take contextual factors into consideration when studying principals and their influence of a school’s culture and climate.

**Implications and Contributions**

From an examination of the literature, several things have been observed. First is that creativity has been defined in the literature and elements of creativity have been researched in both organizations and schools. Literature has shown that creativity is not only an innate ability, but that it can be nurtured. This point is important for studies such as this one because if a society desires more creativity and creativity can be cultivated, then it is important to investigate how to encourage it. Yet, there is little literature – related to organizations and especially schools – concerning how to go about fostering creativity.

More specifically, this review focused on the importance of the environment, through the culture and climate, and its relationship to creativity. Empirical and theoretical work has established a relationship between the culture and climate of an organization and the creativity within it. However, the research is thin and does not address the question of “how?” As there is a connection, it seems that the next step in research is to investigate how creativity can be encouraged through a culture and climate. Both Mayfield and Mayfield (2008) and Cachia et al. (2010) provided lists of
environmental elements that support creativity, yet there is no expansion on what those supports look like when implemented.

Literature also reveals how leaders in organizations, as well as principals specifically, have the ability to shape the climate and culture of an organization. A few studies have shown that business leaders can influence a culture and climate specifically in regard to creativity, both through their attributes and their behaviors. Yet there is a paucity of studies that look at the role of the principal in shaping a culture and climate to encourage creativity.

At the end of the review I paused to review literature centering on how principals influence the culture and climate of a school. Due to the direct relationship, principals have influence over teachers and how they act. While the relationship between a principal and students is indirect, principals have influence over students. When viewing the school as a whole, studies have found that principals are important and have a large amount of influence. Though not dealing directly with creativity, this was an important section as the literature shows that principals can influence the culture and climate of their schools and more importantly that they can be shaped purposefully.

Therefore, this review has shown that the creativity can be nurtured, that the culture and climate are important for creativity, that business leaders can encourage creativity through shaping the culture and climate, and that principals are able to shape the culture and climate of a school. By employing logic and inferences, principals should be able to intentionally foster a culture and climate in a school that encourages creativity. A few articles concerning businesses exist exploring this relationship, but it is almost nonexistent in educational literature. This is an area that warrants additional research,
especially due to the increasing interest in people being creative. This is especially true in regard to empirical literature, something that Davies et al. (2013) also noted in their systematic review of 210 articles around the creative learning environments. A majority of the articles are theoretical or anecdotal, short on definitions and not easily applied to the real world. This lack of clear literature concerning creative schools and creative school leaders reveals a hole that needs to be filled.

However, this also leads to a larger question of how. What are the characteristics of schools where the climate and culture encourage creativity? What strategies do successful principals use when developing this type of culture and climate? More research is needed in this area if schools are going to be known for creativity due to the influence of school leaders. While many questions remain around a principal’s role in shaping the culture and climate of a school to foster the creativity, it is evident that there is a foundation of literature to build upon. My study seeks to expand upon this foundation by connecting areas of current research.

Summary

This chapter presented an argument for more research concerning the role of the principal and fostering a culture and climate that encourage creativity. Literature was reviewed in the areas of creativity, the importance of culture and climate to creativity, a leader’s influence on a culture and climate for creativity, and a school principal’s influence on the culture and climate. Together these pieces reveal a foundation for this study, which will aim to understand how school principals bring about a culture and climate within their school that encourages creativity. The next chapter will outline the steps I took in order to answer the questions associated with this research problem.
Chapter three will provide the reasons for selecting the research methods used in this study as well as detailed explanations regarding both data collection and analysis.
Chapter 3
Research Methods

The purpose of this study was to understand how one international elementary school principal fosters a school culture and climate where creativity can thrive. The previous chapter reviewed literature from several areas, yet revealed a distinct hole concerning what it looks like to encourage creativity in a school setting. For this study, a mixed methods single-case design was selected as the best strategy to use to explore the phenomenon. This chapter will have five sections, (1) research approach and design, (2) data collection which includes sampling methods, participant descriptions, and instruments, (3) data analysis procedures, (4) quality and trustworthiness, and (5) limitations of the study. The four research questions that guided the study were:

1) What are the attributes of an elementary international school principal who is seeking to foster a school culture and climate where creativity can thrive?

2) How does this principal describe her efforts to foster a school culture and climate where creativity can thrive?

3) How does the principal’s attributes relate to her described efforts?

4) How do the teachers in the school perceive the efforts of their principal to foster a climate and culture that encourages creativity, both for them and their students?

Research Approach and Design

As previously discussed, there is a lack of research in the area related to the influence school principals can have on creativity. Therefore, the research questions were
written as exploratory in nature in order to address the hole in the literature. These questions were asked in order to seek greater understanding of the process that a principal uses to encourage creativity and what it looks like within a school setting. In this way, collecting qualitative data, or data that is primarily narrative in nature as opposed to quantitative data that is oriented toward numerical reports, seems the most appropriate fit. As Merriam (2009) stated, qualitative research fits inquiry that seeks to understand meaning or experiences instead of explaining or measuring an outcome. Qualitative research also focuses on the researcher as the primary instrument of data collection and relies on an inductive analysis process. While the emphasis of this study was on the qualitative data collected, a mixed methods study design was selected. Creswell (2011) indicated that mixed methods designs are able to increase the depth of the data gathered during a study by using the strengths of each method. Specifically, in this study, qualitative data was collected in the form of individual interviews, observations, document review, and focus groups. Quantitative data was gathered in the form of a teacher survey.

Mixed methods studies have both qualitative and quantitative components. There are several forms of mixed methods studies, such as concurrent mixed methods where quantitative and qualitative data are collected and analyzed at the same time, sequential mixed methods when one form of data is collected and analyzed first and then used to inform the collection and analysis of the second type of data, and transformative mixed methods where a theoretical lens is used to guide the quantitative and qualitative data that is collected (Creswell, 2011). Overall, this study used a concurrent model where the two types of data were gathered at the same time. Specific procedures related to the
collection and analysis of data will be detailed in subsequent sections.

The case study method was also selected for this research. Merriam (2009) stated that a case study may be the most effective method of when a case is unique concerning what it can show related to the phenomenon. Additionally, Yin (2014) stated that case studies are appropriate for “how” and “why” research questions. With the four proposed research questions, the three of them aim specifically to get a better understanding of the chosen phenomenon and how it occurs. The fourth also approaches the phenomenon, but from the perspective of the teachers. These arguments thus support the choice of a case study design for this dissertation.

A requirement for the selection of a case study design is that the phenomenon of interest can be bounded (Creswell, 2007; Merriam, 2009). Another way of putting this is that it is somewhat easy to identify what the case will be. There are several ways to go about bounding a case. One is to identify the unit of analysis. The unit of analysis, which Merriam (2009) defines as “a bounded system” (p. 42), was identified by looking at the research questions. After reviewing the four questions guiding this study, it became evident that the role of the principal is the unit of analysis. Each of the questions seeks to understand how the principal functions within the role in order to bring about a specific outcome. The focus is not on the outcome itself, but instead endeavors to explore processes and mindsets.

The guiding framework for the study, which was created through combining the work of Pitner (1988) and Amabile (1983, 1997) and discussed in chapter one, bounds the case. This combined framework demonstrates a focus on the role of the principal and specifies both what was included and what was not be included in the study. Here the
specific antecedent of attributes was studied as well as principal actions that influence the creative school culture and climate. In this way the framework demarcates and focuses the types of data that were collected and analyzed. All data that were collected focused on the role of the principal. There was not a focus on the outcomes of the efforts of the principal in terms of measuring success, but instead the focus was on the methods and procedures used by the principal. By identifying the unit of analysis as the role of the principal and referring back to the guiding framework for the study, the case is effectively bounded.

The study was originally designed to include multiple cases in order to strengthen the data collection and findings. Yin (2014) stated that using multiple cases provides stronger data than a single case and thus should be used when possible. Merriam (2009) stated that studying multiple cases also increase the variance of the findings, something that can help make the study easier to generalize. As case studies aim to gather large amounts of data using a variety of methods in order to obtain a deeper understanding about each case (Creswell, 2011), it fits well with a mixed methods design.

However, during the participant selection process the researcher was only able to find two principals who met the criteria for the study and only one agreed to participate. The researcher, committee members, and colleagues reached out to connections across the world in attempt to find other principals to include in the study. While all of those contacted were excited about the study and to recommend principals for the study, each person came back without additional nominations. The difficulty in finding a sample to meet the study criteria further confirmed that the principal found was indeed a unique or unusual case. Yin (2014) defined an unusual case as one “deviating from theoretical
norms or even everyday occurrences” (p. 52). He later stated that by definition, an unusual case employs a single-case design as having multiple cases would imply the case is not entirely uncommon.

Therefore, this study was conducted as a single subject case study. Additions in data collection strategies were made when switching from a multiple to a single case design, such as adding more interviews and adding questions to the principal interview protocol. Increasing the amount and types of data collected further enabled the researcher to understand deeply what this one principal is like and how she then translates those attributes into fostering creativity within the school. Yin (2014) listed six types of data commonly used within case studies: (a) documents, (b) archival records, (c) interviews, (d) direct observations, (e) participant observations, and (f) physical artifacts. This study included four of these data types. Those excluded are archival records since they did not apply to this study and participant observation because the researcher was an outside observer. The remaining sections of this chapter will detail the data collection and analysis procedures, including participant selection, types of data collected and data analysis procedures.

Data Collection

Population and Sample Selection

One of the first decisions to make in terms of the population was the type of school and location. International schools were selected as the population for this study for several reasons. First, international schools are private schools with fewer regulations than public schools and thus usually award more freedom to school principals. The private school status also means that there are fewer levels of hierarchy to contend with
when there is a desire to do something innovative. Finally, the researcher is currently located in an international setting and therefore coordinating a study internationally is less challenging than coordinating a study of principals in the United States.

**Principal Selection.** A multi-step process was used to identify principals who would be eligible to participate in the study, often referred to as purposeful sampling in qualitative research. Purposeful sampling refers to the process researchers use to select participants and contexts for a study in order to ensure that the participants will be able to address the phenomena identified for the study (Creswell, 2007). The goal of a sample in qualitative research is to provide information about the topic of the study. This contrasts with quantitative sampling procedures where a sample might be selected in order to represent the general population or one where participants are selected at random.

The first step in determining the sample was to use a snowball sampling method in the form of a survey. Snowball sampling refers to a method where the researcher does not know who might be eligible for the study and uses experts in the field to obtain references to others who fit an identified criteria (Creswell, 2007; G. Johnson, 2014). To do this, the researcher composed a survey and sent it to various contacts that have connections with international schools. The survey explained a general purpose of the study and provided a place to list the names of principals who would exemplify encouraging creativity in their schools. Self-nominations were permitted and aside from being an international school principal there were not any additional limitations such as geographic location, gender, level of school or country of citizenship. The survey requested that anyone completing it would also forward the link to others who may also know of principals who were encouraging creativity in their schools.
When the survey was sent to a contact, it was requested that they consider filling it out themselves as well as passing the link along to others. The survey was sent to two personal contacts of the researcher who were employed in international schools. Additionally, the researcher requested each committee member to forward the survey to any international school contacts that they had, such as teachers they had met at conferences or previously worked with. The survey was also sent to four fellow doctoral students who worked in international schools. Further, the researcher contacted five international school consortiums, which are regional organizations that international schools may choose to join. These organizations are used for networking, conferences and various professional development opportunities. Three consortiums responded to the initial inquiry and one volunteered to place information about the study and the survey link in an upcoming newsletter to their schools.

After two months, the researcher reviewed the nominations. In order to focus the inquiry and provide weight to the nominations, only those who were recommended more than one time were selected for further review. Having multiple referrals for the same person was a small way to confirm that the principal was encouraging creativity in their school. This criterion narrowed the potential sample down to three principals. An additional criterion was that principals needed to have been in their current school for a minimum of two years. This would eliminate principals who are new to a school and thus in transition between the previous leadership and their own. Leading a school for a short time would mean that a principal has not yet had time to influence the culture and climate in an extensive way. Upon reviewing the tenure of the three principals, one was found to be in his first year at the current school and was therefore not considered for this study.
Initial screening interviews were conducted with the remaining two principals. This short conversation served several purposes. First, it ensured that the principals would describe themselves as intentionally seeking to encourage creativity. While the nominations from others suggested this fact, it was important to the study that the principals were intentional in their efforts. Second, the conversation was aligned with a framework to assess how their self-described actions line up with research literature. This second step will be detailed further in the following paragraphs. During the screening the principals were asked generally about their interest in creativity as well as how creativity looked in their schools. The snowball method was also continued in that the researcher asked again for anyone else that they might recommend. One principal commented, “I know several good international school principals, but I wouldn’t say they are creative.” This comment served as additional confirmation that the eligible population was small.

Notes were taken during the screening interviews and longer field notes composed after the initial contact. Next the principal’s comments were aligned with a framework on leader behaviors that encourage creativity by Mayfield and Mayfield (2008). This framework was previously discussed in the introduction as guiding the instrumentation for this study. The behaviors included in the framework are (a) coaching, (b) securing resources, (c) motivating, (d) goal setting, and (e) feedback. Without any prompting regarding these specific areas during the screening interview, examples for four out of the five areas were identified. Since each principal’s self-described efforts and attributes aligned with the framework, they were both invited to participate in the study. However, one declined participation due to extensive job demands.
**Teacher Selection.** After the principal was selected for the study, all teachers in the principal’s school were invited to participate in two forms of data collection. First was the teacher survey and the second was focus groups. All teachers were eligible to participate in both forms of data and there were not any limitations placed on the teachers by the researcher regarding participant status. Participation in both the survey and the focus group were voluntary. Selecting the teachers within the school was a form of convenience sampling where the selected participants are those that are easy for the researcher to access (G. Johnson, 2014; Merriam, 2009).

Participation in the focus groups was requested in conjunction with the invitation to complete a survey concerning the climate for creativity in the school. While the two requests were issued simultaneously, they were not associated. This was a way to protect the anonymity of the teachers, which is a topic discussed in a later section. When the focus groups were scheduled, the first priority was to arrange a time when several teachers were able to meet. I aimed to have between six and twelve participants in each group, a number recommended by Hatch (2002).

**Other Stakeholders.** Interviews were conducted with three other stakeholders: the director of the entire European International School who also served as Sandra’s supervisor, the elementary school secretary, and a visiting American university professor who brought pre-service teachers to observe at the elementary school during the data collection period. These three stakeholders served as additional points for data collection because they each worked directly with Sandra. In this way, their perspectives were valuable in adding depth to the data collected.
Description of the sample. Sandra, the principal selected for participation in this single subject case study, had been an administrator for a total of 11 years. Sandra is an American female administrator of an international elementary school and was completing her fourth year at her current school at the time of data collection. Her teaching experience amounted to twelve years and all of her experience, both as a teacher and an administrator, was within the elementary school setting. The data collection period was during the last two months of the school year.

The school was the European International School, located in Europe. The school is composed of three schools, an elementary, middle and high school. While the three levels of schools are co-located, they are independent physically and administratively. Each school level has a principal and then a director oversees the entire international school. This study focused on the elementary level of the school, which was where Sandra was the principal. There was not an assistant principal, though there are a few non-teaching staff such as a school counselor, librarian and a curriculum coordinator. The elementary school is comprised of 51 staff members, with 33 teachers. The staff are citizens of many different countries, although 35 are American. With the exception of one teacher, all have appropriate teaching certifications and a majority of the teachers hold Master’s degrees. Each teaching assistant had prior experience in a school and many were previously teachers themselves.

The entire European International School has approximately 775 students and the elementary school has around 350 students each year. There are between 60 and 70 nationalities represented within the elementary during the school year and approximately 10-15% of the elementary students are receiving services for a disability. The
socioeconomic status is high in that students pay tuition to attend the school. It is possible for parents to petition the school board for a reduced tuition due to financial hardship, however this is rare. Many students who attend international schools move locations every few years due to a parent’s employment. Thus, the population is very transient. In addition, most workplaces provide a significant percentage of an international school’s tuition to their employees, thus reducing the cost for the families.

Data Collection Procedures

Several sources of data were collected during this study in order to address the four research questions. It is typical of case study research to gather data through several means in order to maximize the depth of the data (Creswell, 2007). This dissertation included in-depth principal interviews, document collection, a teacher survey, teacher focus groups, observations and interviews with other stakeholders. Each type of data is discussed in the following paragraphs in more detail.

The data was collected concurrently, which means that I did not dictate the order that each type of source is collected and instead collected the various types of data as I was able. The primary reason for this is because it is often necessary to be flexible when working within a school setting. Data collection began with an initial interview with the principal, Sandra, and then proceeded with document collection, observations and interviews with other stakeholders.

By beginning data collection with an interview with Sandra, I had a starting place to guide the collection of documents and future observations. I did not limit myself to looking for just what was self-reported, but beginning with a principal interview helped me triangulate the self-reported data with other sources. The teacher survey was opened
after contact the first interview and during the first observation, which was of a faculty meeting. During this meeting the researcher was introduced to the staff and afterward the survey and focus group interest form were made available to them.

**In-depth principal interviews.** The primary source of data was three in-depth interviews with the principal. Three interviews, approximately one hour each, were necessary to work through the interview protocol as well as address any follow-up questions the researcher had. These three interviews served as the main source of information used to answer the first two research questions regarding what are Sandra’s attributes and efforts. Patton (2002) stated that the interview is an effective method to “allow us to enter into the other person’s perspective” (as cited in Merriam, 2009, p. 88). Since this study sought to explore how one principal shaped the climate and culture of her school in a specific way, asking her to self-report about the process makes sense. The interview followed a semi-structured format and was audio recorded for the purpose of transcription. A semi-structured format was selected because it permitted flexibility to pursue interesting topics that the participant brought up, but the format also focused the interview (Merriam, 2009). Additionally, as a novice researcher, a semi-structured interview ensured that the desired information was gathered during the interview as opposed to using an open format where there are few or no predetermined questions.

After each interview, initial field notes were written detailing the researcher’s reaction to the interview as well as thoughts about the content of the interview. Then the researcher listened to each interview and finally the researcher transcribed them. Memos were written during the transcription process concerning observations about the data and
also recorded conjectures about themes. Notes were also made concerning points of interest that could be followed up on during the next interview.

**Documents.** A variety of documents and artifacts were collected. Their primary purpose was to serve as points of triangulation for the information gathered during the interviews with Sandra. A strength of collecting documents in addition to conducting interviews is that they were not written for the purpose of the study and therefore are considered to be nonreactive (Merriam, 2009). Hatch (2002) stated, “Documents are powerful indicators of the value systems operating within institutions” (p. 117). In this way, documents served as a way to see tangible examples of how Sandra goes about fostering a school culture and climate where creativity can thrive. In simple terms, the documents are a way to report what it actually looks like in a school when a principal encourages creativity. Thus, the documents aided in the ability to take the data from theoretical to tangible.

The documents that were collected are as follows: job descriptions of teacher positions which included stipends, descriptions of teacher leadership teams, examples of teacher schedules, an application to the school board to build a new science lab building, planning documents for whole-school engineering challenges, faculty meeting notes, various messages to teachers which included eight weekly newsletters from the principal to the teachers, and a teacher survey from the principal for the purpose of her yearly evaluation. The criterion for the collected documents was that the principal had a direct influence on its creation. Documents or artifacts generated by teachers were not be collected unless it applies to a situation that the principal directly influenced.
**Observations.** As the researcher was not employed by the European International School, the researcher’s role during the observations was as an “observer as participant” (Merriam, 2009). In this role, the researcher was in the research setting and participants knew that my primary purpose for attendance was for research. This contrasts with a participant as observer who is a participant first as well as a complete observer where the researcher’s motives are not known to those being observed (Merriam, 2009). Two faculty meetings were observed and two walk-throughs during school events were completed. The events were a school-wide engineering day where the students were working to build floatation devices that could hold the most weight and during their end of the year arts showcase which included a music concert and art display. Field notes were written during the observations focusing on Sandra’s actions and interactions with others. The notes were then expanded upon leaving the field.

**Teacher survey.** Teachers in the school were asked to take a three-part survey. A survey was selected as a way to assess the perceptions of a majority of the teachers in the school. G. Johnson (2014) stated that surveys are a good way to collect data from a large amount of people in a cost-effective manner. Thus, a giving a survey to teachers is a good way to collect their perceptions and answer the fourth research question without taking a significant amount of their time. The survey took approximately ten minutes to complete. The first section collected demographic information. The second section, which was the bulk of the survey, was three sections of the KEYS to Creativity and Innovation (KEYS) survey, which is distributed by the Center for Creative Leadership (Amabile et al., 1996). The KEYS assessment is considered a highly effective way of determining whether employees believe that the organization is creative (Mathisen & Einarsen, 2004). The
entire KEYS survey is 78 items, covers 10 dimensions, and consists of statements with a four-point rating scale. This study utilized the three survey dimensions pertaining most directly to leadership and the environment for a total of 38 items. The final section of the survey was three qualitative questions. More detailed information about each section of the survey will be discussed in the instrument section.

Teacher focus groups. In addition to surveying teachers, teacher focus groups were conducted. A request to participate in the focus groups was issued in conjunction with the invitation to complete the survey. Merriam (2009) stated that focus groups are a good method to use when the topic is something that people might talk about in an everyday setting, but usually do not. Discussing how their school environment and the school principal foster an environment where creativity can thrive fits under that umbrella, as it was not an extremely sensitive topic, but also probably not something that teachers actively discuss amongst themselves. Focus groups also allowed for the participants to interact with one another and to build upon one another’s ideas, something that is lacking in individual interviews (Merriam, 2009). A final reason for conducting teacher focus groups was that it is a way to collect more data in a shorter period of time. As time is something very valuable to teachers, conducting focus groups instead of individual interviews was a good fit.

Two focus groups were conducted for this study with a total of seven teachers. The first focus group consisted of three teachers who were also a grade level team together while the second focus group consisted of three teachers and an assistant who were each from different grade levels or specialties. Each of the focus groups were audio recorded and then transcribed by the researcher to aide in the analysis process. The focus
groups provided an opportunity to deeper information concerning teacher perceptions of the principal’s efforts to encourage creativity in the school than was possible through using the survey alone. The atmosphere of a focus group provided the researcher the ability to probe for specific examples of stated opinions as well as seek to understand how the teachers defined a supportive leader. This information added to the findings from the survey to create a much richer picture. The findings from the focus groups were combined with the survey results in order to answer the fourth research question.

**Other stakeholder interviews.** Three other interviews were conducted in order to gain additional perspectives on the actions that Sandra exhibited. The individual interviews were approximately 30 minutes long and the same interview protocol was used for each one. As with the other interviews and focus groups, the interviews with other stakeholders were audio recorded and then personally transcribed by the researcher. The director of the entire European International School was interviewed because he is Sandra’s direct supervisor. He had worked with Sandra for two years and was previously a superintendent of a large public school district in the Midwestern United States. The secretary of the school was also interviewed due to her close working relationship with Sandra. As her office was next to Sandra’s, the secretary had observed the everyday actions that Sandra had with others in the school as well as herself. The secretary had worked at the school a little more than a year at the time of the interview. The final interview was with a professor from an American university. She visited during the data collection period with a group of pre-service teachers. The purpose of their visit was to observe in the classrooms and share in an experience that was different than a regular public school setting in the United States. This was the professor’s second visit to the
school and the first with students. As she had purposefully selected the school as a place to bring pre-service teachers and expressed that she enjoyed working with Sandra, she was also asked to participate in the study.

**Instruments**

Below the types of instruments used to gather data are explained. As the data is mixed concerning how it related to the research questions, Table 1 is provided for reference.

Table 1

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<tr>
<th>Research Questions Paired With Data Collection Methods</th>
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<tr>
<td>Research Question</td>
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<tr>
<td>1) What are the attributes of an elementary international school principal who is seeking to foster a school culture and climate where creativity can thrive?</td>
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<tr>
<td>2) How does this principal describe her efforts to foster a school culture and climate where creativity can thrive?</td>
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<tr>
<td>3) How does the principal’s attributes relate to her described efforts?</td>
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<tr>
<td>4) How do the teachers in the school perceive the efforts of their principal to foster a climate and culture that encourages creativity, both for them and their students?</td>
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**In-depth principal interviews.** The three interviews with the principal were semi-structured. Please refer to appendix B for the instrument. Inspiration for the questions came from several sources. Many of the questions were based off of the
discussion in Bolman and Deal (2003) related to culture, climate, and different perspectives a leader can have within an organization. Also, the Mayfield and Mayfield (2008) framework on leader behaviors that encourage creativity was referenced. This is the same framework that was initially used to screen participants during the sample selection process. Finally, one question asked about the physical environment of the school. Although much of the literature around creativity discusses the climate and culture in theoretical terms, the physical space can also be a source of influence, whether through the look of the space (McCoy & Evans, 2002) or through the organization of the space (Wineman et al., 2014). The style of the interview questions was based off of recommendations from Merriam (2009), such as asking about experiences, opinions and values, or to gain factual knowledge.

A majority of the questions were piloted in the summer previous to this study with three principals of elementary public schools in the United States. However, at that time the questions were about the culture and climate of schools in general. For this study, the questions focused on creativity specifically. An example of the difference can be seen in the following question. “How would you describe the climate of your school?” in the pilot was altered to “In terms of creativity, how would you describe the climate of your school?”

**Documents.** The collection of documents for this study was based on whether the principal authored the written pieces. As this study focused on the role of the principal, I was not concerned with how a teacher chose to design their classroom space or the text of a classroom newsletter unless the principal had a direct impact them. The documents primarily functioned as a point of triangulation for the in-depth principal interviews as
this type of data provided evidence of what was stated. As with the interviews, field notes were written during the review of the documents. These notes summarized content, identified themes and theorized about possible relationships between the documents and the principal interview data.

**Observations.** Observations were guided and focused through the use of the framework by Mayfield and Mayfield (2008). I sought to observe the principal in several settings, such as during a staff meeting and during special events at the school. I attempted to complete the observations as unobtrusively as possible so that the environment was altered in the least possible manner by my presence. I took notes about what I saw and heard during the observations, paying specific attention to the behaviors that fit within the five categories presented by Mayfield and Mayfield (2008). As soon as possible after the observation I composed detailed field notes that were then be used during analysis as recommended by Merriam (2009).

**Teacher survey.** The teacher survey consisted of three parts and was issued in an online format using Qualtrics. While there were possible issues with using an Internet format in regard to participation rates (G. Johnson, 2014), it was my opinion that the format was the best way to access teacher’s perceptions. The online format enabled teachers to access and complete the survey at their convenience. It also allowed for a greater sense of participant freedom than providing a paper survey during a faculty meeting.

The first part of the survey captured demographic information. Questions asked teachers to identify their total teacher experience as a range, their tenure at the current school as a range, subjects or grade taught in the current school year, and highest
education level. The second section of the teacher survey consisted of items from the KEYS to Innovation and Creativity (KEYS) Survey. Specific information about the KEYS will be provided in a following section. The third section of the survey was qualitative in nature and sought to understand more of the teacher’s perceptions than can be gained from the quantitative portion alone. The qualitative questions were as follows:

(1) Please list 3 things that your principal does to encourage creativity in your school, (2) Please list 3 things that your principal does that hinders creativity in your school and (3) Please list 3 things your principal could do to better encourage creativity in your school.

When coupled with the quantitative data generated from the KEYS, these final qualitative questions provided a richer data set that reflected the perceptions of the majority of the teachers in the school. The survey questions can be found in Appendix C.

**KEYS survey.** The KEYS assessment, developed by Amabile et al. (1996), is a way to determine how employees perceive their work environment in terms of supporting or impeding creative work. While several types of assessments exist to rate the creative climate in an organization, the KEYS has been found to be of good quality in terms of reliability and validity (Mathisen & Einarsen, 2004). It is a 78-item survey designed to capture worker perceptions of the climate as related to creativity. Questions are divided into ten dimensions, but also placed into four larger categories. The questions are written as simple statements and rated using a four-point scale. Some statements are worded positively and others negatively to avoid bias (Amabile et al., 1996). Table 2 depicts the dimensions of the KEYS and how it is structured.

The components of the KEYS survey were conceptualized through a critical incident study of 120 research and development scientists who were asked to describe
work activities that were of high and low creativity (Amabile et al., 1996). Categories were identified in the findings and then placed into a conceptual model about how perceptions of the work environment affect creativity in the workplace. It is from this model the KEYS assessment was designed. The KEYS is periodically revised and its most recent update was in 2015.

Table 2

<table>
<thead>
<tr>
<th>Categories</th>
<th>Dimensions</th>
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<tbody>
<tr>
<td>Management Practices</td>
<td>Freedom (4 items)</td>
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<tr>
<td></td>
<td>Challenging Work (5 items)</td>
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<tr>
<td></td>
<td>Managerial Encouragement (11 items)</td>
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<tr>
<td></td>
<td>Work Group Supports (8 items)</td>
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<tr>
<td>Organizational Motivation</td>
<td>Organizational Encouragement (15 items)</td>
</tr>
<tr>
<td>Resources</td>
<td>Lack of Organizational Impediments (12 items)</td>
</tr>
<tr>
<td></td>
<td>Sufficient Resources (6 items)</td>
</tr>
<tr>
<td></td>
<td>Realistic Workload Pressures (5 items)</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Creativity (6 items)</td>
</tr>
<tr>
<td></td>
<td>Productivity (6 items)</td>
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*Note: Adapted from CCL.org.*

Since its development, the psychometric properties, validity and reliability of the KEYS have been studied. Amabile et al. (1996) found that the internal reliabilities, by category, range from .66 to .91, with only two scales rating lower than .80. This shows that overall the internal reliability is good. Additionally, the test-retest scores over a period of three months were found to be good (Amabile et al., 1996). In order to assess the validity of the KEYS, the same authors conducted a three phase study to see if the instrument would discriminate between different types of work environments, specifically environments designated as high and low in creativity. The first phase asked participants to identify two projects completed in the past three years; one that was of high-creativity and one of low-creativity. Then the participants completed the KEYS assessment with
each project in mind. The second phase asked outside experts who were blind to the project designations to rate the projects concerning their level of creativity. The third phase had different participants, who were blind to the study’s focus on creativity, to fill out the KEYS assessment in reference to a selection of the previously identified projects.

The first phase yielded results that high and low creativity projects were rated very differently. The second phase found that the projects nominated as high or low creativity by the first phase were rated similarly by the experts, though the interrater reliability was not high (.58). In phase three, the overall reliability of the raters’ scores, using Cronbach’s alpha, was found to be .75. Finally, the results from phase 3 mirrored the results from phase one concerning the same projects except that phase 3 did not yield differences as marked as phase 1 between high and low creative environments. The KEYS assessment is not a perfect instrument, however, Mathisen and Einarsen (2004) state that overall it is a thorough instrument with acceptable levels of validity and reliability.

For this study, I sought permission from the Creative Center for Leadership, who owns the rights to the KEYS assessment, to use the survey as a part of my dissertation. Additionally, I requested to use an adapted version that is more personal for teachers, as used by Ferizovic (2015) in her dissertation. The adaptations change terms in the original survey, such as “managers” and “the organization” into “the principal” and “my school.” In this way, the survey terms should make the teachers feel more comfortable with the items. Ferizovic (2015) granted permission to use her adaptations and the Center for Creative Leadership also approved these slight amendments to the questions for the purpose of research. It is also recognized the amendments could possibly affect the
reliability and validity of the instrument since these specific questions have not been tested.

Only three dimensions of the survey were selected for use in this study. The three sections selected were managerial encouragement, organizational encouragement, and organizational impediments. The primary reason for reducing the survey was due to concern from the principal about asking the teachers in the school to take a longer survey. There was a concern about time needed to take the survey as well as survey fatigue since teachers were already asked to take several evaluation-type surveys at the end of the school year. Therefore, the three sections pertaining most closely to the purpose of the study were selected. Since the principal and her management was the primary focus of the study, the dimension on managerial encouragement was chosen. The other two dimensions, organizational encouragement and organizational impediments, relate directly to the climate of the school in that the questions seek to identify the encouragers and hindrances that exist. How the teachers responded to these three sections provided insight into their perceptions of the school environment in relation to creativity and the shorter survey likely yielded more responses.

**Teacher focus groups.** The fourth research question was concerned about how the teachers in the school perceive the efforts of the principal to foster a culture and climate where creativity can thrive. Therefore, conducting teacher focus groups helped to fill in the gaps from the teacher survey in order to create a rich set of data related to the fourth research question. Focus groups provided a way to gather not just general teacher perceptions, but also specific examples of the principal’s efforts as understood by the teachers. Thick, descriptive data strengthens research findings and is a characteristic of
both qualitative research and case studies. Similar to the in-depth principal interviews, a semi-structured protocol was developed to guide the discussion during the teacher focus groups. The questions for the focus groups were taken from the principal interview and simply reworded to fit the perspective of the teacher. The instrument can be found in Appendix D. With participant consent, the focus groups were audio recorded in order to create a transcript for analysis purposes. After conducting the focus groups, the researcher wrote field notes regarding the context of the interview, how the teachers acted, and noted any apparent themes in the conversation.

**Other stakeholder interviews.** Three stakeholders were interviewed for this study (a) the director of the entire European International School, the elementary school secretary, and a visiting university professor. The interview protocol was semi-structured and adapted from the teacher interview protocol into the most basic questions, for a total of seven. The short protocol, found in Appendix E, helped to ensure that the interviews gathered a variety of data but also stayed within an approximate time frame of 30 minutes. As with the other interviews, field notes were written after the completion of the interview noting the setting, interviewee behaviors and general thoughts concerning the themes. The interviews were audio recorded with the participants’ permission and then transcribed by the researcher.

**Data Analysis**

Since the data was concurrently collected, the analysis also primarily took place concurrently. The following sections are organized by research question and will detail the procedures that will be used to answer each one. Table 3 below provides a basic summary of the analysis procedures, organized by research question.
**Research Questions Paired with Data Analysis Procedures**

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data Analysis Procedures</th>
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</table>
| 1) What are the attributes of an elementary international school principal who is seeking to foster a school culture and climate where creativity can thrive? | - Transcription of interviews  
- Inductive coding, then focused coding to discover themes and categories in the data.  
- Researcher memos written throughout  
- Relationships between the themes were explored  
- Member-checking |
| 2) How does this principal describe her efforts to foster a school culture and climate where creativity can thrive? | - Transcription of interviews  
- Inductive and deductive coding due to similarities in the emerging themes between RQ#2 and RQ#1  
- Researcher memos written throughout  
- Relationships between the themes were explored  
- Member-checking |
| 3) How does the principal’s attributes relate to her described efforts?             | - After analysis of RQ#1 and RQ#2, looking at the two sets of themes to see if there is a relationship between them (the attributes and efforts).  
- Primarily the analysis would happen through writing researcher memos. |
| 4) How do the teachers in the school perceive the efforts of their principal to foster a climate and culture that encourages creativity, both for them and their students? | - Scaled questions from the survey analyzed using basic descriptive statistics.  
- Open-ended survey questions were paired with the focus group transcriptions  
- Qualitative data was open coded and then focus coded to reveal themes  
- Relationships were looked for between the themes |

**Research questions 1 and 2.** The data related to the first and second research questions was gathered and analyzed concurrently. As a reminder, the first question is “What are the attributes of international school principals who seek to encourage creativity in their schools?” and the second is “How do these principals describe their efforts to encourage creativity through shaping their school’s culture and climate?” The
types data related to answering the first two research questions were in-depth principal interviews, documents, and observations. Data from the stakeholder interviews were used to triangulate and look for negative examples once the initial themes were determined.

The first step in analyzing the data were when the researcher personally transcribed the principal interviews using ExpressScribe and Microsoft Word. During the transcription process, the researcher wrote memos concerning themes that seemed to be appearing in EverNote. Following transcription, an open and focused coding process was used, as outlined by Padgett (2008). This process involves carefully sifting through the data for relevant excerpts related to each research question, namely principal attributes and actions. Open and focused coding is an inductive process, especially in the beginning stages of analysis (Merriam, 2009). Inductive analysis means that the codes or categories are not predetermined before coding begins, but instead emerge from the data itself. This contrasts with deductive analysis where the codes are predetermined and the researcher seeks to assign the data into the categories.

During the first review of the three transcripts from the in-depth interviews with Sandra, the researcher used open coding and maintained “in vivo” terms whenever possible. This means that snippets of sentences were often coded using terms directly from the transcript during the first round of coding. The software program Dedoose was used in order to ease the naming and future location of excerpts associated with each code. Fewer new codes were generated with each transcript. Memos were written during this coding process as a way to begin to distinguish the differences between some of the codes as well as to explore which ones might be related to one another. In order to include the context of a sentence in an excerpt, there were times when a comment was
coded with two codes. An example would be when Sandra expressed that one action was motivated by two beliefs. In light of this, the researcher wrote the following in a memo,

“Sometimes it is really hard to code these. I read and read a few lines over and over, but I’m just not sure how to code it. Some of her statements, especially the attributes ones, are so rich that I’m not sure how to break it down. Leadership is extremely complex… I think that part of the reason that this is hard to code is that she ties everything together.”

After completing the open-coding process, there were 37 different codes in reference to Sandra’s attributes and 46 in reference to her actions.

After the open-coding process was complete for the three principal interviews, the researcher reviewed the codes along with the associated excerpts. This process is often referred to as focused coding and its purpose was to discover larger themes within the interview text. In this way, the analysis moved from the descriptive level to a more analytical level. Merriam (2009) states that it is good to aim for a few conceptual themes during the final stages of analysis in order to make the data manageable as well as to ease the explanation of the findings to others. In order to complete this process, the researcher first listed the open codes for each research question in a memo. Tentative larger themes were identified and then the open codes were placed under the larger themes. In order to accomplish these groupings, the excerpts within each focused code were reviewed to ensure they fit. At times, excerpts were found to fit better within another code and were thus recoded. When reviewing the excerpts for the principal’s attributes, it was sometimes determined that they were actions instead and were therefore recoded. Notes were made during this process concerning how each larger theme might be best defined
and rationalizations for including each open code within a theme were recorded. In addition to identifying themes by grouping codes together, memos were drafted to record conjectures about the relationship of the themes to one another.

Once there was an initial paring down of the open codes to five main themes, the researcher began using a drawing process in order to explore how the themes concerning Sandra’s attributes were related to one another and what was represented. Several iterations of relationships between the themes were drawn and shifts were made concerning the themes at this time. During this process several key quotes were identified and consulted. Once the researcher believed that the final visual depiction was the best way to represent the data, she then wrote a narrative to explain how the themes were related. During this time the main categories of each theme were also identified and defined. After this, all the excerpts were then exported according to the final coding structure and read again in order to check for cohesiveness.

After the relationships of the themes for the data for the first research question was determined, the process of looking at the principal’s actions began in a similar fashion. However it was determined that most of the principal’s self-reported efforts easily fit under her described attributes. Thus, most of the 46 open codes related to the principal’s actions were deductively analyzed by being placed under the themes and facets that were determined for the first research question. Similar to the focused coding process for the principal’s attributes, a memo was written to record the justification for each open code under a theme. During this process the researcher continued to refine the definitions of the themes. A few alterations were made to the original visual depiction in order to further refine the relationships between the themes.
Once the themes for the first two research questions were identified using the data from the in-depth principal interviews, other forms of data were analyzed. Documents, field notes from the observations, and the other stakeholder interview transcripts were then deductively coded in order to triangulate the findings. Additionally the researcher looked for excerpts that might contradict the initial findings or add a new themes or category. Merriam (2009) stated that the analysis of qualitative data starts as completely inductive, moves to both inductive and deductive during the middle phases and that the end of the process is primarily deductive as the researcher tests and confirms the categories. This was found to be true during the analysis of the data in this study concerning the first two research questions. The cumulative result of the analysis yielded the findings for the first two research questions concerning Sandra’s attributes and her efforts to foster a school culture and climate where creativity is able to thrive. The final visual depiction as well as an in-depth description of these findings can be found in chapter 4.

**Research question 3.** The third research question is, “How do the principals’ attributes relate to their described efforts?” This question sought to find possible relationships and therefore the analysis here did not look directly at the data, but instead focused on the findings of the first two research questions. This is a step that Merriam (2009) referred to as theorizing about the data. This level of analysis seeks to make inferences about the data and can be used to create models in order to explain the relationships between themes.

The analysis for the third research question was primarily completed through memos. As described in the previous section, all of the data was first open coded. Then
the researcher went through a process of combining codes into themes for the first research question concerning the principal’s attributes. Once themes were generated and an initial visual was created regarding the relationships between the themes, the researcher proceeded to combine the open codes pertaining to the principal’s actions. The original intent of the researcher was to look for themes independently and then compare the themes found for the first and second research question. However, as the researcher began to review the codes associated with the principal’s actions, it became apparent that many of them were easily aligned with the themes identified during analysis for the first research question. The seemingly strong relationship between the principal’s attributes and efforts were then more fully investigated through memo writing in order to assess how they first two research questions were related to one another.

**Research question 4.** The final research question focused on the teacher’s perspective relating to the role of the principal. It is, “How do the teachers in the schools perceive the efforts of their principal to foster a climate and culture that encourages creativity, both for them and their students?” The were two sets of data that informed the findings of this question. First was a teacher survey and the second was three open-ended questions in the survey as well as teacher focus groups. The quantitative data provided the perceptions of many teachers while the qualitative data will provide specific examples that enliven the quantitative data in a way that can make it relatable to practitioners. By combining quantitative and qualitative methods, I sought to gather data that was both reflective of the larger teacher population while also investigating their perspectives more intensely.
**Quantitative data.** The quantitative data from the KEYS section of the teacher survey was analyzed using basic statistical methods. The primary variables in the survey portions used for this student were managerial practices, organizational encouragement, and organizational impediment. The researcher used SPSS to compute the statistics. First, the negatively worded questions were reversed scored. Then mean scores and standard deviations were computed individually for each question as well as per section of the survey. The individual means were computed in order to later determine which areas were perceived as the strongest and the weakest within each section. The three section scores were computed in order to gain a comprehensive view of the teachers’ opinions of the data.

Cross tabs were created combining the mean scores and the teacher demographics of educational attainment, years of teaching experience and years of teaching at the current school. The purpose of the cross tabs was to see if there were any scoring trends related a particular demographic. Overall, the analysis of the KEYS data was descriptive in nature and include computing the mean scores and standard deviations for each subsection of the assessment. As causation was not included in the purpose of the study, analyses regarding relationships between the variables was computed.

**Qualitative data.** There were two sources of qualitative data to analyze. These were the qualitative questions at the end of the survey and the teacher focus groups. For the focus groups, the researcher first created transcripts and then general notes were made regarding potential themes or particularly interesting quotes. The analysis then followed a similar method as the qualitative data collected for the first two research questions.
The transcripts and the responses to the open-ended survey questions were coded inductively using an open-coding process. This process seeks to keep the codes as close to the original data excerpts as possible. The next step was to combine the codes together in a process called focus-coding. Here the researcher combined smaller codes that were related into larger themes. Memos were composed in order to maintain a record of the rationale for how the codes were grouped as well as to define terms. The final themes were then examined for relationships to one another.

**Ethical Considerations**

Several precautionary steps were taken in order to ensure the ethical treatment of the data. First, all participants were provided consent forms detailing the purpose of the study, the time commitment involved, confidentiality, and contact information for the researcher. Also, only the researcher had access to the audio recordings from all of the interviews and focus groups. This ensured that participants are not identified by voice by someone associated with the school. The transcripts created from the recordings did not contain any identifying information about the participants. In the writing of the dissertation, only pseudonyms were used when quoting Sandra and the teachers were not individually identified. Finally, the location of the school was stated generally in order to protect the identities of all research participants. All data, including the audio recordings, transcripts and survey results, were stored on a password-protected computer that only the researcher had direct access to. Data may be shared with members of the dissertation committee, but confidentiality of the participants was protected at all times.
Quality and Trustworthiness

Quality

There are several ways that I sought to ensure that the study completed was of high quality. One was to limit the amount of time I personally spent in the field per session and to space out the interviews as was possible. This enabled me to initially focus on writing detailed field notes about each experience without mixing them up. Balancing time spent in the field and time spent writing and reflecting it a way to combat researcher fatigue. Audio recordings of the interviews and focus groups were listened to as soon as possible after the initial field notes were written in order to further reflect on the data before gathering more. Taking the time to review collected data before collecting more also permitted me the ability to alter protocols if they were not collecting the type of data that was needed to address the research questions. This time also allowed me to reflect with my committee members as needed during the data collection process.

Trustworthiness

Various terms are used within the research community to discuss whether the results of a study can be trusted. Maxwell (2005) used the term validity while Merriam (2009) used validity, reliability, and trustworthiness. Regardless of the terms used, the meaning is the same. With this study, several steps were taken to ensure that the findings were trustworthy. One way that trustworthiness of the data and analysis was ensured was to use triangulation. Triangulation is when a researcher collects data about the same phenomenon from multiple sources (Merriam, 2009). For example, in order to answer the first two research questions, data was gathered in the form of principal interviews, documents, researcher observations and other stakeholder interviews. These four types of
data provided a way for the researcher to see the same behavior or belief from different vantage points, or would have allowed the possibility to discover that what was documented did not match what was said. Having several sources of data adds to the credibility of the data. The same is true for the fourth research question, which was answered through a teacher survey and focus groups, in that multiple forms of data were gathered.

During the writing process, the researcher had two separate people who were unfamiliar with the study conduct a review of the themes as a form of inter-rater reliability. A peer reviewed an early draft of the findings chapter to review how the chapter was organized as well as to examine how the themes were supported by the data. This process yielded several suggestions for editing in order to make the themes easier to understand and places where further explanation was necessary. Another person outside of the study was asked to complete inter-rater reliability concerning the coding process. The reviewer was supplied with a code tree and definitions for both the principal and the teacher themes. The reviewer was asked to code according to the categories within the themes. Approximately 15% of the principal interviews was provided, in the form of one interview excerpt, and excerpts comprised of 15% of each teacher focus group. Excerpts from both focus groups were provided because the groups had very different conversations. After the researcher and the external reviewer coded the excerpts, they spoke about their coding choices. Some codes were altered or added at this time. For the principal excerpt, the final Cohen’s kappa was .774 and \( p = .000 \). The percent of code agreement was 94.7%. For the teacher focus groups, kappa was .956 and \( p = .000 \). The
percent of agreement in coding was 96%. Thus, there was a high level of agreement in code applications between the researcher and the reviewer.

Once the findings from the study were drafted, the researcher met with Sandra in order to complete a member check. Maxwell (2005) listed checking with participants as a way to validate the study. However, he also points out their responses should also be treated as data. Merriam (2009) discussed member checks as a way to ensure the researcher has not misunderstood the participant but is instead reflecting the intended meaning of their words and actions. During the meeting to discuss the findings, the principal was initially startled to see someone outside the school had identified her leadership philosophy so well. Therefore, the findings from the first two research questions were especially validated through the member checking process.

A final way trustworthiness was built into the study was to maintain good records of all research activities (Merriam, 2009). This will included writing detailed field notes after leaving a field experience and documenting the various contacts with the participants. Researcher memos during analysis were also be a part of the validity. Together field notes and memos created a record of my perceptions as the researcher while doing the research. This aided in the writing of the dissertation findings as I had a specific record of where I went, what I did, and how I perceived each experience. Researcher memos also recorded all of the justifications during the coding process as well as thoughts regarding the refining of definitions of the themes.

**Summary**

This chapter discussed the research methods used in this study in detail. First a justification was provided for selecting a mixed-methods single subject case study. Mixed
methods studies are able to pull from the strengths of each kind of data while a single subject case study is a good choice when studying a unique case. During the sample selection process, it was found that population fitting the criteria for the study was smaller than anticipated and the one principal who agreed to participate in the study was therefore a unique case. This chapter also detailed the types of data that were collected: in-depth principal interviews, document collection, teacher survey, teacher focus groups, and other stakeholder interviews. The instrument design process was detailed as well as the procedures for data collection. Finally, the analysis process was described concerning each research question. Overall, an inductive and then deductive process was used to code the qualitative data. The focused codes generated themes and finally the researcher looked at relationships between the themes. The quantitate data was analyzed using descriptive statistics and then paired with the qualitative data. Together, the types of data created a rich picture of the principal’s attributes and her efforts to foster a school culture and climate where creativity could thrive. The next chapter will discuss in detail the findings from the data analysis which includes both the themes found in the data as well as a proposed relationship between the themes.
Chapter 4

Findings of the Study

The previous chapter outlined the rationale for a single-case study in order to examine how an international school principal seeks to foster a culture and climate where creativity can thrive. Quantitative and qualitative methods were used in data collection, which included in-depth principal interviews, a teacher survey, teacher focus groups, stakeholder interviews, observations, and document collection. Quantitative data from a teacher survey were analyzed using basic statistical methods to yield descriptive statistics that reflected the teachers’ perceptions of the school climate in relation to creativity. Qualitative data from the various interviews, focus groups and documents were analyzed using an inductive coding process to yield larger themes in relationship with one another. Once analysis was complete, inter-rater reliability and member-checks were used as methods to strengthen the findings. The resulting findings are presented in this chapter and are organized by research question. The research questions, which guided the study, are as follows:

1) What are the attributes of an elementary international school principal who is seeking to foster a school culture and climate where creativity can thrive?

2) How does this principal describe her efforts to foster a school culture and climate where creativity can thrive?

3) How does the principal’s attributes relate to her described efforts?
4) How do the teachers in the school perceive the efforts of their principal to foster a climate and culture that encourages creativity, both for them and their students?

While there was some variation across the different data sources, overall I found they tell the same story. Themes along with their categories will be presented for each question. Additionally, the themes are connected in important ways and these relationships will also be discussed. A guiding organization of the themes emerged during analysis and will be presented both visually and in narrative form. The chapter will be begin by introducing the main figure that shows the relationships between the themes before moving to a discussion concerning the findings for each research question.

**Presentation of the Figure**

During the analysis of the qualitative data, a series of themes emerged. As I continued to look at the themes, I realized many of them were in relationship with one another. Therefore, I created a visual in order to assist the understanding of the themes as well as how they were connected to one another. The image itself went through three iterations before reaching the form presented in Figure 6. There are three themes I call attributes because each is based on an attribute of the principal: Personal, Core Educational Beliefs about creativity, and Vision for the School. Each attribute influences the next one in a downward pattern, which is the same successive pattern seen in the guiding framework for the study (see Figure 4). Each attribute is tied to specific efforts of the principal and therefore the same image is used to discuss both the first and the second research questions.
Figure 6. Relationship of Themes for Principal Attributes and Efforts.
Each attribute is comprised of themes. Many themes have categories. The Personal Attribute contains three themes, *Personal Experience, Whole Child Emphasis,* and *Attitudes and Outlooks.* The attribute of Core Educational Beliefs contains three major themes of *Creativity is Important, Relationships are Important,* and *Growth is Important.* Between each of these major themes are minor themes, which serve as links between the major themes. These themes are *Exposure to New Ideas Sparks Creativity,* *Teachers as Leaders,* and *You can’t grow without being creative.* The final attribute pertains to how the principal leads the school or her Vision for the School. This attribute contains the themes *Common Expectations for All* and *Goal Oriented.*

**Attributes of the Principal**

This section will present findings for the first research question, which asked “What are the attributes of an elementary international school principal who is seeking to foster a school culture and climate where creativity can thrive?” To arrive at the findings for this question, three in-depth interviews with Sandra were considered the primary data source and were analyzed inductively. Data from the documents, observations and other stakeholder interviews were then used to expound upon and confirm the themes found in the in-depth principal interviews. A detailed account of the analysis process can be found in chapter three. Through analysis, three types of attributes were derived: Personal attributes which reflect her as a person, an attribute of her Core Educational Beliefs related to creativity which is evidence of the main convictions related to creativity in schools, and the attribute of Vision for the School which pertains to how Sandra goes about leadership. The entire image can be seen in Figure 6 and pertinent portions of the
image will be provided during the discussion of the themes and categories within each attribute.

As this study was completed with the lens of fostering creativity in the school, it is not means to paint a complete picture of Sandra’s entire life experiences, personality traits and educational philosophy. It does, however, unveil salient attributes which arose during the interview process when focusing on creativity in the school. The section following the description of her attributes presents the actions associated with them, which was the second research question. Therefore the combination of the two findings answers the question, what does this attribute look like in a school setting when a principal displays it?

Attributes One: Personal

During the analysis of the data, three themes emerged which describe Sandra as a person. These themes are Personal Experiences, Whole Child Emphasis and Attitudes and Outlooks. These three themes stand apart from the other eight themes identified because they intertwine and impact the other two attributes of Core Educational Beliefs and Vision for the School. In the following paragraphs each theme and pertinent categories will be defined and discussed, with examples from the data provided. Figure 7 below is a subsection of Figure 6 and shows the Personal Attribute.

Personal experiences. Each person brings to their current situation a history of previous experiences. Three categories of this theme emerged during analysis: Life Experiences, Teacher Experience, and Administrator Experience. Primarily this theme is descriptive in nature and provides a better picture of Sandra’s personal experiences.
Figure 7. Personal Attribute with themes and categories.

Life experience. Life experiences entail events that occurred while she was growing up, before reaching adulthood. Sandra moved several times as a child and she linked her willingness to accept new ideas to this experience by stating, “My own openness probably came from moving around quite a bit and having to be open to learning new things across my life.” She attended a Montessori school from around the age of 3 until 4th grade, which she believes helped form the way that she learns and how she approaches education today. Specifically she recalled the importance of field trips and the use of manipulatives for learning, part of education that she still believes are important today. When asked to reflect on how her life experiences had shaped her confidence, she discussed her high school experience. She attended a “progressive, arts-based” boarding school where the emphasis was on individuality. She stated,

You were recognized and celebrated for how different and unique you could be. That was what was encouraged. A lot of the classes were structured around developing your personal voice. So, there were always multiple answers sought at the table. And I think I just learned that, that became part of what I was expected to do and think.
**Teacher experience.** Sandra did not initially set out to become a teacher. She attended art school at the university level and then took a year off to determine whether she wanted to be a full-time artist. At that time she was hired to teach art in an after-school program. She fell in love with teaching and continued a career in education. She was a classroom teacher for a total of 12 years in several schools, all at the elementary level. Her classroom experience includes both positions as an art teacher and as a kindergarten teacher. When asked how she felt her arts training influenced her leadership today, she responded with,

I'd love to say that you have to have been an artist-- but I don't think that's true and I don't think it was necessarily even art school that is critical. I do think being a teacher is really important before becoming an administrator because I think you really have to understand the challenges that a teacher faces before putting things in front of them… You have to teach to know. You have to know when the critical periods are, so you're not going to try and do creative things when report cards are due.

It was during her teaching experience in the United States that she initially heard about international schools and elected to apply for positions within them. It wasn’t long before she and her husband accepted teaching positions in an international school. All of her educational experience since then has been in various international schools in several countries and continents.

**Administrator experience.** Similar to her path into teaching, Sandra did not initially plan to become an administrator. She elected to obtain a master’s degree in educational leadership with principal certification while teaching internationally as a way
to leave room for possibilities in the future. Her first principal position, which she described as more of a curriculum director role due to the small student population, was in a school where she was initially a teacher. After leaving that school, she initially moved back into a classroom teacher position in another international elementary school before becoming the elementary principal there. Her current position at the European International School is her third school as an administrator. During the data collection period she was completing her eleventh year as an administrator and her fourth year at the school.

**Whole child emphasis.** This theme is a central conviction Sandra has concerning education, one permeating her *Core Educational Beliefs* and her *Vision for the School*. Having a whole child emphasis means that she believes it is important to address all aspects of a child and not only focusing on tested academics within the school. This includes the arts, but also technology, engineering, creative thinking and social-emotional aspects of the child. When asked what she considered an essential quality for principals desiring to encourage creativity in their own school, she stated,

I think they really have to have a philosophy about developing the whole child and not just focused on an academic program. I think if you are achievement focused or success focused, you know success by numbers or success by assessment, that really kills opportunities for creativity. So I think that philosophy is really important. I think you have to you have to truly believe that music is as important as math as art as all of the other things and then have that drive everything you do.
This statement is evidence of not only the conviction she has concerning addressing the whole child, but also that the belief should be evident in practice. Simply put, that beliefs drive actions.

A piece of this theme is also that Sandra’s focus is always on the students in the school and what is best for them. In one interview she discussed that even when there are successful events or projects that fostered creative opportunities for students, that teachers can be both tired and joyful. Yet, “No matter what, everyone sees everything that we’ve done together benefits students. I think people are very good at reflecting on the fact that it is important and kids love it and that’s what we’re here for.” This shows that her emphasis is on the whole child because she focuses on the students and their school experiences while also encouraging the teachers in the building to see the bigger picture in potentially stressful situations.

**Attitudes and outlooks.** The third theme within the Personal attribute concerns the attitudes that Sandra displays. These attitudes and outlooks are also ones that she intentionally models for her teachers and expects her teachers to also exhibit. There are five categories associated with this theme, which are openness, transparency, risk-taking, flexibility, and celebrating.

The categories, which are described within this paragraph, are often evident in the actions that Sandra takes. Openness is a willingness to be exposed to a new idea or experience without immediately disregarding it due to unfamiliarity. As previously discussed in the section on life experiences, Sandra attributes part of her own willingness to be open to changing locations as a child. In discussing how she works on her personal growth, she said that her ideas come from many sources. For instance, “they come from
kids, they come from classrooms and they come from teachers and I just have to be open to really listening and then researching myself.” Transparency can be thought of in terms of vulnerability, in that it is when a person makes information or themselves exposed and unconcealed. Sandra specifically stated that transparency was a value and gave the example of sharing with her teachers the results of a survey about her leadership. She said, “I really do think that if I’ve asked people to do the survey, it’s important that they get to see what the results are.” Risk-taking is the willingness to engage in an activity or idea where the outcome is not certain. Sandra tied risk-taking to vulnerability by stating that she believed the two are important and related to transparency. Flexibility is the willingness to change plans as necessary and is therefore also tied to openness because if a person is not willing to listen to a new idea, they are not going to be willing to follow it. During the interviews Sandra stated several times that an aspect of the school had changed from year to year. When questioned about the practice of changing structures, she often responded that she was flexible and willing to adjust course as needed in order to achieve a goal. The final attitude is celebrating, which captures Sandra’s desire to have fun and to commemorate the things that she values. She said,

I think also what I choose to celebrate speaks to what I value. So, when I celebrate new ideas and innovations and creativity, I think I’m telling people that this is what I value and this is, you know if you want to be celebrated or you want to see… this is what I'm looking for!

However, celebrations are not limited to creative projects within the school. She also honors teachers as people and seeks to celebrate achievements or life events that occur outside of their classroom work.
The data revealed three ways that these attitudes and outlooks manifest themselves. First, Sandra exhibits them herself and specific examples are provided in the next section concerning her actions. Second, Sandra is intentional about modeling them. This suggests the Attitudes and Outlooks are not just a part of her personality, but she is conscious of their importance and seeks to display them as she leads the school. She stated modeling is important to her. In fact, concerning the attitude of transparency she stated, “I value transparency because I think it’s important to model what I expect.” The final way Sandra exhibits these attitudes is by looking for the Attitudes and Outlooks in her teachers. It is closely tied to modeling because she is hopeful that as she exhibits behaviors which are open, transparent, risky, flexible or celebratory, her teachers will feel comfortable to also display them.

**Attribute Two: Core Educational Beliefs**

During analysis, six themes emerged concerning Sandra’s Core Educational Beliefs about the role of an administrator and cultivating creativity. These themes are not meant to be inclusive of Sandra’s entire educational philosophy, but instead pinpoint the beliefs she holds in relation to creativity. There are three major themes and three minor themes within this attribute. The major themes are *Creativity is Important, Relationships are Important,* and *Growth is Important.* The minor themes serve as links between the major themes and are *Exposure to New Ideas Sparks Creativity, Teachers as Leaders,* and *You can’t grow without being creative.* Each theme is discussed in the following paragraphs along with any pertinent categories. Throughout this discussion, the influence of the Personal Attributes, which were discussed above, will be presented. In order to
simplify the discussion, the following sections will follow Figure 8 in a clockwise manner, beginning with *Creativity is Important*.

*Figure 8. Attribute of Core Educational Beliefs.*

**Creativity is Important.** It is not surprising Sandra believes creativity is important given the focus of this study and its participant selection process. Be that as it may, in each of the three interviews with Sandra, she made seven explicit belief statements concerning creativity. This section will first review Sandra’s explicit beliefs...
about creativity and then explore two categories associated with them, which are Finding Time for Creativity and Recognizing Creativity.

Sandra operates with a broad definition of creativity in that she considers creativity to be everywhere, asserting, “in order to have a creative school, creative thinking has to be everywhere in the school.” She also defined creativity as “an openness to experience and an openness to new ideas.” This last statement connects this theme, *Creativity is Important*, to the category of Openness within *Attitudes and Outlooks* which was discussed in the Personal Attributes.

In one interview, she drew attention to the role of the principal in relation to creativity by stating, “It really is critical, in only the flipside. It would be very easy for me to discourage it and to stop it from happening. I mean it's so easy, you can kill it so quickly. So, so easy.” When the researcher asked what she then does to ensure that she does not kill creativity, Sandra said, “It's hard to quantify… but it’s walking around and recognizing the good things that are happening and then sharing those things or growing ideas from those things.” This relates to her attitude of celebration in that she not only recognizes creativity when she sees it, but she also shares it with others.

*Finding time for creativity.* When discussing her *Whole Child Emphasis*, a theme in the Personal Attributes, Sandra stated “I think you have to you have to truly believe that music is as important as math as art as all of the other things and then have that drive everything you do.” As she believes that *Creativity is Important*, she also believes it is important to schedule creativity into classrooms and school activities. Throughout her tenure at the school, Sandra has worked with teachers to begin to schedule intentional time for creativity into their regular rotation of lessons. This was evidenced both in
conversation with her and in several of the grade level’s schedules which include a creative time or project time within their six-day rotation. Sandra has also initiated days where the entire school participates in a science, technology, engineering and math (STEM) project or build. Titled “STEM Challenges,” she instituted the opportunities for the projects because she believed they were important. At the same time, one of her future goals is to shift the school-wide projects related to STEM into projects that are a part of the regular science curriculum. However, she admitted that finding time for creativity was often not easy, even for someone who is actively looking for ways to incorporate it into the school. “I think we’re struggling to find the balance between curriculum demands and opportunities to encourage creativity, which necessitates time.”

**Recognizing creativity.** An additional category of the theme Creativity is Important is that creativity needs to be recognized. This means that she is open to exploring when she sees a teacher doing something that she has not seen before. One of the interview questions asked Sandra what she thought were the essential qualities of a principal who wants to foster creativity in a school. She responded,

Recognizing it. I mean really, really recognizing, but also recognizing it when you see it. Recognizing that when someone is not doing something the way you've seen it done before, that what you're seeing might be better. I can imagine walking into a classroom when I am expecting them to be doing math and I walk in, and they’re doing something math-like but not really. I could react to it by, “Why don’t you have your books open? Why are you doing this?” Or I could ask questions and hope to understand it differently. So I think that part of it is recognizing that there's a place for creativity.
To be able to identify creativity when encountered can be a small act. However, it requires an attitude of Openness and it is a necessary step toward the Celebration of creativity, both of which are categories in the theme *Attitudes and Outlooks* within the Personal Attributes. It is not possible to value and celebrate creative thinking if a person does not recognize creativity when it is there.

**Exposure to new ideas sparks creativity.** This is a minor theme that links the two major themes of *Creativity is Important* and *People are Important*. Sandra’s interview responses indicated she believes allowing people to experience something they have not experienced before is a way to generate new ideas. New ideas in turn lead to creative thinking. In practice, this often means grouping people in different ways. She ties creativity to looking for alternative ideas or ways of doing things, which in practice for Sandra often means operating within a group of people, each who brings a different perspective to the conversation. She stated,

I think that then you have a wealth of ideas at the table and [instead of] one person who is coming up with things and I think that the expanded conversation expands ideas and through collaboration, through conversations, things grow and develop differently than they do if you're just sitting down to do it by yourself.

Sandra is always looking for new ideas or doing something in order to generate new ideas within the school. Through the excerpt above, Sandra links creativity to working in collaboration, which is a category of the next theme, *People are Important*.

**People are important.** Sandra does not believe in working alone. She values people and the different perspectives they bring into their roles. She sees the teachers in the building as professionals and as human beings. In this way, she seeks to celebrate not
only academic achievements that occur in classrooms, but also personal achievements. The categories associated with this theme are Forming Relationships and Establishing A School Community, Working in Collaboration and Engaging Everyone’s Voice. Each is discussed below.

**Forming relationships and establishing a school community.** When Sandra arrived at the school, one of her goals was to form relationships with the teachers and to work toward a school climate that was positive and cooperative. She values having a strong school community and has worked toward developing it during her tenure at the school. When she identified characteristics of the school’s culture that were important for encouraging creativity, she said,

I think that we’ve developed a community of trust and risk-taking. I think that if I’d come in and suggested certain things during the first year, people might have complied and maybe enjoyed them and wanted to continue, but now we have developed a relationship where anyone is willing to try anything. So I think it’s kind of a risk-positive environment. Because people also trust that if things don’t work we’re not going to keep doing them. I think that’s probably really important. So, the relationships, the trust and that creates that risk-positive environment.

For Sandra, she relates building relationships and a feeling of community with the creation of an environment that promotes risk-taking, which is an attitude that she values. Communication is also as part of forming relationships and Sandra seeks to communicate transparently with her staff whenever possible.

**Working in collaboration.** While some decisions must be made by the principal, for the most part Sandra does not lead alone. She has a mindset that it is important to
work with others and especially the teachers when seeking to nurture anything in a school. During her first year in the school, she sought to focus on using “we” language in order to give her teachers ownership of the school and the way that it operated. She also stated, “One person can’t make a school great. But if we all are willing to share passions then we can create it.” She seeks to make decisions about the school using teams of teachers and garner’s feedback using formative and summative means.

**Engaging everyone’s voice.** In light of the fact that she values people and working together, Sandra is intentional in collecting the thoughts of everyone. She wants to provide everyone with opportunities to be heard and to share their thoughts.

“I think in all of our faculty meetings and discussions and even in the leadership teams it’s really about getting everyone’s voice. Because when we think together, we think deeper and we think more creatively about everything.”

Feedback is a large part of engaging everyone’s voice, but she also seeks to engage teachers in discussion and idea-sharing during faculty meetings or through committees. She was also purposeful when transitioning to the school by speaking to each teacher during a visit. She believes that it is important to hear everyone’s thoughts and through everyone sharing their different perspectives, better ideas will be generated. The result is that more creativity will occur.

**Teachers as leaders.** This is another minor theme which connects the major themes of *People are Important* and *Growth is Important*. The European International School is a smaller school and has, as Sandra stated, “a skeleton administrative staff.” Sandra is the only administrator in the elementary school. Instead of trying to cover all the leadership tasks herself, she created leadership positions for teachers. Some of these
positions have stipends, but she also frequently forms committees with teachers in order to make decisions for the school.

Sandra has several reasons for placing teachers in leadership positions. One is that she values the ideas of others and working with others and forming relationships, which was evident in the categories within the theme *People are Important*. She said, “I think that developing teacher leaders and teacher leadership, forming committees - basically encouraging dialogue so that you are generating new ideas, is something that is critical.” Additionally, as a teacher who transitioned into leadership, she is also motivated to provide that opportunity for her teachers so that they can also grow in their skills. This value ties teachers in leadership positions to the next core belief that will be discussed, *Growth is Important*. When discussing how she sought to develop relationships within the school during her first year, Sandra expressed,

And then, identifying different leaders, so trying to build that capacity and trying to encourage people to grow. So, I think that’s also relationship development because it’s giving up control over everything and recognizing that someone else can do it better than you. And I think when a principal does that, then it’s more likely to happen at grade levels and everywhere else.

This excerpt ties teacher leadership to the value of relationships and the value of growth, both of which are reflected in the themes *People are Important* and *Growth is Important*. The statement also hints at purposeful modeling in that she provides teachers with opportunities to lead in part so that they will provide those opportunities to students in their classrooms.
**Growth is important.** This is the third and final major theme within the attribute of Core Educational Beliefs. Sandra operates with a conviction that people want to be challenged and to grow, whether they are conscious of that desire or not. She believes that people have a sense of accomplishment and are in better spirits in the work place when they are growing. In response to a question concerning her goals for creativity in the school Sandra stated,

I think they are just simply that we continue to grow and change… I think that you can’t grow without being creative because if creativity is thinking deeply about things and being open to new ideas, that has to be present for growth… And I think it can be easy to stop growing and it takes energy to keep growing.

For her, growth and creativity are inseparable, which is how the two themes of *Growth is Important* and *Creativity is Important* are linked together. She seeks to grow herself in order to continue to be creative and she seeks the same for the teachers in her school. The two categories within the theme of *Growth is Important* are Finding the Strengths of Others and Growing the Strengths of Others and are discussed below.

**Finding the strengths of others.** For Sandra, it is important to see people as individuals. She recognizes that each person has a strength and that strengths differ from person to person. She allows teachers opportunities for self-expression. When discussing her reasoning for these opportunities, Sandra stated,

Everyone is different and has a different strength. And modeling your personal strength and your passion is important for students because not everyone is going to be interested in the same thing there either. So, I think really recognizing
individual talents and encouraging people to share with each other those things is something that we’ve worked on. In terms of her leadership, she said that as principals, “We really can’t know and can’t do everything, but if we identify the strengths of those that we work with and we work together, we can build and do beautiful things.” This then ties to her valuing of people and of working together to individuality and growth.

**Growing the strengths of others.** It is not just enough to recognize that people are different and have individual strengths. Sandra also seeks to grow teachers in their strengths. She expects teachers will attend conferences, participate in committees and work with their grade level or subject area teammates. In fact, Sandra identified her educational leadership philosophy by this belief. “It's a really about growing the strengths of everyone around you… It's about germinating other people's strengths and developing leadership across the school.” Her aim as a principal is to grow others and she believes that you can’t grow without also being creative.

Part of growing the strengths of others is supporting their strengths and passions. She supports the ideas of her teachers by listening to them and offering feedback, but also in providing resources as possible in order for them to pursue a project they are interested in. This is also evidence of Sandra’s reflection about her own strengths. She knows her own weaknesses and identifies teachers who have strengths in those areas. Then Sandra supports their personal and professional growth by placing them in a leadership role.

**Attribute Three: Vision for the School**

The final attribute revealed in the data encompasses themes describing Sandra’s vision for the school and how she leads the school. It is depicted in Figure 9. The
attribute of her Core Educational Beliefs, outlined above, greatly influence how she
operates as a leader of the elementary school. She has a vision of what the school should
be like and she has aimed to accomplish it by two main facets of establishing common
expectations for all and by being goal oriented. Pieces of her vision include revising the
curriculum, looking at the physical school building and the furniture within it,
purposefully incorporating STEM projects, and restructuring how the early childhood
level operated. Upon arrival she also wanted to alter the school climate and culture. In her
visioning, she thinks about future in order to evaluate how the outcome of a decision
might look several years later. She also involves her staff in creating the vision. She said,

We can all be working in the school of our dreams. And the only way that can
happen is if we make it happen. So, when we dream about that school, what does
it look like and how can we get there? And so, just in various ways across the
years making sure that that’s the question that we’re always asking.

Within this attribute there are two themes, *Common Expectations for All* and *Goal
Oriented*. These two themes are discussed below.

![Figure 9. Attribute of Vision for the School.](image)

**Common expectations for all.** One of the ways in which she enacts her vision is
to establish *Common Expectations for All*, which is the first theme within the attribute of
Vision for the School. This is primarily seen through actions, but it’s also a belief that she
holds. She has sought to create what she calls “common expectations for a guaranteed
curriculum.” She believes that expectations must be clear and that that must be the same in order to ensure all students are exposed to the same kind of learning experiences. She sees this as an equity issue. In reference to a STEM project that occurred school wide, she expressed her desire to add more of those types of projects into the science curriculum because “if it’s going to be part of every student’s guaranteed learning it has to fit somewhere. It can’t be an add on.” This ties to the theme of *Creativity is Important* and it's associated category of Finding Time for Creativity. At the same time, it also speaks to providing students with a common experience. Events that are added onto the regular curriculum might be nice, but then they are not part of the guaranteed learning that students have from year to year. Sandra has worked to establish the common expectations, both in curricular and non-curricular areas.

**Goal oriented.** As a way to progress toward her vision for the school, Sandra is very *Goal Oriented*, which is the second theme. She has a list of general school goals that she discusses with the teachers throughout the year. These goals provide focus for the work that she and the teachers are doing throughout the year as well as a way to measure progress. A key part of her goal orientation is that it changes according to the needs of the school. This means that every year and then also as the school year progresses, Sandra evaluates the progress toward the school goals. She then determines what the needs are in order to reach that goal. The needs could be time, resources, a physical location or even the leadership structure of the school. Once she determines the needs, she then makes changes in order to better support the achievement of a goal. She collects feedback from her teachers in order to make informed decisions regarding the needs that they have and how they feel they can be better supported. She also collects feedback in terms of what
the teachers think needs improvement in the school. She then uses this feedback to
determine the goals. School goals are an area where she does make the final decision
herself. It can be compared to steering a ship of rowers. Sandra listens to the rowers and
talks to them concerning their perspectives, but in the end she chooses to steer toward her
vision.

*Structures the School According to Needs.* Sandra is flexible in how she
structures the school in order to meet the goals. This means that if a method is not
working, she is willing to change how a committee operates in order to achieve the end
goal. For her, growth and meeting the goal are more important than the specific way that
it is met. Since she equates growth with creativity, she is always seeking to refine how
the school operates in order to avoid stagnation. She expressed this sentiment when she
said,

> And so I think that in the ways that teachers need to look at curriculum as always
> changing, I think that leaders need to look at schools as also always changing.
> And not allowing ourselves to get comfortable, but to recognize that we always
> want to grow and always want to learn and always want to improve.

**Summary of Attributes**

This first section explored the attributes Sandra exhibited to foster a school
environment where creativity can thrive. Three types of attributes were identified:
Personal, Core Educational Beliefs and Vision for the School. The Personal Attributes
encompassed three themes of *Personal Experiences, Whole Child Emphasis,* and
*Attitudes and Outlooks.* Second, the attribute of Core Educational Beliefs was explored
along. Within this attribute it’s three major themes of *Creativity is Important,*
Relationships are Important, and Growth is Important were discussed along with the three minor, or linking, themes of Exposure to New Ideas Sparks Creativity, Teachers as Leaders, and You can’t grow without being creative. Finally, the attribute of Sandra’s Vision for the School and how she leads was examined. This serves to address the first research question, which asked, “what are the attributes of an elementary international school principal who is seeking to foster a school culture and climate where creativity can thrive?” The following section will follow the same thematic structure, but expound upon the actions which serve as evidence of each of the attributes.

**Efforts of the Principal**

The first research question sought to understand Sandra’s attributes in order to paint a picture of what a principal who is seeking to foster an environment for creativity is like. The second research question stated, “How does this principal describe her efforts to foster a school culture and climate where creativity can thrive?” Data collected for this research question emphasized what Sandra does. As with the first research question, the primary data sources were the transcripts from the three in-depth interviews with the principal. Additional data from documents, observations and other interview transcripts were reviewed in order to triangulate the principal’s self-described efforts.

This section will examine what activities Sandra engages in as she seeks to foster a school culture and climate where creativity can thrive. This means that the excerpts will primarily provide specific examples of actions that are a result of her personal experiences and attitudes, core beliefs and her vision for the school. The organization of this section will follow the same structure as the section for the first research question and will be discussed in the same order for continuity. Thus, it begins with a discussion
of the top level of her personal experiences, moves to the three core beliefs and connecting themes before exploring her vision for the school. Figure 10 is provided for reference, though it is the same figure presented at the beginning of the chapter.

Figure 10. Relationship of Themes for Principal Attributes and Efforts.
Attribute One: Personal

At the top of Figure 10 are the Personal Attributes. It depicts the three themes of Life Experiences, Whole Child Emphasis and Attitudes and Outlooks. This level is fundamental in that these three themes permeate and influence the subsequent attributes. As a consequence, there are few described efforts directly associated with these themes. Her life experiences were reviewed as a part of the first research question and as they are already lived experiences, there are not any actions directly paired with them. Instead, the previous experiences impact who she is today in the form of her Core Educational Beliefs and her Vision for the School, which were the other two types of attributes identified. Her whole child emphasis compels her Core Educational Beliefs about education and how she chooses to create a Vision for the School. She was explicit about her conviction concerning a whole child emphasis driving her actions when she said, “I think they really have to have a philosophy about developing the whole child and not just focused on an academic program... and then have that drive everything you do.” However, there are many actions associated with her attitude and outlooks. Therefore those will be explored in the following paragraphs in a more specific manner.

Attitudes and outlooks. As reviewed for the first research question, this theme relates to temperament and perspectives that were revealed in the data. These attitudes are not only displayed by Sandra, but she is also intentional in modeling them and she looks for them in her teachers. Five categories were identified for this theme: openness, transparency, risk-taking, flexibility, and celebrating. Specific examples of how Sandra exhibits each Attitude and Outlook as provided below.
**Openness.** Openness is a willingness to be exposed to a new idea or experience without immediately disregarding it due to unfamiliarity. Sandra is open to hearing ideas from anyone and does not wait for the director of the school to tell her what to focus on. She listens to teachers in the school as well as students. For example, when the physical education teachers were working to redesign an activity room, a student suggested that they consider a specific piece of equipment. Sandra fully supported the teachers looking into it and eventually they decided to purchase something that they had not known existed before the student shared information with them. Her approach is often, “tell me more about it” instead of rushing to judgment.

Another example is that Sandra was performing a regular walkthrough when she came upon a classroom where some students were making clay figures and others were on computers. The official schedule dictated that they were supposed to be doing a social studies lesson. Sandra retold her reaction as, “I walked in and I’m like, “what's going on?” and the kids started talking to me.” It turned out that they creating Claymation videos as a way to discuss cause-and-effect. She admitted that she did not know what they were doing when she entered the classroom, but after asking questions and seeking to understand she discovered a lesson that she believed was very innovative.

One way that Sandra monitors the climate of the school is by looking for openness in her teachers. She is open to listening to her teachers and she also desires them to be open to new experiences and ideas as well. Sandra demonstrates an outlook of openness in her actions, she models it by listening to new ideas and experiences and then she encourages her teachers to be open as well. When situations arise she watches how the teachers in the building react in order to see if they are open to new ideas. An
example of this was evident when the school tested several new math curricula during the past year to see which one they might want to adopt. There were several volunteers to do this. A similar reaction from teachers was exhibited when the elementary school was given the opportunity to host student teachers in the next school year. Initially Sandra spoke with the US-based university to express that she was not sure how many of her teachers would want to mentor student teachers. However, after she sent out an e-mail asking her teachers to consider it, she now has more volunteers than she has student teachers. She said of her teachers, “Instead of looking for ways to say no, I feel like people look for ways to say yes or at least maybe. She also said that, as a principal,

    You want to encourage questioning of things. You want to encourage an openness to new ideas. I want people to step forward and say, “I had this great idea what do you think? Can we do it?” … I think what it means to be a creative leader is to always be open and encouraging of new ideas. And be willing to explore them.”

**Transparency.** The willingness to share information with others is a way to consider the attitude of transparency. It is very closely related to vulnerability in that making oneself transparent often means being vulnerable. Sandra often asks her teachers for feedback on decisions that have been made or even their perspective about school improvements. This is formally done through a survey at the end of every year, which is a part of Sandra’s evaluation process. During a faculty meeting that the researcher observed, Sandra displayed the results of the survey and spoke to her teachers about them. She then specifically pointed to the areas where there were markings of “inconsistent” or “unsatisfactory.” The survey itself had asked that people provide specific feedback for improvement, but there was not any. Therefore she drew attention
to her desire for feedback concerning her weaknesses during the faculty meeting. She requested all staff review the results of the survey and that if anyone had feedback for improvement to please write it on a sticky note. After the faculty meeting Sandra then posted the survey results in the teacher’s lounge so that anyone could review it and offer additional comments.

Additionally, she works to be transparent in her leadership. When a decision is made, she shares as much as possible concerning the hows and whys. She stated,

I try and share as much information about what is going on in the school as much as possible so that everyone is in the know. I try and avoid the “someone has power because they have more information” scenario.

This desire to share information is another indication of her willingness to be transparent. She does not seek to hide information from staff. She updates them on projects as they are taking place. A new science building scheduled to be built for the elementary school is an example of Sandra’s efforts to communicate transparently. She worked with a committee to determine what would be built and then shared news with the entire staff through a weekly newsletter as information became available. In the newsletter she acknowledged that there was a lot going on and so, “two documents are printed out in the ES Office for your reference this week that should help to fill in the blanks.” In this newsletter to her staff she also provided a few links to internal documents that provided construction details for the new science building.

**Risk-Taking.** Willingness to try an idea without having a guaranteed outcome is something that Sandra exhibits herself and that she also seeks from the teachers in the school. By being open and listening to new ideas, she often encourages teachers to try
them. An example of a risk that Sandra took was when she initiated the first school-wide STEM challenge. At the time her main focus for the event was to build community within the school by having every class work on a similar project. She was inspired by an online video entitled, “Cane’s Arcade.” It is a story of a boy who created an entire arcade of games to play using cardboard. Sandra had all classrooms participate in students creating their own arcade games out of cardboard and other materials and then the students spent some time rotating around the school playing one another’s games. She reflected on the experience by saying,

Everyone loved it. And the kids loved it and the parents came and they loved it. We learned a lot from that. I didn’t pre-think everything before doing it… the entire parent lounge, from floor to ceiling, was just cardboard. And I actually had to pay like 800 euros to have it removed. So, I did not pre-think that! I just thought we’d use it, we’d get rid of it! But, so there were things that we learned.

By deciding to have the school work on this project, she took a risk. She did not know what it would turn out like nor was she able to anticipate all of the outcomes, such as the excess cardboard once the games were broken down. However, the one event turned into a committee that discussed how to incorporate school-wide STEM projects into the school year and later a teacher coordinator was established to lead two annual STEM days and then smaller monthly projects.

Additionally, Sandra has sought to build a school community where the teachers feel safe to take risks themselves. She believes this has been achieved due to the relationships that have been established. She indicated that she did not think that teachers would have been willing to take the same risks during her first year at the school as they
do now because the relationship was not there. The teachers in the school are often taking small risks within their classroom as they try out new types of lesson plans, such as the previously discussed example of having students create Claymation videos for a social studies lesson on cause and effect.

_Flexibility._ Sandra is very willing to change her methods of action in order to meet a goal. An example of this was during her first years at the school when she had teachers form committees based on curricular areas. The goal was to mix teachers with different grade levels and have them work on curriculum in different subject areas. However, after a year of regular meetings the committees had not made much progress. So the next year she shifted the teacher committees to instead be on “task oriented teams.” Each team had a specific goal to achieve and at the end of the year all committees had reached their goals. Examples of goals from the teams were to work on how STEM challenges would look within the school and also to create a set of common expectations regarding social-emotional behaviors in the school.

Another way that Sandra demonstrates flexibility is in how decisions are made. She determines the vision for the school but then forms committees in order to establish a specific plan of action. She has emphasized STEM projects as part of her vision and has worked to begin to transition from just added-on day challenges to projects that are tied to the science curriculum. When the researcher asked her what was going to happen next year with the STEM challenges and the coordinator position, she replied, “It will be determined in the next faculty meeting.” Meaning, she was going to seek her faculty’s input and see what they thought was the best way to proceed. Sandra demonstrates flexibility in that she wanted to do what was best for her teachers and the students.
Celebrating. The final attitude that Sandra demonstrates is one of celebration. She seeks out ways to create a school environment that is fun and that honors the accomplishments of teachers, staff, and students. She believes in public celebration and sharing with one another so that teachers feel more connected to one another. One prominent way that Sandra accomplishes this is through her weekly newsletter to teachers. There are many components to the email, however it always consists of a section of thank-you’s where she publically thanks a person or group and a goals section where she identifies a school goal and then provides an example of exactly how that goal has been met in the school by a teacher or staff member. She also takes pictures when she visits classrooms and posts a few in the newsletter. While Sandra has several reasons for publishing a newsletter to her staff every week, one of them is to address the question, “How do we celebrate each other’s accomplishments? How do we recognize individuals and teams who are doing incredible things?” She celebrates creativity when she sees it, but she also celebrates the personal accomplishments of teachers. In the newsletter and also in an observed faculty meeting, Sandra celebrated the birth of a baby, a pregnancy announcement, an engagement and a sports-team win.

She does not just use the weekly newsletter or faculty meetings to celebrate in the school. She will also share accomplishments with the director of the school so that he can come by a teacher’s classroom in order to compliment the work being done. She also writes notes, is intentional in speaking with someone to personally tell them she believes they have done something great. She is intentional in her celebration as well in that she ensures that everyone is celebrated for the work that they do and around the Thanksgiving holiday she write personal notes to her teachers listing what she is
“thankful for” in relation to them personally and their contributions to the school. For students, sometimes she displays work in the hallways. There was a student at the school who created large, accurate cardboard models of movie characters as well as the Titanic. Though they were not created in the school, Sandra celebrated the creativity by placing the models in the library and taking the student’s picture to share in the newsletter. Later one model was moved to her office while the two robots were placed in a display in the main hallway that everyone walks past as they enter or exit through the main entrance.

Attribute Two: Core Educational Beliefs

This attributes expounds upon the Core Educational Beliefs Sandra holds regarding creativity and school administration. A visual representation of the themes can be found in Figure 11. The three major themes identified are Creativity is Important, People are Important, and Growth is Important. There are also three minor themes which serve as links between the major themes. These are Exposure to New Ideas Sparks Creativity, Teachers as Leaders, and Sandra’s statement that You can’t grow without being creative. In the section concerning the first research question, these themes were defined and discussed in relation to one another. In this section concerning the second research question, Sandra’s actions associated with each belief are now described. The three core beliefs will be reviewed along with their categories and the smaller themes that connect them together. This section will be organized in the same order and manner as when the Core Educational Beliefs were examined as attributes, which is to follow the Figure 11 in a clockwise direction.
Creativity is important. Sandra values creativity and believes that it needs to be incorporated into the school and into each student’s learning experience. She seeks to create an environment where creativity is not extinguished by her actions. She is careful to ensure that the whole child is addressed instead of focusing solely on academics. Sandra defines creativity openly in that it can be everywhere and is not limited to the arts. Two categories emerged during analysis that indicated how Sandra intentionally shows that she values creativity, finding time for it and then recognizing it. These two ideas will

Figure 11. Attribute of Core Educational Beliefs.

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be explored more fully in the following paragraphs and include specific examples of how she carries them out in an elementary school setting.

**Finding time for creativity.** As creativity is important to Sandra, she has pursued ways to intentionally include time for it into the school day. One such example is the school-wide STEM challenges that have already been discussed. There are two large ones that happen on designated days and then monthly challenges that teachers incorporate into their classrooms. The researcher was able to observe during a STEM challenge day and the project was to create an object that floats using recycled materials. While the STEM coordinator is the person who oversees the planning of the event, it is scheduled because of Sandra’s initiative. At the same time, Sandra confessed that it was very hard to find time to incorporate creativity into the classrooms. She said,

People want to, everyone wants it … But figuring out how to do it and how to do it well is hard. And so one of the things we’re looking at is how can we build in that capacity that sort of opportunity for multiple answers, multiple ways of doing things, deep thinking, into the curriculum that we have to and are already doing.

Therefore, Sandra has worked to incorporate creative activities into the school in general, but she is now working with her teachers in order to write units of curriculum that have creativity imbedded in them. She admits that currently many large-scale creative opportunities, such as the STEM challenge days, are added-on instead of part of the regular learning experience.

Another way that she has sought to find time for creativity is to allow teachers flexibility into their schedules. If a teacher needs a larger segment of time during a particular unit in order to include a creative project in a unit, they are permitted to move
other curricular times around to create the larger block of time. Upon arriving at the school Sandra sought to completely change the Pre-Kindergarten and Kindergarten schedules in order to provide more time for manipulatives and creativity learning. She had two teachers with experience train others in the Reggio Emilia methods. While this will be discussed in more detail later, one of the goals of the overhaul of the grades was to provide more creativity in the younger grades. Sandra then worked with the curriculum coordinator to alter the curricular expectations for early childhood in order to allow for more learning time in centers. They currently have a six-day rotation schedule in the elementary school, so five of the days are treated normally for a curricular area and the sixth is set aside to engage in more creative learning experiences such as going outside to measure objects instead of using classroom materials in a math lesson.

She has also started to work with different grade levels to allot a section of time dedicated to projects within their schedule. Some grades have been able to schedule in a weekly or quarterly time where students will be engaged in a creative learning activity and some grades have not yet done so. This does not look the same in the grade levels that have scheduled it, it may be a center time, a specific time for open play in the younger grades or a project time in the upper grades. However, the inclusion of project or creative time into the regular schedule was an initiative of Sandra’s.

**Recognizing creativity.** The ability to recognize creativity, or see creativity when it is around, is an important part of encouraging creativity. Creativity must be recognized before it can be celebrated. While recognizing it seems to be an obvious step, it is one that is not necessarily easy. Sandra primarily recognizes creativity when she is visiting classrooms. Her openness allows her to notice when something is different and then to
ask about it instead of checking the published schedule and correcting a teacher who seems to not be following curricular expectations. One example of this is the clay figures discussed above in the section about openness. In that instance Sandra saw something that she did not understand and asked questions. Then she was amazed at the level of creativity that the teacher had when preparing the lesson and also that the students were exhibiting while creating their short films. Anytime that she celebrates creativity she has recognized it as the first step.

**Exposure to new ideas sparks creativity.** This minor theme, which links *Creativity is Important* to *People are Important*, speaks to Sandra’s belief that more people with more perspectives participating in something yields more ideas. It is the link between her values of creativity and people because she sees the two as working together. She often seeks to connect teachers with one another, both inside the building and then also with other professionals outside the building. If she sees two teachers in the school doing innovative lessons that seem like they would be even better if the teachers collaborated, Sandra will connect them. She did this with the teacher using Claymation and the art teacher because it turned out that they had not spoken with each other. Sandra also connected two teachers in her building when a classroom teacher was reviewing artwork with students as a way to discuss culture. She connected the classroom teacher with the art teacher and together the two worked out a way to not only enhance the classroom discussion, but also extend the discussions into the art classroom.

Sandra also connects teachers with those outside of the building. When she first came to the school a physical education teacher was discussing ideas with her that were similar to a teacher she knew from her previous school, so she said, “I think if you two
could start having conversations about curriculum it would benefit both of you.” She connected two teachers in different parts of the world in order that they could both gain new ideas. Sandra has also participated in a job-alike exchange with the other international schools in the area. The principals meet a few times a year, but one activity Sandra was interested in starting was job-alike for teachers, where they could go experience what another school was doing. She reported that almost every teacher has enjoyed the experience of going or hosting another teacher. Sandra sees several benefits from these exchanges, referring to them as a “cross pollination of ideas” and said, “In some ways it’s confirming that what they’re doing or what we’re doing is really strong and in other ways it gives ideas about where we should all move forward.”

A committee process is used a great deal when making decisions. While this aspect of Sandra’s leadership will be discussed in more detail later, it should also be mentioned here. When decisions need to be made, whether curricular, altering the building space or hiring new staff, Sandra chooses to use a team of teachers.

**People are important.** This theme reflects Sandra’s emphasis on people. She esteems teachers and students not only for their good work, but she also sees value in them as individuals. The secretary of the school commented that people are always coming in and out of Sandra’s office and that she knows teachers and staff in the school well enough to provide specific ideas and feedback that will be useful for them. Of the teachers, the secretary said, “She knows them very well. And they are open to come. There’s room to be, to show a new side, a new interest. Always.” The director commented that,
“I've seen Sandra work with questions and even as she is confronting tough issues, she might pose something in a question to get to an issue. She's got a pretty well honed and refined set of skills that she takes to the feedback process and the affirmation process. I think both of those are important for encouraging creativity.”

Three categories of this theme are that she values Forming Relationships and establishing a School Community, she seeks to Work in Collaboration and she is intentional about Engaging Everyone’s Voice. Each of these will be examined in further detail through specific examples in the following sections.

**Forming relationships and establishing a school community.** A key part of the belief that people are important is the desire to form relationships with them, both individually and as a larger community. Sandra aims for the elementary school to feel familial, meaning that everyone is in relationship with one another. In his interview the director stated, “She promotes this kind of ethic of we're in this together, we are we are good when we are a family kind of unit together around this workplace and workplace issues.” When Sandra first came to the school, she sought to develop relationships with the teachers. One of the ways that she did this was by inviting each grade level team to her home for dinner.

During her second year at the elementary school she sought to have teacher develop stronger relationships with one another, so she encouraged people to move grade levels. The purpose of moving teachers around was two-fold in that it stimulates professional growth and that it helps teachers form stronger relationships with other people in the building. She stated that she thought that every team changed the second
year of her tenure. Although there were no changes at the beginning of her fourth year, she anticipated several changes would occur before the next school year. A specific example of when she moved teachers was when she facilitated the reworking of the early childhood curriculum. There were two teachers, a couple, working at the school who were trained in the method that she was interested in using. When she arrived, one was teaching Pre-Kindergarten and the other was teaching 5th grade. However, she moved them both to the Pre-Kindergarten level so that they could work together with the other teachers in order to train them. Thus, she moved teachers in order to maximize their strengths and to have them work with other teachers in a close relationship.

She views communication as a relationship and the need for information was one of her motivations to begin the weekly teacher newsletter. The newsletter provides teachers with information about what is happening outside of their current grade level and contributes to the feeling of community within the building. She said, “Probably more than anything now, it’s a community building piece. So that you’re not isolated at your grade level any longer, but you belong to this greater elementary community and a better idea about what’s happening in a real way through photos and through stories.”

Her desire to communicate ties to her attitude of transparency through attempting to avoid situations where access to information is equated with power. She aims to communicate as much as possible so that everyone can have power and thus be in community with one another.

The formation of several new school traditions is another way that Sandra has formed a sense of community within the elementary school. The STEM challenges are
times throughout the year where students and teachers have a shared experience. In fact, the first time they participated in a whole school challenge Sandra said, “It really was not about the engineering side of it, that was an added benefit. We were really trying to build the spirit within the school.” She also sought to build school spirit by placing a teacher in a leadership position dedicated to school spirit. This person was then responsible for several events throughout the year that would promote school spirit. Events included celebrating Halloween, maintaining a bulletin board and also coordinating student farewells since it is common for students to relocate at any time of the year. Sandra has also supported teachers who desired to create a greater sense of community in the 5th grade by establishing an annual hike and overnight trip as well as a kickball league.

These examples do not all demonstrate creativity outright, however, forming relationships and building community was a precursor to Sandra’s ability to foster opportunities for creativity in the school. She reflected,

I think that we’ve developed a community of trust and risk-taking. I think that if I’d come in and suggested certain things during the first year, people might have complied and maybe enjoyed them and wanted to continue, but I think that now we have developed a relationship where a suggestion is now – anyone is willing to try anything. So I think it’s kind of a risk-positive environment. Because people also trust that if things don’t work we’re not going to keep doing them.

**Working in collaboration.** This category focuses on Sandra’s enthusiasm about working with others. As seen in the theme Exposure to New Ideas Sparks Creativity, she values working with teams of people because she equates it with deeper and more creative thinking. She finds it fascinating to interview a candidate for a position and
afterward to see how everyone perceived the person a little differently. She believes the team approach is “a creative way to recruit.” She also stated that the school often attracts high quality applicants and so her focus is more on their personality and passion. She asks job candidates questions such as “If we bring you into our school, how will your being here change us?” This question speaks to her desire to find people who work with others and to promote growth in one another.

Curricular work in the school happens through teacher committees. Teachers work in teams in order to accomplish specific goals. Teachers have worked to establish the plan for the STEM challenges and how to incorporate engineering projects into the science curriculum, researched and written together the school’s philosophy concerning early childhood education as well as composed common expectations for social-emotional student behaviors and designating what teachers are responsible for in terms of teaching those behaviors. A committee was also formed in order to address changes in the building, from painting and lights to shifting where grade levels were located. Part of that work was also to decide how to use a building permit that had been issued to the school. Sandra and the committee decided in the end to dedicate the new building to science in order to provide lab space for projects. This was a decision that was made after a considerable amount of research and conversations with one another.

Sandra also works with her teachers by seeking feedback from them. She then combines teacher ideas and feedback with her own values in order to lead the school. She collected feedback from the teachers as she was transitioning to the school in order to assess what they wanted to keep and change in the school. She recounted, “One of the things that people wanted to do was focus on developing school traditions and developing
a stronger school community.” Therefore she did so, and examples were discussed in the previous category’s explanation on Forming Relationships and Establishing a School Community. Another example is her goal to incorporate STEM projects into the science curriculum. When the researcher spoke to her at the end of the school year, she was not sure if there would be a teacher leading STEM challenges the next year. She then stated her plan,

“I’m going to collect feedback and if people still want to do the two all school builds, then I would still ask the STEM leader to coordinate just around that. If they don’t, then no because it will be built into the curriculum.”

A final example of her collecting feedback is through the annual survey she provides as part of her evaluation. She takes the feedback her teachers give her seriously and is willing to adjust how the school operates. Last year the teachers asked for more time to work in their curricular teams, so Sandra moved from weekly faculty meetings to monthly faculty meetings. Her goal was to provide her teachers with three extra afternoons a month to devote to developing curriculum instead of attending faculty meetings.

Engaging everyone’s voice. It’s not just enough to have everyone in the same room if people do not have the opportunity to share their perspective. Sandra is intentional to hear ideas from others and she makes an effort to allow everyone to share their opinions. There are many ways that she encourages this. First, she provides the annual survey as an opportunity for teachers to provide anonymous feedback and comments. She also sent a survey to teachers the spring before she started at the school in
order to collect their ideas and desires for the school. Sandra also uses in person meetings and she ensured that she met with each teacher during a site visit.

Faculty meetings are organized so that they encourage conversations between staff members. Sandra purposefully designs a variety of protocols that will allow people to converse in a meaningful way that prompts thought. Sometimes this is by brainstorming the good things and the challenges concerning their outdoor classroom or brainstorming potential creative projects that could be incorporated into their classrooms as well as what resources might be needed. Teachers work in smaller groups and then share their ideas with everyone at the end of the meeting. During one of the faculty meetings that the researcher observed, there were pre-service teachers visiting the school. Sandra chose to use the meeting as a way for the university students and elementary faculty to have meaningful conversations with one another about what the students had seen. Sandra provided initial questions to guide their discussions, but the flow of the conversation was up to each group. At the end of the meeting she had the students write down their biggest take away from observing in the school and the teachers to write out a piece of advice for a beginning teacher. These were written on large sticky notes, which Sandra then collected after the meeting and displayed in the faculty lounge. The researcher spoke with one of the accompanying professors concerning her perspective of how Sandra fosters creativity. She said,

I liked how she ran the meetings because to me they weren’t your traditional stuff “well turn to your partner discuss this.” It allowed ideas to bubble up and I think it allowed our students in particular to recognize the inherent power of thinking outside the box when it comes to faculty meetings. So that's one thing that really
stood out to me. I mean, the time and the thoughtfulness to say “I’m going to come up with different sticky pads, different pencils, you know.” Again, drawing on the American context, there are principals who do that. It takes time and you have to be very thoughtful about it and I noticed that.

**Teachers as Leaders.** The minor theme link between the major themes of *People are Important* and *Growth is Important* is *Teachers as Leaders.* Sandra distributes the leadership responsibilities in the school. She sees the value in allowing teachers to have a focused leadership time, both for their personal development as well as her inability to do everything. Sandra also spoke to the community building value of teachers in positions of leadership by saying, “I think that it’s giving everyone ownership of the school and having them feel that they are also leading the vision and leading the course.” In reference to a teacher leading the supervision schedule, she stated, 

And I just felt that if someone had a passion in that area and I could trust them to do a good job leading that, they would do a better job than I could do, focusing 2% of my time on it along with everything else, they would be able to focus 100% of their leadership time on it.

Sandra uses teachers in leadership positions that are both have stipends and do not have stipends. When she arrived she actually changed the leadership structure of the school from one teacher leader per grade level to leadership based on specific needs such as school spirit, student council, supervision and more. In fact, it is not uncommon for the specific leadership areas to change every year. Yet, there are always areas that teachers can participate in to provide leadership.
Sandra also identifies the strengths of teachers in the building and as she can she has them present their knowledge to other teachers. Sandra did this when overhauling the early childhood by having the two teachers who had been to Reggio Emilia and learned the philosophy there. The early childhood approach focuses on experiential learning and play, with teachers not focusing on the end product but on the process of learning and then documenting what students are thinking as they learn. Sandra said, “And so, again I asked them to lead us. So they did a number of faculty presentations on the documentation process and it is now the way that we really do things in our early childhood program.” She also asks teachers to present their major learnings from conferences. The first faculty meeting that the researcher observed consisted of several teachers giving presentations from conferences they had attended and showing new lesson strategies they had learned.

**Growth is Important.** The final theme combines Sandra’s acknowledgement of people as individuals and her goal to increase the capacity of those around her. She considers growth and creativity to be symbiotic, that you cannot have one without the other. The director recounted that “One of Sandra’s stated vision pieces to me, and I see evidence that she’s moving in that direction already, was to build the capacity of staff to own their own visioning.” An important component of considering *Growth is Important* is that Sandra continues to ensure her own growth. She stated that it is something of which she is acutely aware is needed in order to continue growing the school. The director also commented that “she continues to try to challenge herself” while the secretary of the school phrased it as, “she’s very self-renewing.” As an administrator, Sandra focuses on the growth of the teachers and students in the building. Two categories
nestled into the theme are how Sandra goes about Finding the Strengths of Others and Growing the Strengths of Others. Each of these categories is discussed below along with specific examples of actions she takes.

**Finding the strengths of others.** Sandra believes that everyone has a strength and that each person’s strengths are different. She thinks highly of differences between people and values each person’s uniqueness. This ties to her own personal experiences, especially in high school where individuals were recognized for their originality. It also speaks to her openness in that she does not believe that there is one right way to do something, but instead that each person can accomplish something in their own way. The secretary of the elementary school shared that Sandra sees strengths in everyone and stated

She provides the room so that everybody can think in their own way… People come in with ideas and then she says, “Oh yeah! And this could go together with this.” And you think, “Oh, they just needed this link.”

The university professor recounted a bulletin board in the school that was decorated with pictures of M&M candies, stating “We’re all part of the overall pieces.” She was impressed with the idea of using the example of a candy that is different, but forms a group together as a way to create “an applicable message to students as far as their character development and where they fit in.”

Sandra acknowledges the individuality of her teachers by writing them “thankful for” notes each year where she provides reasons for why she is thankful for them and their uniqueness. When she wanted to alter the early childhood program, she found the teachers who had strengths in the areas that she wanted to incorporate into their program.
Growing the strengths of others. The final category of *Growth is Important* is Sandra’s aspiration to grow the strengths of those around her. She has annual meetings with all teachers and staff at the beginning and end of the year, called “goals meetings.” These meetings are a time to determine the professional goals for the school year and then to evaluate what progress was made at the end of the year. Generally grade levels have these meetings as a team and make goals as a team. Sandra asks them to not only think about their classroom and curricular goals, but also to reflect on professional development needs and opportunities. She encourages teachers to observe one another in order to share learning throughout the school and to help teachers see particular methods in action that they can then incorporate into their own classrooms. She seeks to stimulate growth in teachers by having them move grade levels, something that was also discussed in the category concerning relationships and forming a school community. By having teachers move to a new grade level, they are forced to think about their teaching a little differently, which them promotes professional growth. They are also then connected with other professionals who will present ideas they have not thought of before.

The professor observed that Sandra also gives her teachers space to grow. She observed a classroom activity with Sandra that was more chaotic than necessary and the professor noticed that Sandra did not stop the teacher and correct the planning there. That instead she allowed it to happen. The professor reflected,

“We realize they're going to hit these benchmarks at certain periods, but allowing young teachers that the chance to engage in something that you may know as a professional might need some tweaking, but allowing the teacher the creativity to kind of put it together, see where they need to grow, and then go from there.”
Sandra provides feedback to teachers. The director recounted a conversation he had with Sandra concerning the recent music concert and art display. He said, “Sandra has a mind's eye towards feedback and reflection. So she not only affirms, but she's taking mental notes and she's playing back those tapes with her teachers to continue to challenge and empower them to reach for more.” In terms of teachers as leaders, Sandra tries to identify potential teacher leaders and she approaches them about the positions and encourages them to grow in that area. When Sandra sees a school-wide need, she brings in outside consultants in order to provide training, such as using science kits in the classroom for more project learning.

In addition to emphasizing growth, Sandra also supports teacher’s passions. When teachers come to her with an idea about a new project, she encourages them to continue with the work. The most often quoted example of creativity in the school is their outdoor classroom. This is a space that was envisioned by a teacher after he came back from a conference. He was excited about the concept of creating an outdoor classroom and spoke with Sandra about it. She was supportive and then found a donor to help fund some of the initial costs to create an outdoor classroom. She also worked to redirect some of the regular school budget. The end result is a classroom that the entire school can use in many ways.

**Attribute Three: Vision for the School**

The final attribute concerns how Sandra’s leadership is influenced by her Personal Attributes and the Attributes of her Core Educational Beliefs. It can be seen in Figure 12. Sandra has a clear vision for the school that encompasses her values and beliefs. She often asks big questions in order to establish the next steps for the school. In reference to
connecting teachers with other professionals, she asked, “How do you expand the conversation and how do you expand the voices feeding into things?” She has led faculty meetings around the question, “How do we develop creativity in classrooms?” The director reflected that, “part of Sandra’s ability to reinforce, instill and get creativity from staff is having a vision of where they want to go.” The themes within the Attribute of Vision for the School are she has worked to establish Common Expectations for All. And she is Goal Oriented. Each of these themes and how Sandra exhibits them through actions will be discussed in the following sections in order to provide specific examples of what they look like in practice.

**Vision for the School**

*Common Expectations* For All

*Goal Oriented* Structures the School According to Needs

*Figure 12. Attribute of Vision for the School.*

**Common Expectations.** Sandra has worked to provide common expectations within the school. It is not only limited to academic curricula, but also entails student experiences and behavior. Academically, Sandra has provided grade level guidelines for teachers concerning minutes of instruction for each subject for each rotation. She lists the goals of the school for the teachers, some of which include curriculum work and holding students accountable for behaviors within the school, such as walking in the hallway. The behavioral expectations were a result of a specific team of teachers establishing rules and guidelines concerning the social-emotional behavior of students in the school, which included hallway behavior, how students should speak to one another, how students should speak to teachers and how teachers speak to students.
Sandra has also established instructions concerning how grave level teams operate. She expects them to plan together, communicate with parent similarly, and to write report cards together. She emphasizes the importance of students in the same grade having the same experience, such as a field trip. She also worked to establish the common experience of a Halloween celebration. Before her arrival, Halloween was always an event that the parents coordinated after the school day. While Sandra fully supported the event, she recognized that not every student was able to attend and thus they lacked the common experience. So, she worked to create a small event for the holiday during the school day so that all students would have a common experience to reflect on and share with one another.

**Goal oriented.** Sandra sets specific goals for the school in order to achieve her vision. While she uses teacher feedback, this is an activity that she often does on her own. During the interviews she spoke about how she was establishing new goals for the upcoming school year as well as how she had established the different tasks for committees to work on in the previous years. As the school meets the goals, Sandra then creates new ones. The director recalled that during his first year at the European International School, Sandra was finishing her third year. She and the staff at the elementary school had set several three-year goals, and therefore Sandra was very reflective concerning how well the goals had been attained before establishing new ones.

The school goals are very visible. Sandra provides a list of them at the beginning of the year during the pre-service days for teachers, but more importantly she has a “goals in action” segment in the weekly newsletter she sends to teachers. This section lists a goal and then provides a specific example of how someone in the building is meeting that
goal. The section combines celebration with the goals in that Sandra publically recognizes work that she values and she shares it with all staff. One example is that for the goal, “actively participate in and support on-going curriculum development,” Sandra listed an innovative practice one teacher is doing. The teacher works to create an experiential learning project with her students each week by cooking with them. There were also pictures of the students to accompany this goal. By highlighting practices in this manner, Sandra reminds the teachers weekly of various school goals and then provides them with an example of what that goal looks like in action.

Structures the school according to needs. When Sandra is enacting the goals, she is very open concerning the exact methods of attainment. Thus, the category Structures the School According to Needs was pulled out of the theme Goal Oriented in order to expound upon it separately. Her willingness has already been demonstrated a few times, such as under the code of flexibility. However, it is an important part of how she leads the school and so data supporting this specific code will be presented here.

Sandra is constantly adjusting the operations of the school in order to improve. One example of this is that the teacher leadership positions have changed almost every year. When she initially arrived, one of the positions was a School Spirit coordinator, but once some school spirit and community had been established, the duty was absorbed into a new position of the Student Council Leader. When asked about this constant changing, Sandra said,

“Our stipends change every year based on what work we want to accomplish. So year one we didn’t have a STEM coordinator, but this year we do. Next year we won’t have one because now we’re going to embed STEM in science, but we’re
going to increase the money for the outdoor classroom coordinator because that’s a much bigger job than anticipated. So, we’re flexible.”

However, in a later interview she indicated that there might be a STEM coordinator in the next school year, depending upon what the faculty wanted to do with the whole school builds. In terms of the teacher teams, she admitted that the first arrangement of teachers by curriculum areas

“weren’t as effective as we thought they were going to be because there was so little time that you couldn’t really delve into curriculum. So we found other ways to accommodate that and identified what tasks we wanted to accomplish… Then the next year, I created these task-oriented teams…Basically the task teams were developed around all of the work that we had yet to accomplish.. and those teams were extremely successful.”

Therefore, she has changed how both the teacher leadership positions with stipends as well as committee work were organized every year based upon the needs of the school. She also altered the amount of faculty meetings in order to address teacher’s concerns that they needed more time to work in their curriculum committees.

Part of her structuring and flexibility is tied to her want for continual growth and refinement. She looks for ways to keep her staff enthusiastic and engaged in their work. The staff turnover rate is low in the school, so she works to constantly refine and renew aspects of the school in order to maintain passion and avoid stagnation. While she is very excited about the outdoor classroom, she spoke to the researcher about several ways that she has continued to refine it. She said,
“So this year we added composting. At the brain and learning conference, I saw this other principal who has done incredible things with her outdoor classroom. And I would love to see us do a spring or summer outdoor speaker series on science topics.”

She also provides outside consultants from varying disciplines in order to address the needs of the teachers. For example, she had an advisor come in and present on science activities tied to the curriculum that could be completed using a new kit that the school had purchased. She also had a consultant come in and work with teachers concerning literacy in early childhood during the reworking of that curriculum.

Summary of Principal’s Efforts

This second portion of the chapter addressed the second research question, “How does this principal describe her efforts to foster a school culture and climate where creativity can thrive?” by examining the associated actions that Sandra displays in relation to her attributes. Specific examples were provided using data from the principal interviews, documents and interviews with the director, secretary and an outside university professor. Together the data provided many examples of what it looks like when Sandra exhibits the Attitudes and Outlooks of openness, transparency, risk-taking, flexibility, and celebrating. Examples of specific efforts she used to foster an environment where creativity can thrive, due to her Core Educational Beliefs that Creativity is Important, People are Important and Growth is Important, were explored along with the minor, connecting themes of Exposure to New Ideas Sparks Creativity, Teachers as Leaders and her belief that You can’t grow without being creative. The
following part of the chapter will compare how her beliefs interact with her actions in order to address the third research question.

**Relating Attributes to the Efforts**

The purpose of the third research question was to examine how the attributes and actions revealed in the data related to one another. It is often said that the espoused beliefs of leaders are not the same as their observed actions. Therefore, the researcher wanted to assess whether the beliefs expressed by the principal in this study were also those that she demonstrated in action. This analysis reflects the conceptual framework for the study, which anticipated that the attributes of a principal influence how the school is lead. If they were found to be closely associated, this means that the combination of the data provides a picture of not only her beliefs and values as an educator, but also what those beliefs look like in action.

During analysis of the first two research questions, the researcher had difficulty identifying separate themes for the principal’s attributes and actions. Therefore the researcher shifted to composing themes concerning Sandra’s actions deductively instead of inductively. This was the first indication of a strong alignment between the two. Negative examples were looked for in the documents, observation notes and the three personal interviews, but the researcher was not able to identify clear examples that would counter the findings for the first two research questions.

The fact that the principal’s beliefs, values and way of leading the school were found to be strongly connected to one another has several implications for others in education who are interested in fostering school cultures and climates where creativity
can thrive. These, as well as suggestions for future research, will be discussed in chapter five.

**Teachers’ Perspective on the Principal’s Efforts**

The final research question was “How do the teachers in the school perceive the efforts of their principal to foster a climate and culture that encourages creativity, both for them and their students?” It sought to explore the teacher’s perspective concerning the principal’s efforts to encourage creativity in the school. This question adds another dimension to the study as the first three questions primarily focused on the principal’s perspective. Gaining the perspective of the teachers is a way to assess whether the efforts that Sandra engaged in were understood by the teachers in the school in the way that she intended.

The data collected for this question was both quantitative and qualitative. All of the staff were invited to participate in an anonymous survey. Additionally, teachers had the opportunity to volunteer in focus groups. All of the methods of collection sought to understand whether the teachers felt like Sandra had created a school environment where creativity can thrive, the actions they perceived that encouraged creativity specifically and then where improvements needed to be made in order to continue to allow creativity flourish.

This section will be divided into two parts, the quantitative data and the qualitative data. The findings for each data type will first be reviewed separately and then combined in order to provide a more complete picture of teacher perceptions.
Quantitative Data

All teachers were asked to take a survey on their perspective of the culture and climate of the school in relation to creativity. The survey was anonymous, though it included some demographic questions which were used in analysis. There are 33 teachers in the building and 21 took the survey, which is a response rate of 63.6%. One teacher chose to not consent at the beginning of the survey, leaving 20 complete responses. The end of the school year is filled with extra activities and the teachers were asked to take other evaluative surveys the month prior to the survey for this study, which could have limited the number of responses. For comparison, the evaluation survey that the principal asked teachers to complete about her leadership had a total of 28 responses.

In terms of the demographic data, the teachers completing the survey had a variety of characteristics. A majority of the teachers have obtained Master’s degrees, 15 or 75%, with the remaining 5 responses dispersed among Bachelor’s Degree, Some Graduate Work Completed and a Doctoral Degree. The current subject level taught was also dispersed, with 8 indicating a specialist teaching position, 3 from 5th grade, 3 from 3rd grade. The remaining 6 responses were divided amongst the other 5 categories. Therefore, all grades and teacher positions were represented by the survey, though often in small numbers. The number of years in their current school and total number of years teaching were also varied, however 75% of teachers who participated in the survey indicated that they had been at the school 10 years or less. These final two are indicated in Table 4 and Table 5.
Table 4
Teachers' Number of Years in the School

<table>
<thead>
<tr>
<th>Years in Current School</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 years</td>
<td>4</td>
</tr>
<tr>
<td>3-5 years</td>
<td>6</td>
</tr>
<tr>
<td>6-10 years</td>
<td>5</td>
</tr>
<tr>
<td>11-15 years</td>
<td>1</td>
</tr>
<tr>
<td>16-20 years</td>
<td>3</td>
</tr>
<tr>
<td>21 or more years</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 5
Teachers' Total Teaching Experience

<table>
<thead>
<tr>
<th>Total Teaching Experience</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 years</td>
<td>0</td>
</tr>
<tr>
<td>3-5 years</td>
<td>1</td>
</tr>
<tr>
<td>6-10 years</td>
<td>7</td>
</tr>
<tr>
<td>11-15 years</td>
<td>3</td>
</tr>
<tr>
<td>16-20 years</td>
<td>3</td>
</tr>
<tr>
<td>21 or more years</td>
<td>6</td>
</tr>
</tbody>
</table>

The sections of Principal Encouragement and Organizational Encouragement were worded positively, meaning that if the climate of the school was seen as encouraging creativity, those scores would be high. The Organizational Impediments section was worded negatively and therefore a lower score would indicate that there are
few perceived impediments to creativity whereas a higher score would indicate substantial hindrances to creativity. The rating scale for all three sections ranged from 1 to 4. The findings from the survey are shown in Table 6 and are rounded to the thousandth.

Table 6

<table>
<thead>
<tr>
<th>Survey Section</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Encouragement</td>
<td>3.668</td>
<td>.511</td>
</tr>
<tr>
<td>Organizational Encouragement</td>
<td>3.417</td>
<td>.553</td>
</tr>
<tr>
<td>Organizational Impediments</td>
<td>1.475</td>
<td>.477</td>
</tr>
</tbody>
</table>

Overall, the quantitative data from the survey indicated that the teachers feel that Sandra does encourage creativity and that the school as a whole does as well. A possible reason for the lower score for the Organizational Encouragement section, as well as a higher score in Organizational Impediments, are that some of the questions refer to top administration and an overall feel. Within the school setting, these questions go beyond the relationship between the principal and the elementary school to include the director, school board and other staff. This was a limitation of the survey instrument.

Within each section there were a range of scores, indicating that not all teachers perceive the principal’s leadership and the school climate in the same way. In order to evaluate for any specific low points, the mean scores were computed for each individual question. This was a way for the researcher to see if the highest and lowest scoring individual questions were reflected in the data. Within the section of Principal
Encouragement, “my principal serves as a good work model” and “my principal is open to new ideas” had a mean score of 3.9, indicating that overall teachers feel that these statements are always or almost always true. Then there were four scores of 3.85, corresponding with the questions of “my principal plans well,” “my principal communicates well with my work group,” “my principal shows confidence in our work group,” and “my principal values individual contributions to projects.” The lowest score, at 3.15, was for the statement “I get constructive feedback about my work.” It is of note that even the lowest individual statement score was rated just above a 3, indicating that the statement is often true.

The averages were slightly lower in the section concerning Organizational Encouragement. The two highest averages, at 3.7 were for the statements “performance evaluation is fair” and “there is an open atmosphere in this school.” The lowest, at 3.2 was for the question “overall, the people in this school have a shared vision of where we are going and what we are trying to do.” The averages were much lower for organizational impediments, indicating that the overall opinion from the teachers taking the survey was that the statements were never, almost never or sometimes true. The lowest score in the impediments section was 1.10 and associated with the statement “destructive criticism is a problem in this school.” The statement “there is destructive criticism in this school” was scored closely with a mean of 1.15. The statements with the highest scores were “there are many political problems in the school” at 2.00 and “people in this school are very concerned about protecting their territory” with an average of 1.90.

Cross tabs were also computed in order to see if there was a relationship between demographical data and average ratings. While there were a few participants who had a
much higher or much lower average than the mean of all scores, no relationship was
found between any of the demographical data and their ratings for any of the three
sections. Table XX, a cross tab between the highest level of educational attainment and
average scores in the Principal Encouragement section, is provided below for reference.

Table 7
Cross Tab of Teacher Educational Level and Average Rating for Principal Encouragement
Section

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Average Rating for Principal Encouragement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.0</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>0</td>
</tr>
<tr>
<td>Some Graduate Work</td>
<td>0</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>1</td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
</tr>
</tbody>
</table>

Qualitative Data

There were two sources of the qualitative data regarding teacher perceptions.
These were three open-ended questions in the survey and two teacher focus groups. The
survey questions had the same number of responses as the survey itself, 20. There were 3
participants in the first focus group and 4 in the second, for a total of 7 participants in the
focus groups. Demographic data was not collected during the focus groups due to
concerns about confidentiality by reason of the small number of participants.

During analysis, it was observed that the themes emerging were very similar to
those found concerning the principal’s attributes and efforts. However, they were not
fully coded deductively because the research question asks about the teacher’s
perspective. It was then realized that while the teachers observe many of the same actions
that were described in the discussion of the second research question, that they interpret
the actions in light of their own role. Thus, they perceive them differently than the principal does.

Once grouped into larger themes, the codes were organized graphically in a similar way to the figure conveying principal attributes and efforts. This was in order to highlight the similarities as well as for ease of understanding. Figure 13 below shows a depiction of the actions and beliefs that the teachers identified Sandra does that foster creativity within the school. The teachers were also asked what in the school hindered creativity and what could be done in order to improve it. This section concerning the qualitative data will begin with the actions that the teachers identified as encouraging creativity. For ease, the explanation will follow a similar order as the discussion of the first two research questions and it will follow the Figure 13 in a clockwise manner. Next the hindrances to creativity will be discussed, followed by the improvements for creativity.

**Encouragers to creativity.** The teachers identified many actions they perceived as encouragers to creativity. Overall they indicated, in both the open-ended survey questions and the focus groups, that they felt like Sandra had created an environment where creativity could thrive. The following subsections discuss the major themes found within each of Sandra’s attributes, as perceived by the teachers. In the Personal Attributes, there was a *Whole Child Emphasis* and several *Attitudes and Outlooks*. Within Sandra’s Attributes of Core Educational Beliefs, there is the *Importance of Creativity*, the *Importance of People*, *Teachers as Leaders*, and the *Importance of Growth*. In contrast to how the principal’s attributes and efforts ended with the Attribute of Vision for the School, the teachers perceived her actions through their own lens which
is how they felt. This outcome yielded three new themes, *Respected, Supported* and *Empowered*. These three feelings will provide the final pieces of discussion for this section concerning creativity encouragers. Each of these themes will now be discussed within their appropriate attributes section.

**Figure 13.** Teacher’s Perspective of How the Principal Encourages Creativity.
**Personal attributes.** During data collection, the teachers described not only specific actions of their principal, but they also described who they felt she was. The themes, along with associated categories, are discussed in the following sections. The themes presented are *Whole Child Emphasis and Attitudes and Outlooks.* These will each be discussed in the following sections. Figure 14 provides a visual representation of the themes and their associated categories.

![Diagram showing themes and categories](image)

*Figure 14. Personal Attributes of the principal as perceived by the teachers.*

*Whole child emphasis.* The teachers strongly attributed creativity in the school to the emphasis placed on the whole child. One teacher stated,

*I would say that the emergence of whole brain and mindset work across the elementary school now is a tribute to creativity. We see that we want to value that process over the products. That we want kids to come away with the things that will help them be successful, regardless of the environment. And that’s being encouraged.*

The teachers observed that focus on the whole child and not just on academics allowed for more freedom and creativity to be present in the school. They did recognize a contrast between their classrooms and their faculty meetings when compared to the upper schools within their international school location.
**Attitudes and Outlooks.** As with the first two research questions, the teachers identified several perspectives that Sandra exhibits. Many of them are the same as those previously identified, but there are also new ones that did not emerge from the principal data. The attitudes and outlooks, which will be discussed in the following paragraphs, are openness to new ideas, transparent, and takes risks.

Openness to new ideas meant that Sandra was willing to listen to ideas that the teachers shared with her. Several of the survey respondents listed her openness as an encourager to creativity in the school. One teacher in a focus group spoke about her willingness to share an idea with Sandra by stating,

> Just knowing that it wasn’t going to be shot down. Or knowing that it will be considered and fully supported as much as possible. Knowing that it might get rejected, but for good reasons. It wouldn’t be just out of, “well, we’ve never done that so we’re just not going to do it.”

The teacher participants in this study believed that Sandra was open and available to listen to any idea that they presented her with.

Transparency was described both as Sandra willing to admit her own shortcomings as well as how she shared information with her staff. One participant spoke about how Sandra was honest that she was reaching her own capacity in some areas, such as incorporating STEM projects into the curriculum. Another teacher spoke about how the goals of the school were obvious as well as the reasons for the decisions that are made within the school. The teachers also indicated trust due to the transparency in that when a decision is made, they know that it was not random but instead the result of a process.
The third attitude is that Sandra takes risks and encourages teachers to try new ideas. Several times during the focus groups teachers recounted times when they bought an idea to Sandra and she emboldened them to try it, even if she did not know how it was going to work out. The university professor recounted a conversation she overheard in the hallway where Sandra said, “That’s a great idea! You should try it.” Her reflection on the event was,

Now I asked folks to think about how many times a principal or even your mentor teacher has ever said that to you… I can't remember a principal in my experience in schools saying that. I can hear them say “Well, you might not want to do that” or “Oh I don’t know.” So, I think that that's really impressive and it shows a certain level of poise and a certain level of respect for her staff that whatever happens she’s going to be willing to help guide them or scaffold them to the next level.

Attributes of Core Educational Beliefs. The teacher’s identified most of the same beliefs that were found in the first two research questions using data from the in-depth principal interviews. However, several of the categories within each theme are different. The following sections discuss each theme, found in Figure 15, in a clockwise manner. The themes are Creativity is Important, People are Important, Teachers as Leaders, and Growth is Important.

Creativity is important. The teachers spoke about Sandra valuing creativity and provided several examples of how she makes creativity important in the school. Comments in the survey included that “she makes an environment for it” and that she “has a continuous discussion around the topic of creativity.” The categories for this theme
are that Sandra Models and Asks for Creative Work, she Schedules Time for Creativity and she Celebrates Creativity within the school.

The teacher participants noticed that Sandra was creative and that she asked for others to also be creative. During one focus group the teachers discussed how Sandra is creative in many areas of the school, “even in staff parties, she makes a big effort. And those things have spin off. It’s not something that’s just kind of drab and boring.” Three of the responses to the open-ended survey questions indicated that Sandra asks her teachers to be creative. Thus, the teachers believe that Sandra is creative, that she models that creativity for those in the school in how she leads and that she desires for them to be creative.

![Core Educational Beliefs Diagram](image)

*Figure 15. Attribute of Core Educational Beliefs as perceived by the teachers.*
The teachers also recounted how Sandra is intentional about scheduling time for creative projects. The focus groups for this study were coincidentally scheduled close to an all-day STEM challenge and as a consequence many teachers provided the activity as an example of creativity in the school. Four of the survey responses indicated that Sandra schedules time for creative projects, either by speaking generally or through a specific mention of the STEM challenges. Teachers also discussed in the focus groups their attempts within their teams to put a creative time within the rotation schedule. Some had success in this area, while others had not yet found a way to consistently schedule creative time into the school day. One teacher reflected that creative time “does have to be scheduled, otherwise you won’t do it….you can always think of something else.”

Data from the focus groups and survey suggest teachers believe creativity is celebrated in the school. Examples provided were that creative thinking was celebrated, that projects were recognized in the weekly newsletter, that there was public acknowledgement of creative work, and recognition during faculty meetings. In fact, 13 of the 20 survey respondents listed some types of celebration as an encourager to creativity. One teacher recounted how a student built models of two movie figures at home and brought them to school. She stated that not only was the student and his work highly celebrated in the school, but that as a result she had witnessed several of her students inspired by the first student’s work. Those students were then planning to create their own model, but instead of copying a movie version they elected to make their own. Therefore, she saw that the celebration of creativity sparking more creativity. Similar statements were made regarding the STEM challenges. Many of the challenges required the students to build something out of recycled materials resulting in many students who
see possibilities of creative projects from items that are normally thrown away. The teacher did not know if the student enthusiasm concerning creative projects of their own initiative was entirely due to the STEM challenges, but she believed that it was definitely an influence.

*People are important.* The teachers see how Sandra values people through the way that she acts when leading the school. They commented that she clearly values them as people in that she is supportive when emergencies come up and a teacher needs to take off from work. The three categories emerged from the data were that she believes in Personal Care, Facilitates Collaboration and Idea Sharing, and she Engages in Conversations with her Faculty.

Personal care involves ensuring that people are happy both within the workplace and outside the workplace. Once teacher recounted that she had expressed feeling overwhelmed and Sandra’s response was that she should take a day off. She reflected,

“I think she recognizes that if you’re like that, it’s not in the best interest of the kids for you to be there. Her whole focus is on the kids. It’s really what’s going to be best for the kids and I think she understands that by taking care of us and making us feel good and happy that we’re doing our best job for the kids.”

This ties Sandra’s care for the teachers to her whole child emphasis and what is best for students. Teachers also stated that she models work-life balance for the teachers in that she works reasonable hours and expects them to do the same. One teacher put it this way, “She sets the tone of ‘you’re a person too and you’re supposed to keep that balance’ and that I encourage that balance.”
Sandra often encourages teachers to collaborate with one another and to share ideas. They recounted meetings between the grade levels, hearing different teachers present on topics during faculty meetings and making decisions together in committee meetings. This was another area where a noteworthy amount of survey responses pointed to the same idea. A total of seven responses out of the 20 indicated some form of collaboration and sharing.

The final way that Sandra exhibits care of people is that she engages in conversations with her teachers. This is tied strongly to her openness to new ideas and a result of her openness is that teachers feel as if she listens to them. One teacher stated, “If you come up with an idea, she’s open to discussing it. It won’t always work, but she’s open to discussing it and problem solving with you. And giving you ideas.” Another gave a specific example that her grade had unexpectedly finished a math curriculum a few weeks before the end of the year. Therefore, they discussed with Sandra the possibility of allowing the students to work on a creative project in groups related to math, but of their own choosing. She stated that one student was building a scaled replica of the planet Jupiter, a group of students were rewriting recipes to be for different quantities and another group was computing statistics related to the best place to score a goal on a soccer field. When the teachers initially approached Sandra about the idea, she discussed it with them and then gave them permission to try it. As she listens, she provides feedback to teachers concerning their ideas. This indicates that she is really listening, but that she will also be honest when an idea needs refining or may not align with the goals of the school.
They also stated that when she does say “no” to an idea they present, they still feel respected. “I feel like if I’ve ever gotten rejected it’s always been like, ‘I’m going to tell you why, I’m going to respect you. I’m hearing you, but this is what’s going to happen,’ ” said one teacher. Another teacher stated it this way, “I left feeling frustrated but also like my concern had not been just totally [rejected], like I hadn’t been told, “just make it work.” In general teachers stated that they are rarely told “no” and that it surprises them when Sandra does not give them open permission to explore an idea. One teacher even inquired of others during the focus group, “Have you guys ever gone with an idea and gotten a no?” This indicates that most of the time Sandra does listen and support teacher ideas.

Teachers as leaders. Within the Attribute of Core Educational Beliefs, this theme was the only linking theme that was found in both the data from the principal and the teachers. The teachers identified their opportunities to lead in the school in several ways. The first is through committees and the second is through official positions that are compensated with stipends. Committee work was something that the teachers recognize happens and that when they approach Sandra about changes, that a committee will probably be used to discuss the change first. In reference to the coordinator positions that have stipends, one teacher said, “She encouraged people to step up and be leaders.” Another teacher spoke about a time when Sandra approached her about taking a position of leadership in the school. She spoke about how Sandra saw strengths in her in the areas of the position, but that ultimately she decided to not take the opportunity due to her current home schedule.
"Growth is important. The teachers see that Sandra emphasizes their professional growth and is intentional when she speaks to them about it. The teachers have a meeting with Sandra at the beginning of each year to identify the goals their team has in terms of growth. These are encouraged to be related to the school goals. Both focus groups spoke about how Sandra is not upset at the end of the year when teachers have not met their goals, but instead is concerned about whether the teachers are trying new things and growing professionally. One teacher also spoke about how Sandra allows for differences in staff members. “She’s not trying to make everyone be like everyone. She’s letting us all be us, to be us with the kids.”

Both focus groups also discussed how Sandra encourages the teachers to change grade levels instead of staying in the same one for several years. One teacher recalled that after she was a part of a strong team that trained others in the school,

Then she spread us all throughout the school. Which is another way that I think she keeps things flowing and keeps things going, is that you’re not seen as a teacher of the grade that you’re teaching. You’re just seen as the professional teacher. And I think that the idea and the emphasis here is to go wherever you’ll professionally grow… And it spreads ideas all around, so that what was happening in one grade level happens all throughout the school. And that’s been nice.

They recognized that there were strengths to moving around instead of being seen as a teacher of one grade level. They felt that this made them grow as professionals as well as connected them with colleagues which in turn causes them to share their strengths with others.
Outcome: How Teachers Feel. This final section reflects the outcomes of the actions Sandra takes, as perceived by the teachers. As they reflected on the efforts to foster a school culture and climate where creativity can thrive, they naturally considered it with reference to their own role. The end result that is the teachers expressed that they feel respected, empowered and supported. These three ideas as well as specific examples will be detailed in the following paragraphs. Figure 16 provides a visual reference.

Respected. There are several ways in which the teachers feel respected. They feel Sandra respects them through her interactions with them. One teacher said,

She respects us as professionals, I think is a big part. I feel really respected as a professional. She’s not staring over our shoulder all the time or making us hand in lesson plans or anything like that. She really puts a lot of trust and faith in us. And so that, I think makes me feel like, “Oh if I do have a great idea, it probably is a great idea and maybe I should present that or try it or something like that.”

Other teachers in the focus groups also commented that Sandra was not directive concerning exactly how they execute the curriculum and that she doesn’t question whether they are doing their jobs correctly as she walks through the rooms. One stated, “It’s just this idea of, “You’re professionals. I trust that you and your teams are capable of having children’s interests at heart and doing what’s best for the kids that you have. And I’m not going to stand over there and tell you otherwise.” Another teacher said, “I don’t think she necessarily tells you to do this and that. Because that would then lose
creativity, right?” One teacher, who is also one of the coordinators who received a stipend, spoke about how she needed help concerning the position. She recounted that Sandra willingly helped her work through the problem instead of simply saying, “Well, I gave you this job. You need to do it.” A final way that teachers feel respected is their time. Sandra does not schedule unnecessary meetings with her staff and has cancelled them in the past when she could communicate everything within an e-mail. One teacher asked, “What boss does that?”

**Supported.** The feeling of support was also an outcome the teachers identified. They spoke about how Sandra often supports their ideas when they want to try something. Sometimes this is verbal support and permission to take a risk, but as necessary Sandra also provides resources. She has provided some financial support such as with the outdoor classroom or even through the purchase of some playground equipment that is meant to promote imaginative play. They also discussed that Sandra will work to enact a vision. A teacher recalled that she had recently shared an idea to take a group of students to another country and soon afterward the director of the school made a comment to her about travelling with the students in the next school year. Two teachers commented in the focus groups that Sandra will take an idea and then ensure that it comes to fruition, that she follows up and if she has a role in it, she always follows through.

The teachers also feel supported in that Sandra worked to stabilize and narrow the curriculum during her tenure. Both focus group specifically commented about how there were now fewer writing units to cover each year. They commented that having a more structured curriculum, as well as some lessening of the units that needed to be taught,
allowed them more time to think creatively about their teaching. One teacher said that the fewer units meant she had the ability now to have students act out characters in a story instead of writing about them because of the fewer units. This then provided more students with time to be creative.

*Empowered.* The third way that teachers interpret Sandra’s efforts to foster creativity is that they feel empowered. The director identified this feeling as a goal of Sandra’s, “She's really after a confident and empowered staff that that will drive some of their own collaboration and some of their own creative spark.” One teacher referred to it as a chain by which the teachers are empowered and then the students are empowered to be creative. Due to Sandra’s respect and her support, they feel as if they are able to accomplish the tasks that are set before them. In a focus group one teacher discussed the goals meeting as a time when “the conversations tend to flow with whatever we’re doing and I think everyone walks away feeling like, “ok, I can try this” or “I’m going to go do this.”” The university professor also observed empowerment in the teachers. She recounted,

I noticed how the teachers were just encouraged to think for solutions that were not necessarily your traditional solutions to solving problems. There was a teacher talking about some of the issues they were finding and they went to Sandra. The teachers then came up with a solution and Sandra was supportive of that. That, off the top of my head is really what came to mind and just hearing the power in their voices that “we feel as though we can solve the problems with the support.”
They are empowered to try ideas and take risks because they are respected and supported. As seen in the discussion on respect, they often feel like if they have an idea it probably is a good one since they are supported and listened to by their principal.

**Hindrances to creativity.** Teachers were also asked to identify ways that creativity was hindered in the school. This was in part to look for any possible examples that would counter the actions that were identified as encouragers and then also to lead into suggestions for improvement. The data for this section is primarily from the teacher survey, with some supportive evidence from the focus groups. However, most of the teachers in the focus groups framed issues as suggestions for improvement rather than that something was actively hindering creativity.

There were a total of 20 survey responses and four participants left this question blank. A further nine respondents said that the question, “What does your principal do that hinders creativity?” was either not applicable, they could not think of anything or that they don’t believe that she does hinder creativity. Thus, a total of 13 survey participants did not list any hindrances. From the data, two categories emerged regarding hindrances, a lack of resources and a lack of time due to curricular demands. There were also several responses that were single. As they were not repeated or supported by other sources, they will not be discussed here. However, it is important to acknowledge those responses because their existence shows that not all teachers are fully content with how creativity is fostered in the school.

**Lack of resources.** A concern expressed by a few of the survey respondents was that they needed more tools and resources to be creative. One person specifically said “we do not have enough PD around creativity.” This particular section is thin on data,
however when paired with suggestions for improvement it is a piece that seems very important to teachers.

**Lack of time due to curricular demands.** Teachers in the survey and both focus groups spoke to the fact that they believe the curricular demands and expected number of minutes for instruction hinder their ability to have more creative time in their classrooms. One teacher said, “I think that the biggest restriction that I experience is our time… We don’t have the time to have the students extend things.” Classroom teachers expressed the difficulty in meeting the curriculum demands with the fact that their students are also attending special classes. They believe that the specials are very important and should remain in the schedule, but that the dense curriculum inhibited their ability to expand ideas and allow for more creative projects. Other responses include, “too many demands that make it difficult to foster creative work” and “we do not have enough time within our curriculum to allow kids to be creative.” Teachers acknowledged that creativity takes time and that time was often in short supply.

**Improvements for creativity.** While both the quantitative and qualitative data indicated that most teachers perceive the school culture and climate as fostering creativity, the data did not suggest that all was perfect. Therefore, this final section concerning the teacher’s perceptions of the efforts of their principal to foster a climate and culture where creativity can thrive focuses on their proposals for improvement. There were many recommendations, both from the survey and the teacher focus groups. Two survey responses to this question actually stated that she does a great job and an additional two indicated that they were not sure what could be improved. As with the comments concerning hindering creativity, there were again several responses that were
distinct. These codes did not fall into the categories that will be discussed below and can serve as a basis for further investigation. With this the researcher recognizes that groups of people often have differing perceptions of the same events and the elementary school from this case study is not exempt. The categories that emerged from the data and will thus be discussed are curricular improvements, more collaboration, more resources and provide a clearer vision.

Curricular improvements. The teachers felt that there were many improvements that could still be made in the area of curriculum. While they appreciated that the curriculum was more stable than previous years and that the number of writing units had been reduced, they were still concerned about the number of minutes of instruction that were required for different subject areas. Several teachers participating in the focus groups believed that they could trim the amount of time required for reading and writing, in part because their students come from literate background and therefore are exposed to those skills within the home. Relatedly, the teachers indicated that they felt the curriculum was quite dense and therefore

“there’s not much room for that much creativity. Because we’re given the math curriculum, we’re given the science curriculum, what we need to teach for reading and writing. It’s quite specific. So, in that sense we don’t have much room to maneuver in our units.”

The teachers also expressed that in order to have more time for creativity in the classroom, that they needed large chunks of time. One teacher commented that she often does not have time for the full creative cycle when she has her students engage in creative work. She lamented, “The reflection piece that’s so essential or the revision piece that
needs to happen or the share time that’s so beneficial gets cut.” Another teacher indicated a similar line of thinking when she expressed her preference for the large, all-day STEM challenges instead of the smaller monthly ones. She said that with the smaller ones, “there’s not this whole process involved of really making a plan, working in collaboration, seeing it through, trying it and then revisiting it.”

**More collaboration.** The teachers also expressed a desire to have more time to work with others to plan creative projects, both within their teams and with others in the school. Teachers specifically mentioned cross planning between classroom and specials teachers, time to plan units within their teams and meeting with others across grade levels in order to share how each is engaging in creativity. They also wanted to grow better relationships with other staff members, which they felt would ease the sharing process and stimulate more idea sharing. One focus group participant stated, “I think there needs to be help from Sandra to force these meetings. Either saying “this year I want you to collaborate with a grade level to do a project” or you know?” In addition to scheduling more time for teachers to meet together, one also commented about a need for space. She gave the example of two classes collaborating together on a project, “You can meet with one class somewhere maybe in someone else’s classroom, but there isn’t a communal space. There’s no big space in this school where you could have multiple classrooms meet together.”

**More resources.** Another area where the teachers expressed a need was for more resources to be provided. Most of the expressed needs revolved around professional development, but there were also suggestions of making more materials readily available for projects and to guide teachers more in simply coming up with creative projects that
they could do within their classrooms. A survey respondent said, “Encourage professional development directed towards increasing teachers’ and students’ creativity.”

One focus group participant said, “We’re trying. It’s not that easy, but we’re trying to come up with ideas.” Combining the idea of ideas and having an outside consultant come in to do professional development, a teacher said, “We don’t need a consultant to tell us what’s in the curriculum. We need them to show us what can be done with curriculum.”

Several teachers expressed that they want to move beyond the regular units and into provide students with open-ended problems to work on. Yet, they are unsure of how to actually enact that desire and they would like for someone to come to the school to counsel them. A number of teachers were also interested in the possibility of having someone come to the school to work longer than just a few days of PD, but instead to serve as a consultant for up to a few years in order to work with all the teachers to incorporate more opportunities for creativity into their lessons.

**Provide a clearer vision.** Several teachers who participated in the focus groups felt that they needed a better vision of what it looks like to incorporate creativity into their classrooms. They were interested in doing it, but felt at a loss concerning how to make it happen. This ties to the discussion about coming up with ideas which was discussed in the previous paragraph. They were looking for someone who could show them how creativity worked in a classroom. Several comments also focused on the desire to incorporate creative projects into the schedule that were tied to the curriculum. They acknowledged the benefit of the all day STEM challenges, but were interested in taking projects like those and tying it to a unit. One teacher said, “That’s where I think the creativity comes into play, the problem solving, meaningful application of what they’ve
learned. And if that exists, then the kids will remember what they’ve learned throughout the unit.” Yet, some teachers still feel at a loss about what it looks like to incorporate creative activities into the classroom and how to find the time to do them. Another focus group participant stated, “There’s not like, “Well, you can’t do it.” But in terms of actually scheduling a time as a team or as a group to really say, “no, we’re going to dedicate this time to this.” That is much harder.” Therefore, the teachers are looking for a clearer vision piece around creativity in their classrooms.

**Summary of Teacher Perspective**

In this section, the data for the fourth research question was reviewed. The teacher’s perspective concerning the efforts of the principal was captured using both quantitative and qualitative methods. The data showed that the teachers do perceive the school environment as one where creativity can thrive. They attribute the efforts of Sandra as a large factor concerning creativity. The quantitative data revealed that the teachers see both their principal and the school environment as encouraging creativity while there are not too many hindrances to creativity. The qualitative data revealed that teachers see the same efforts that Sandra also described, but that they view those efforts through their own lens as teachers. The end result of those actions is that the teachers feel respected, supported and empowered. Yet, there is also room for growth in that the teachers identified a few ways that creativity is hindered in the school and suggested several means for improvement. When looking at the data together, there is a strong indication that the teachers perceive their school culture and climate as a place where creativity can thrive. In this way, the teacher and principal data align. Possible implications from the teacher data will be discussed in chapter five.
Chapter Summary

This chapter has reviewed the data from the four research questions that guided this study. The attributes and efforts of the principal in this case study were examined in detail regarding how she seeks to foster a school culture and climate where creativity can thrive. A visual map was created which identified three types of attributes: Personal, Core Educational Beliefs and Vision for the School. The themes within Personal Attributes were *Personal Experiences, Whole Child Emphasis, and Attitudes and Outlooks*. The themes within the Attribute of Core Educational Beliefs were *Creativity is Important, Exposure to New Ideas Sparks Creativity, People are Important, Teachers as Leaders, Growth is Important*, and the conviction that *You can’t grow without being creative*. The themes within her Attribute of Vision for the School were *Common Expectations for All and Goal Oriented*. Data from additional sources including interviews with three stakeholders, observations by the researcher and documents were found to support the principal’s self-descriptions. It was found that the beliefs and convictions recounted during in-depth interviews were closely associated with the principal’s efforts.

Data from the teachers were also examined in order to evaluate their perceptions of the school culture and climate as well as the principal’s efforts. From the teachers who participated in the survey and focus groups, most felt that the principal was fostering an environment for creativity. The teacher data identified themes within the same three types of attributes that were found from the principal data. Within the Personal Attribute, the themes were *Whole Child Emphasis and Attitudes and Outlooks*. The second Attribute of Core Educational Beliefs yielded four themes, which were *Creativity is Important, People are Important, Teachers as Leaders, and Growth is Important*. The teachers
identified several of the same efforts that the principal did, however their outcome was different. Instead of identifying a Vision for the School, the teachers revealed they felt *Respected, Supported, and Empowered*. The following chapter continues the discussion of the findings from the study by interpreting them through comparisons to the literature. Possible implications for practice are proposed as well as suggestions for further research.
Chapter 5

Discussion and Implications

The previous chapter explored the themes that emerged from the data concerning each research question and presented a visual depiction of how the themes were related to one another. Data was presented concerning the principal’s attributes and efforts to foster an environment where creativity can thrive as well as the perspectives of the teachers. This chapter will turn to discuss the findings of the study and their implications. First, the chapter summarizes the purpose of the study, the methodology, and the findings. The final two sections of the chapter will be a discussion of the findings and implications of the findings.

Purpose of the Study Reviewed

The purpose of this study was to understand how one international school principal works to foster a school climate and culture where creativity can thrive. A review of literature revealed that there was very little published concerning creativity and the role of the principal (Davies et al., 2013). Therefore, the researcher looked to business literature, which revealed that managers can influence the work environment and therefore effect the creativity of workers (Amabile et al., 1996; Amabile et al., 2004). This was paired with educational literature supporting the notion that the principals have an important role in the school (Leithwood et al., 2004) and principals are able to intentionally shape the climate and culture of a school (Deal & Peterson, 1990; Hallinger et al., 1996; Leithwood & Jantzi, 1990). In this study the business literature and educational literature were combined in order to create a framework to guide the study. The framework combined the Mediated Effects with Antecedent Effects Model by Pitner
(1988) with the Componential Theory of Creativity by Amabile (1983, 1997). The resulting framework, which was discussed in chapter one, is shown in Figure 17.

![Combined Guiding Framework](image)

*Figure 17. Combined Guiding Framework. This figure illustrates the combination of Pitner’s (1988) and Amabile’s (1997) models in order to guide the study.*

Guided by the combined framework, four research questions were generated to explore during the study. These questions were as follows:

1. What are the attributes of international school principals who seek to encourage creativity in their schools?
2. How do these principals describe their efforts to encourage creativity through shaping their school’s culture and climate?
3. How do the principals’ attributes relate to their described efforts?
4. How do the teachers in the schools perceive the efforts of their principal to foster a climate and culture that encourages creativity, both for them and their students?

In this way, the questions sought to identify the both the attributes and the actions of the principal in the study. The attributes and efforts were compared in order assess their level of similarity as sometimes leader’s stated beliefs and subsequent actions do not align.

Finally, the perspective of the teachers in the school was captured in order to see if the intentions of the principal were interpreted in the way that she had intended.
Review of the methodology

A single-case, mixed methods study of one international, elementary school principal, named Sandra, was conducted. A single-case design was selected when the population which fit the sampling criteria was found to be very small. Single-case designs are effective when the case is unusual or unique (Yin, 2014). As the focus of the study was on the principal, she was the unit of analysis. The principal was completing her fourth year in the elementary school when the data was collected and her eleventh year as an administrator. The school was an international school and all three levels, elementary, middle and high school, were co-located on the same campus and housed in separate buildings. The elementary school employs 33 teachers and contains grades pre-kindergarten to fifth grade.

The study combined quantitative and qualitative methods, though the emphasis was on qualitative data. Data collected included in-depth principal interviews, researcher observations, document collection, a teacher survey, teacher focus groups and interviews with three adults who have worked with the principal. The data was collected concurrently and then analyzed according to each research question. The quantitative data, which was the teacher survey, was analyzed using basic statistical methods in order to provide a descriptive report. Qualitative data was analyzed inductively using an iterative coding process to generate themes. The interviews were transcribed by the researcher and then open-coded using software. Themes and categories were then generated from the small codes in order to yield the findings for the first two and final research questions. A detailed description of the study methods, including the design of
the research instruments, data collection, and methods of analysis can be found in chapter three.

**Figure 18.** Principal’s Attributes and Efforts.
Summary of the Findings

This section will now summarize the findings of the four research questions, which were presented in detail in chapter four. The first two research questions addressed the principal’s attributes and her efforts to foster an environment where creativity can thrive. Through an inductive analysis of qualitative data, several key themes emerged which are presented above in Figure 18. The figure shows the themes organized into three types of attributes which each influence the one beneath them. First are the Personal Attributes, which contains the themes of her Life Experiences, Emphasis on the Whole Child, and the Attitudes and Outlooks that she exhibits. Those themes were found to influence the next attribute, which is her Core Educational Beliefs concerning creativity and administration. There are six themes within this attribute, three of which are major and three that are minor themes. The minor themes serve as links between the major themes. The three major themes are Creativity is Important, People are Important and Growth is Important. The three minor themes are Exposure to New Ideas Sparks Creativity, Teachers as Leaders, and the principal’s statement that “You can’t grow without being creative.” The third attribute is related to the outcome of the first two. It is Sandra’s Vision for the School and the two themes are Common Expectations for All and Goal Oriented.

Data from the in-depth principal interviews, interviews with stakeholders, researcher observations and documents were used to support each of the themes and categories as attributes and also to provide specific examples of actions associated with each one. These themes provided the answers to the first and second research questions. The third research question asked how the principal’s attributes and efforts compared to
one another. When the themes for the attributes and efforts were compared, they were found to be highly associated, which further validated the findings and the organization of the figure.

The final research question centered on the teacher’s perspective of the principal’s efforts. A survey was used to collect quantitative data from a majority of the teachers in the school and then focus groups were conducted to collect qualitative data. The quantitative data was analyzed to provide basic descriptive statistics and the qualitative data was analyzed using an inductive coding process. The quantitative data was positive overall with most of the teachers indicating that the principal encouraged creativity in the school. The qualitative data yielded similar themes as those discovered through the in-depth interviews with the principal. The teachers identified many of the same actions that the principal did and that were observed by the researcher. The themes emanating from the teacher data fit into the same first two types of attributes as the themes from the data provided by the principal. First was the Personal Attribute with two themes: Whole Child Emphasis and Attitudes and Outlooks. Second was the Attribute of Core Educational Beliefs with the themes of Creativity is Important, People are Important, Teachers as Leaders, and Growth is Important. The end result and final section, seen in Figure 19, indicated how the Teachers Feel due to the attributes and actions of the principal. The themes here are Respected, Supported, and Empowered. These themes were then organized similarly to the findings for the principal, which can be seen in Figure 19. The teachers also identified two Hindrances to Creativity in the school, which were Lack of Resources and Lack of Time Due to Curricular Demands. Finally, the participating teachers provided several Suggestions for Improvement, including Curricular
Improvements, More Collaboration, More Resources and Provide a Clearer Vision about creativity in the classroom.
Figure 19. Themes for Teacher Perspective.
Discussion of the Findings

The research questions sought to discover not only what the principal believed, but also what those beliefs look like when enacted. In doing so, the research would address a hole in the literature regarding creativity in schools, specifically centering on the role of the principal. The limited amount of literature available was largely theoretical concerning the principal in relation to creativity, however this study begins to guide the field in identifying what it might look like to create a school environment that doesn’t hinder creativity. For me, as the researcher, it was very important to combine theory with practice in order to make the research accessible to both future researchers and to practicing educators.

Though the study was of a single-case, the findings yielded a picture a leader who is seeking to cultivate a school climate and culture where creativity can flourish. The data concerning the principal’s beliefs and actions were astonishingly confirmatory across sources. Data in the form of Sandra’s self-reported actions were confirmed through observations by the researcher, statements from stakeholders who have worked with her, and the teachers in the building. Additionally, when the researcher met with the principal to discuss the findings, she was shocked at how similar they were to her own reflections concerning her leadership. She said,

“This is how I would like to believe that I enact leadership, so it’s a little overwhelming to hear that I am achieving that in some way…. We all have self-doubt and I’m always questioning, ‘Do I really live this? Is this really who I am?’… [The findings] match what I imagine when I think about my best self.”
Therefore, the types of attributes and themes presented in Figure 18 seems to provide a strong portrait of the attributes this specific school principal has and the efforts she makes to intentionally encourage creativity in her school. The themes are supported by the use of several data sources, a peer review process, inter-rater reliability in coding, and through sharing the data with the principal.

The figure itself is important because such a depiction of a school leader has not been created before in relation to creativity in schools. This portrait, while specific to one person, can serve as a starting point for further research on school leaders and creativity as well as a point of reflection for current principals seeking to encourage creativity in their own schools but are unsure of where to start. It is also important to note how themes in the data emerged as being in relationship to one another. The relationship is important because the themes are not silos; they cannot be considered alone as a key to increasing creativity in schools. Instead, it is the combination of the themes and how they relate to one another that seems to nurture a school culture and climate where creativity can thrive. The themes also permeate one other. While I chose to depict them in an orderly format, they often tie into one another. Within the detailed description of the findings, examples of this interconnectedness were often provided, specifically between all of the themes in the Attribute of Core Educational Beliefs and the theme of Attitudes and Outlooks which was within the Personal Attribute. For example, it was common to reference Sandra’s Openness to new ideas when discussing her desire to Work in Collaboration or to discuss Flexibility in relation to Finding Time for Creativity. There are, of course, many examples of interconnectedness that were expounded upon in chapter 4.
The remainder of the discussion of the findings will be discussed in three sections. First, the findings will be examined in relation to the guiding frameworks for the study. Second, the principal’s attributes and efforts will be explored more closely and compared to related business and educational literature. Finally, the findings concerning the teachers’ perspective will be considered in relation to literature as well.

**Discussion Around the Frameworks of the Study**

The findings of this study confirmed the influence relationship seen in the models used to guide the study. Those would be the Mediated Effects with Antecedent Effects Model by Pitner (1988) and the Componential Theory of Creativity by Amabile (1983, 1997) which were discussed and pictured in chapter one. The model by Pitner (1988) proposed that antecedent variables influence principal leadership, which in turn influence the school. In this study, the principal’s life experiences, attitudes, and core beliefs about creativity and administration were found to guide her leadership actions. In fact, Sandra expressed that beliefs must drive how a principal leads. In reference to other principals who may want to foster creativity in their own school, she said, “I think they really have to have a philosophy about developing the whole child … and then have that drive everything you do. So drive that into the schedule, drive that into faculty meetings.” Here she explicitly tied what she considers an essential philosophy about education and a principal’s leadership choices.

Relatedly, the Componential Theory of Creativity (Amabile, 1983, 1997) identified management practices as one of the factors which influence employee creativity. This is most easily seen in the teacher’s perspective. Teachers in Sandra’s school perceived many of her actions as encouraging creativity, both of their own and of
the students in the school. They provided many examples of how Sandra models creativity, listens to their ideas, and emphasizes their professional growth. In the end, they felt that several of her actions, such as narrowing and stabilizing the curriculum, provided them with more time to then be creative with the lessons because they did not have to write the units themselves. In a simple way, this information shows that the attributes of a principal influence which leadership activities are engaged in, and then outcomes of those actions. This is exactly what the combined conceptual framework, created by the researcher and which served as a guide to the study, proposed. In this case study, it was seen that Sandra has core beliefs about creativity which then lead her to act in certain ways with the intention fostering a school environment where creativity will be supported. The participating teachers, as well as others who were interviewed, confirmed that creativity is often nurtured within the school.

The findings of this study also align with the Leadership Behaviors to Promote Garden Variety Creativity (Mayfield & Mayfield, 2008), used as a guide during the planning stages of this study for composing the interview protocols and to aide in the selection of participants. It puts forth five skills with associated actions that leaders can exhibit to support a creative environment. The behaviors are (a) coaching, (b) securing resources, (c) motivating, (d) goal setting, and (e) feedback and are seen below in Figure 20. The findings concerning the principal’s attributes and efforts to foster creativity and this model are very similar. Coaching is most closely related to Sandra’s belief that growth is important. While it was not observed during this study how she has changed her support over time, the director did comment that he knew she was working toward a staff capable of their own visioning, which would relate to “build a self-sustaining cycle.”
This seems to imply a graduated support system. However, a longitudinal study would be necessary to document this behavior more fully.

Concerning the behavior of securing resources in the Mayfield and Mayfield (2008) model, both Sandra and the teachers identified many resources she provides as a way to support creativity, including gathering funds and gaining necessary permissions from the director or the school board. Additionally, Sandra’s ability to connect teachers to one another, both within the building and with teachers in other schools, reflects the “leaders as linking pins” since she purposefully connects people with one another. Mayfield and Mayfield (2008) list praise, stories of models to create inertia, and eliminating a fear of change as aspects of the “motivating” skill. This was seen in the many ways that Sandra celebrates creativity, how she models creativity herself, and shares stories of others who have been creative in the weekly newsletter. Sandra also spoke about how she made an effort to form relationships with teachers when she first arrived at the school and how she believed that the relationships were the foundation for an environment where risk-taking, and thus creativity, could occur.

The skill of goal setting correlates well to the findings in this study since being goal oriented was identified as a part of Sandra’s vision for the school. Similarly to how it is described in the Mayfield and Mayfield (2008) model, Sandra was observed to have specific goals for the school and that she worked to achieve the goals most often through committees of teachers. At the same time, teachers indicated that they would benefit from more a more specific vision of what creativity could look like in their classrooms, indicating that they are looking for a more detailed description of the goals than they are currently receiving. Mayfield and Mayfield (2008) suggested that goals that are too broad
in scope may discourage or overwhelm workers, which means it is important to adjust the scope of the goals.

![Figure 20. Leadership Behaviors to Promote Garden Variety Creativity. Reprinted from “Leadership techniques for nurturing worker garden variety creativity” by Mayfield, M. and Mayfield, J., 2008, Journal of Management Development, 27(9), 976-986.]

Similar to the skill of coaching, feedback in the model is tied to Sandra’s belief that growth is important. As she actively seeks to identify and grow the strengths of others, she provides feedback. This was seen in the annual meetings she has with teachers concerning their professional growth. The teachers discussed how Sandra would listen and then provide honest feedback concerning any new idea that they brought to her. She often served as a listening ear to ideas and would help teachers refine their ideas. The director spoke about how Sandra actively took mental notes when observing in order to
provide teachers with quality feedback with the purpose of affirming and empowering teachers. He commented, “Sandra is able to authentically talk with her staff about what was good about that and what we might be able to learn from and do better next time.”

The Leadership Behaviors to Promote Garden Variety Creativity (Mayfield & Mayfield, 2008) model was composed after a literature review and the leadership portrait in this study was created to reflect the findings of the principal’s attributes and actions was created after studying a person. Yet, despite the different purposes, a comparison of the two supplies a set of behaviors that are very much alike. In this way, the findings from the current study are supported by the literature. Furthermore, this study was able to take the theory presented in the literature and then provide concrete examples of how those behaviors may appear within a school setting. As this case study sought to understand a person, it was able to bring to light not only the behaviors themselves, but also the how the previous personal experiences of a leader, her attitudes, and her beliefs influence those behaviors. Therefore, the findings from this study are supported by the literature and able to move beyond it.

**Principal’s Attributes and Efforts**

One observation concerning the findings from this study is that developing an environment that nurtures creativity in schools is not just about creativity. The examination of this one case yielded an Attribute of Core Educational Beliefs. Within the attribute were three major themes and three minor themes which serve as links between the major ones. One of the major themes was that Creativity is Important, yet there were two others of People are Important and Growth is Important that seemed to carry equal weight. Additionally, the principal’s Attitudes and Outlooks were tied to all of the core
beliefs. This shows that fostering creativity is complex and that factors outside of creative acts are also important. This notion is supported by literature. The KEYS assessment, of which a portion was used for this study, was developed with the idea that environmental factors influence the creative output of workers (Amabile et al., 1996). Additionally, Sternberg and Williams (2003) tied growth and creativity together by stating that growth is a combination of encountering new ideas, taking-risks and thinking freely without conventional limitations. This is almost identical to Sandra’s sentiment that “you can’t grow without being creative” and how she seeks to expose everyone to new ideas in order to spark creativity, which were the smaller themes on either side of her belief that Creativity is Important.

The findings from this study can also be compared to those found by Goertz (2000), whose study was discussed in the literature review specifically addressing the creativity of principals. Goertz (2000) used a questionnaire and in-depth interviews to look at the relationship between creative traits and leadership concerning four principals who were already identified as effective. The major themes found were that the principals had a passion for work, are sometimes independent in action, set goals, prefer original solutions to problems, are flexible, have a wide range of interests, are intelligent and are highly motivated. Within this case study, it was found that the principal exhibits the attitude of flexibility and she sets goals for the school. Within the section of the findings related to Sandra’s goals, it was discussed that the creation of the goals is often an action that she does alone. Thus, the goal setting in the current study is similar to the themes of goals and independence in the study conducted by Goertz (2000).
The differences in the major themes of the findings in the two studies can be attributed to the different perspectives with which the studies were conducted. Goertz (2000) specifically sought to measure the themes that were reported on in the study whereas I sought to capture the attributes and efforts of a principal seeking to foster a school environment where creativity can thrive. The dissimilarities in the findings do not negate one another, but simply provide different views of leadership. In fact, they seem to support and enhance one another since both found several of the same attributes were strongly associated with school leaders who were creative. While Goertz (2000) focused on self-reporting by the principals concerning their attributes, this study added the step of identifying the actions associated with the attributes. Additionally, the principal’s self-reports were triangulated using interviews with others who worked with her, document analysis, researcher observations, and gathering the perspective of the teachers in the school. This pairing of the attributes and actions furthers the research and can serve as a clearer guide concerning the implications for practice as well as suggestions for further research.

Teacher Data

While the teachers who participated in the study identified many of the same actions which were self-reported by the principal, the outcome was completely different. With the principal, the outcome of her Core Beliefs was her Vision for the School and how she went about leading. With the teachers, the outcomes of the principal’s leadership were that they felt Respected, Supported, and Empowered. At the same time, they also easily discussed aspects of their principal’s leadership that would improve creativity in the school. The teachers’ perspective provides insight that a principal-only study could
not provide. Their willingness to share how the principal fosters creativity in the school along with frustrations and suggestions for improvement indicate a healthy school climate and culture. It also reflects that they are looking for ways to grow since two of the themes for improving creativity in the school were More Resources and to be Provided a Better Vision.

Amabile et al. (2004) conducted a study which sought to investigate a specific section of the KEYS survey, one on perceived leader support. The study illuminated several types of behaviors that managers displayed and which employees then perceived as supportive, including support of a worker’s actions, regularly speaking with workers and providing feedback, providing positive recognition, and including workers in decisions. These are behaviors perceived by teachers in the study. The teachers stated they feel supported by Sandra, that she regularly engages in conversation with them concerning their ideas and provides feedback, she celebrates creativity in multiple ways, and she uses teachers in positions of leadership. A behavior identified by Amabile et al. (2004) as negatively related to leader support was a lack of clarity regarding the work to be done. This was seen in this study through the teachers requesting a better vision for creativity in their classrooms.

The themes concerning positive leader behaviors in the Amabile et al. (2004) study were divided into task-oriented and relationship-oriented behaviors, but the researchers observed that many of the task excerpts also contained relationship components. This supports the way that the findings from this study were visualized in order to show a relationship between Sandra’s attributes and associated behaviors. This is another indication the findings from the current study are supported by previous research.
The findings also extend the idea of leadership and fostering creativity from that of Amabile et al. (2004). They sought to only identify leader behaviors through employee reporting and then categorize them, while this research gathered multiple perspectives and then proposed a visualization of how those behaviors interact with one another in order to create a positive environment where creativity can thrive.

Another way the findings of this study relate to previous research is in employee perceptions. Carmeli and Schaubroeck (2007) analyzed the effect of perceived expectations for creativity on employee creativity at work. They looked at three areas of influence: (a) leaders, (b) customers, and (c) family. While each group was found to have some influence, the strongest influence on creativity at work was from how the employees perceived their leaders’ expectations. In the current study, the teachers discussed that the principal both models and asks for creative work. Thus, they believe she expects them to be creative. Additionally, the teachers also expressed their principal expected them to grow professionally. While the conversations in the focus groups indicated teachers were aiming to provide time for creative projects within their classrooms and to grow professionally, this study did not seek to measure teacher creativity or growth.

The teachers in this study perceived the efforts of the principal very similarly to how she self-described them. Due to the similarities in the themes and categories, I chose to depict them visually in a way that was similar to the principal’s attributes and efforts. While not an emphasis of this study, this is an important observation. Oftentimes employees do not perceive a leader’s efforts in a way they are intended. Carmeli and Schaubroeck (2007) suggested that future research investigate how leaders communicate
their expectations in order to learn which communication strategies reduce misinterpretation. However, in this case it seems that the teachers perceive the intentions of the principal fairly accurately.

It is my opinion that the most important part of the findings related to the teachers is how they reacted to the efforts, which is the bottom row in the visual. The data indicated that the teachers felt Respected, Supported, and Empowered by their principal. These feelings apply to both their general ability to teach and specifically to their personal creative efforts in their classrooms. Employee perceptions of their environment influence their work performance. In educational literature, S. M. Johnson et al. (2012) found a relationship between a school principal and teachers’ job satisfaction. They also found a teacher’s job satisfaction influenced student achievement. This relates to the study in that the teachers have a positive outcome concerning their principal’s actions, which influences their performance in the classrooms. As student achievement was not measured in this study, that section of the study by S. M. Johnson et al. (2012) cannot be related to the current study.

In their survey of over 800 teachers, Blase and Blase (2000) identified the themes of talking with teachers to promote reflection and the promotion of professional growth as the characteristics of a principal that enhanced classroom teaching the most. In this study, teachers identified engaging in conversations and an emphasis on professional growth as actions that encouraged creativity. Thus, the conclusions are similar and support that those specific actions are beneficial. Yet, neither of the studies from the educational literature discussed how the teachers felt. This study began to look more specifically at how the teachers perceived the principal’s positive actions and expand why
they felt that way. The current study was certainly not exhaustive, but it moves beyond pinpointing specific actions to an overall perception. With further research, the perceptions teachers have of their environments could illuminate other supportive actions that may have been missed in previous research.

**Implications and Suggestions for Future Research**

The third research question explored how the principal’s attributes aligned with her efforts to foster a school environment where creativity can thrive. In simple terms, it sought to discover what the principal was truly like and how that translated into leadership. The short answer to the question is Sandra’s attributes and efforts were very much in line. This study revealed that how she chooses to lead the school and the specific actions that she takes are guided by her convictions. Thus, beliefs drive actions. In fact, she said this herself and it was discussed as a part of the previous section relating the findings to the frameworks of the study. The implications for practice here are that when a school leader endeavors to make a school change, their personal educational philosophy is very important. If the attitudes, values and beliefs are not there, then it is unlikely that the change will occur. In the instance of creating an environment where creativity can thrive, Sandra said that having a philosophy of the whole child was essential and that focusing only on academics kills creativity. While one study cannot claim that having an emphasis on the whole child is the key to a principal’s ability to support creativity in a school, it is a place to start when engaging in self-reflection and an examination of practice. In terms of higher education programs that train principals, this finding shows the importance of not only having students write out an educational philosophy, but then also examining what they would want their school to be like. Coursework may require a
written educational philosophy and introduce new methods of leadership, but there is an important link between attributes and actions that would benefit from more attention. When the goal is to cultivate creativity, a core conviction must also be there.

There is a difference between being personally creative and fostering a school environment for creativity. Sandra pointed out that while someone can be creative alone in a dark room, to lead for creativity one must have a certain level of confidence. Thus, it isn’t all about someone’s personality, but also their actions. Mathisen et al. (2012) concluded this in their study which showed through a multiple regression that the behaviors of restaurant chefs had a greater effect on employee creativity than their personality traits. Comparably, Janussi and Dionne (2003) showed in their study laboratory study that unconventional behaviors displayed by a leader yielded more group creativity than other forms of leadership, including transformational leadership. The implication is that a school principal needs not to have attended art school or be personally involved in traditional creative acts like music or dance to foster a school culture and climate where creativity can thrive. Instead, a principal’s beliefs and then actions are what is important. School leaders can use the findings of this study as a guide to compare their own actions to the findings in the study.

A suggestion for future research is the role of personal confidence and specifically creative confidence. Creative confidence can be defined as “believing in your ability to create change in the world around you” (Kelley & Kelley, 2013, p. 2). The subject of confidence only came up once in this study. Sandra stated, “I think you have to be, in order to be a risk taker, in order to be open, you have to have inert confidence.” While the teachers did not specifically discuss confidence, they often expressed uncertainty
regarding how to foster a creative environment within their own classrooms. A way to further the investigation of creating school environments where creativity can thrive would be to specifically study how school leaders work to build self-efficacy in both teachers and staff as it relates to creativity. In other words, how can school principals grow creative confidence in their schools?

One avenue for future research is to conduct more case studies of principals who fit the selection criteria identified in this study in order to refine the themes and categories that were presented in the findings. With the inclusion of more principals in a database, the most important attributes are likely to arise and the associated possible actions will grow. In turn, this refinement would serve as a better foundation for policy and program changes as well as provide practicing principals with more resources to consult when aiming to foster creativity in their own schools. Additionally, more case studies would address some of the limitations of this study including type of school, the socioeconomic status of the students, diversity, funding level and the gender of the principal.

Finally, in order to truly further research on creativity in schools, a research instrument should be developed specifically for schools in order to assess culture, climate and outcomes while taking various school-related factors into consideration. The current creative climate measurement instruments were all written from a business perspective and school instruments concerning climate rarely include elements of creativity. While the instruments that exist can be adapted and are of some use, an instrument designed for schools would provide results that are more accurate and therefore more informative.
**Limitations**

As with all research studies, there were limitations within the design. One is the use of the KEYS assessment to assess teacher perceptions. While the KEYS has been used by numerous researchers in the field of education, it was written for businesses to assess worker perceptions. When examining previous studies for an assessment concerning creativity in schools, the KEYS was the most often used in schools. It was also considered to be one of the better written instruments. However, it is still not a perfect fit for assessing teacher perceptions in a school setting since it was not written for the purpose of evaluating a school climate and culture.

Another limitation is the research setting. There were advantages and disadvantages to selecting an international school, which is a private school, instead of a public one. The advantages were discussed within the population description in chapter three. A disadvantage of selecting to study an international school is that they are culturally diverse, which may make them inherently more prone to creativity than schools that are more homogenous. However, due to the difficulty in identifying a sample to fit the study criteria, this may not be the case. International schools also experience a lower percentage of students with disabilities or receiving special services, aside from language learning. International schools tend to have more funds and resources available than public schools. Each of these reasons could mean that transferring the findings out of the international school setting would be difficult.

In this particular case, the principal had a high degree of freedom, or lack of bureaucratic barriers to her decision-making. While this is not the case in every international school, it is something the principal reflected on in the interviews, i.e. the
degree of freedom likely had an impact on her ability to foster an environment where creativity could thrive. Principals with less freedom are probably more restricted in their actions. Additionally, this study was conducted as a single-case of a female principal in an elementary school. As this was an exploratory single subject case study, the findings are not readily generalizable to a larger population. It is possible that a male principal in the same setting would describe a different experience. It is also likely that attributes and efforts vary according to the level of the school, such as a middle or high school. Since pressure is placed on secondary schools concerning college admissions and test scores, a principal seeking to foster an environment where creativity can thrive will likely operate differently than the principal in this study.

Finally, I recognize the framework used to guide the study was limiting. Frameworks provide focus for a study because they limit what the researcher examines. In this study I chose to not consider other outside variables that influence the culture and climate of the school such as students, culture of the country where the school is located, teachers, parents and outside community members. There are many outside factors that influence schools and for this study I selected to focus on the role of the principal.

**Researcher Bias and Reflection**

This study represented two areas that I am personally passionate about: creativity and leadership. Before beginning my doctoral studies, I studied studio art in college, taught visual art for three years, and also completed a master’s degree in educational leadership. These life experiences have made me attuned to the principles of both creativity and leadership. I personally operate with a broad definition of creativity, recognizing it is any new idea that is useful and not something that is only contained
within the arts. This definition for creativity was discussed in the review of the literature in the second chapter. I certainly see the actions of others as creative when they may not label them as creative themselves.

As with all research, my personal experiences shaped the way this study was conducted. The experiences and beliefs brought to the study influenced how I reviewed literature, which terms I focused on and the frameworks that were selected to guide the study. Further, my personal background also shaped the terms used during the recruitment process and the questions asked within each interview. After completing this study and reflecting on the findings, I believe that future studies will benefit from the added descriptors of what it looks like to be a principal who fosters a school environment where creativity can thrive. The different attributes may aide in the identification of principals who fit within the parameters for the study, but would not define themselves as creative or in order to guide nominators who carry a different perspective concerning the term creativity.

Conclusion

This mixed methods case study illuminated the attributes and actions of one international elementary school principal who is seeking to foster a school culture and climate where creativity can thrive. The result of the study was a portrait of the principal as a leader, including a Personal Level, Core Educational Beliefs about administration and creativity, and how those influenced her Vision for the School. The teachers perspective highlighted the same beliefs and actions, while also revealing that the result was a staff that felt Respected, Supported, and Empowered. As a whole, the data yielded not only the themes as theories, but also paired the attributes with specific behaviors that
the principal exhibited. This is a starting point for both researchers and educators currently in schools who are aiming to increase creativity in their schools.

While there were many details included in the findings of this study, overall the fact the attributes of a principal were explored in relationship to a school’s culture and climate is of value. While many studies touch on leader’s attributes in relationship to a school climate, such as the study Sweetland and Hoy (2000) concerning teacher empowerment, the focus of those studies is on teacher or student outcomes. While these are certainly important topics, it is beneficial to pause and look solely at the leader. Conducting a case study and creating a multi-level representation of a principal provides insight into leadership. This study focused on the school leader in relation to fostering an environment for creativity and the findings from the study yielded a set of attributes with accompanying examples of them in action. These attributes provide a set of specific factors that can be further explored in future research while the examples of actions aide in better understanding the attribute. Looking at the relationship between the attributes serves as a reminder that there are many levels of influence concerning principal behaviors. The interconnectedness of the attributes reminds researchers and practitioners alike that a single one does not yield a specific type of school culture of climate.

There is certainly still much to be learned concerning the role of the principal and creativity in schools. As creativity continues to be a focus in both businesses and education, it is important that educational literature begin to close the research gap. The basis for studying creativity in schools exists and the call has been made for more research so that principals can knowledgeably work toward increasing creativity in their schools.
Appendix A: IRB Approval

Initial Review

Approval Ends
April 12, 2017

IRB Number
16-0277-P4S

TO:
Rachel Allen

FROM:
Chairperson/Vice Chairperson
Non-medical Institutional Review Board (IRB)

SUBJECT:
Approval of Protocol Number 16-0277-P4S

DATE:
April 14, 2016

On April 13, 2016, the Non-medical Institutional Review Board approved your protocol entitled:

How Principals Encourage Creativity in Their Schools by Influencing the Culture and Climate: Attributes and Actions

Approval is effective from April 13, 2016 until April 12, 2017 and extends to any consent/assent form, cover letter, and/or phone script. If applicable, attached is the IRB approved consent/assent document(s) to be used when enrolling subjects. [Note, subjects can only be enrolled using consent/assent forms which have a valid "IRB Approval" stamp unless special waiver has been obtained from the IRB.] Prior to the end of this period, you will be sent a Continuation Review Report Form which must be completed and returned to the Office of Research Integrity so that the protocol can be reviewed and approved for the next period.

In implementing the research activities, you are responsible for complying with IRB decisions, conditions and requirements. The research procedures should be implemented as approved in the IRB protocol. It is the principal investigators responsibility to ensure any changes planned for the research are submitted for review and approval by the IRB prior to implementation. Protocol changes made without prior IRB approval to eliminate apparent hazards to the subject(s) should be reported in writing immediately to the IRB. Furthermore, discontinuing a study or completion of a study is considered a change in the protocol’s status and therefore the IRB should be promptly notified in writing.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research" from the Office of Research Integrity’s IRB Survival Handbook web page [http://www.research.uky.edu/ori/IRB-Survival-Handbook.html#responsibilities]. Additional information regarding IRB review, federal regulations, and institutional policies may be found through ORI’s web site [http://www.research.uky.edu/ori/]. If you have questions, need additional information, or would like a paper copy of the above mentioned document, contact the Office of Research Integrity at (859) 257-9428.

M. Van Tu Bergen, PhD/ah
Chairperson/Vice Chairperson
Appendix B: Principal Interview Protocol

- To start, tell me a little about your experiences as an administrator.
- How long an educator? Subject/grade taught? How long an administrator?
  - How long at current school?
- Talk to me a little about your interest in creativity. What has influenced your passion/interest in creativity?
- Can you tell me a little bit about your current school?
- What does it mean to you for a principal to seek to encourage creativity?
- In terms of creativity, how would you describe the climate of your school - how does it feel?
- When thinking about encouraging creativity, what characteristics of your school’s climate do you think are most important?
  - Tell me about a time that you intentionally sought to foster _____ in your school’s climate.
- What areas of the school climate encouraging creativity do you feel are particularly strong?
  - Tell me about a time when you have worked to strengthen those areas.
- The flip side of that is to look for areas of growth. How are you planning to strengthen an area of your school’s climate?
- What role do you think resources play in your ability to encourage creativity?
  - Tell me about a time when you were able to secure resources for a creative endeavor.
  - Tell me about a time when you were not able to secure resources. How do you think that situation affected your ability to encourage creativity?
- Talk to me about the physical aspects school. What have you done to the physical space in order to encourage creativity? What would you still like to do?
- How would you describe the culture of your school in relation to encouraging creativity? - the beliefs, values and traditions?
  - What are the rituals, ceremonies, awards, traditions, phrases everyone uses, etc that you have at the school?
  - What are the stories someone might tell me about encouraging creativity in the school?
  - What physical artifacts in the school show that creativity is encouraged here?
- In order to encourage creativity, what characteristics of your school’s culture do you think are most important?
• Tell me about a time that you intentionally fostered _____ in your school’s culture.

• What areas of your school’s culture that encourage creativity are particularly strong?
  • Tell me about how you have worked to strengthen those areas.

• As with climate, I want to pause to think about areas of growth. How are you planning to strengthen (or continue to strengthen) an area of your school’s culture in relation to creativity?

• What goals do you have in relation to creativity in the school?
  • How do you communicate those with others associated with the school?

• Walk me through how you monitor the culture and climate of your school to see if creativity is being encouraged. (daily, monthly, yearly)

• We’ve talked some about what you do to encourage creativity in your school. How do you monitor if your actions are having an effect? What do you look for/listen for?

• How have you sought to motivate teachers and students in the school to be more creative?

• How do you go about coaching/mentoring the teachers and students in order to encourage creativity?
  • Can you give me a specific example of a teacher who needed encouragement and how you went about it?
  • What about a student?

• How does your interest in creativity affect the retention of your current teachers and the hiring of new staff?

• What do you believe your role, as principal, is in relationship to the culture and climate of your school.

• Tell me about your educational leadership philosophy. What are the principles that guide you as you lead a school?
  • How do you think your philosophy affects how you shape the culture and climate of your school?

• In your opinion, what are the essential qualities a principal should have to effectively shape a school culture and climate that encourages creativity?

• Is there anything else you’d like to share with me?
Appendix C: Teacher Survey Questions

Demographic Questions:
- Please indicate your total teaching experience
  1-2 years
  3-5 years
  6-10 years
  11-15 years
  15-20 years
  20 or more years
- Please indicate how many years you have taught at this school
  1-2 years
  3-5 years
  6-10 years
  11-15 years
  15-20 years
  20 or more years
- Subject you teach:
  Foreign Language (any)
  English as a Second Language
  The Arts (eg. Visual Art, Music, Dance)
  Other Specials (e.g. Physical Education, Library, Technology)
  Other:
- Grade(s) you teach:
  Pre-K
  Kindergarten (US definition)
  1
  2
  3
  4
  5
- Highest Level of Education:
  Bachelor’s Degree
  Some graduate work, but no degree awarded
  Master’s Degree
  Doctoral Degree

Adapted KEYS® Questions. They are paired with a four-point response scale (never or almost never, sometimes, often, always or almost always).
* - Indicates a question that is reverse scored
Manager Encouragement
- My principal clearly sets overall goals for me.
- My principal has poor interpersonal skills.*
- My principal serves as a good work model.
- My principal’s expectations for my projects are unclear.*
- My principal plans poorly.*
- My principal supports my work group within the organization.
- My principal does not communicate well with our work group.*
- I get constructive feedback about my work.
- My principal shows confidence in our work group.
- My principal values individual contributions to projects.
- My principal is open to new ideas.

**Organizational Encouragement**
- In this school, there is a lively and active flow of ideas.
- Overall, the people in this school have a shared “vision” of where we are going and what we are trying to do.
- New ideas are encouraged in this school.
- Performance evaluation in this school is fair.
- In this school top administration expects that people will do creative work.
- People are recognized for creative work in this school.
- There is an open atmosphere in this school.
- Ideas are judged fairly in this school.
- Failure is acceptable in this school, if the effort on the project was good.
- People are encouraged to solve problems creatively in this organization.
- People are rewarded for creative work in this school.
- People in this school can express unusual ideas without the fear of being called stupid.
- This school has a good mechanism for encouraging and developing creative ideas.
- People are encouraged to take risks in this school.
- I feel that top administration is enthusiastic about my projects.

**Lack of Organizational Impediments**
- This school is strictly controlled by upper management.
- There is much emphasis on doing things the way we have always done them.
- People in this school are very concerned about protecting their territory.
- There is destructive competition within this school.
- There are many political problems in this school.
- Procedures and structures are too formal in this school.
- People are quite concerned about negative criticism of their work in this school.
- People in this school feel pressure to produce anything acceptable, even if quality is lacking.
- Top management does not want to take risks in this school.
- People are too critical of new ideas in this school.
- Other areas of the school hinder my projects.
- Destructive criticism is a problem in this school.

**Qualitative Questions**
(1) Please list 3 things that your principal does that encourage creativity in your school.
(2) Please list 3 things that your principal does that hinder creativity in your school.
(3) What are 3 things you principal could do to better encourage creativity in your school?
Appendix D: Teacher Focus Group Protocol

- In terms of creativity, how would you describe the climate of your school - how does it feel?
- How would you describe the culture of your school in relation to encouraging creativity?
- What do you think are the principal’s goals in relation to creativity in the school?
- In what ways does your principal encourage a culture and climate that encourage creativity?
  - If I were new to the school (as a teacher applying for a position or a parent considering sending my kid), what is the story you might tell me about how the principal encourages or doesn’t encourage creativity in the school?
- In what ways does your principal discourage a culture and climate that encourage creativity?
- What are some areas where the principal could grow in order to better encourage a culture and climate that encourages creativity?
- How has the principal influenced the school culture and climate to encourage more creativity in you? Your students?
Appendix E: Other Stakeholders Interview Protocol

- Can you tell me how long you have been involved with the school? How long have you known <Principal>? What is your relationship to them?
- When I say <Principal> encourages creativity in their school…” what are your thoughts?
- If I were new to the school (as a teacher applying for a position or a parent considering sending my kid), what is the story you might tell me about how <Principal> encourages or doesn’t encourage creativity in the school?
- What do you see <Principal> doing that encourages creativity?
- What do you see <Principal> doing that hinders creativity?
- What do you think <Principal>’s goals are in terms of creativity?
- How have you seen <Principal> motivate others to be more creative? (teachers, students, parents, the board, anyone!)
References


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