AMERICAN UNIVERSITY OF BEIRUT

EXAMINING LEADERSHIP AND ORGANIZATIONAL CONTEXT FOR AN ENABLING ENVIRONMENT: THE CASE OF FOSTERING CREATIVITY IN SCHOOLS

by

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A thesis
submitted in partial fulfillment of the requirements
for the degree of Master of Arts
to the Department of Education
of the Faculty of Arts and Sciences
at the American University of Beirut

Beirut, Lebanon
January 2021

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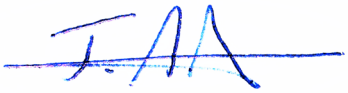

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Date of Thesis Defense: January 27, 2021

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ACKNOWLEDGEMENTS

Several years ago, I got it into my fool head that I could “do the academic thing” and embarked on a journey I knew nothing of. My arrogance and self-conceit were evident in my early blustering discussions with a professor that would prove to be a seminal figure in my transformation from pedagogical confidence man to semi-respectable pedagogue. That professor is called Dr. Rima Karami-Akkary.

Dr. Rima, let me begin by saying that I am profoundly grateful to you. You tempered my excess tendencies and encouraged my steely resolve. It started with excited debates about the reliability of qualitative research, it swelled into determined dialogues on the source and nature of knowledge building, it settled into the meaning and context of the human experience, and all the while a masters degree was proceeding. I didn’t feel the time. What has been particularly impressed upon me has been your tenacity, your unwavering commitment to academic excellence, and your courage to pursue ideas to their logical, inevitable, unknown limits. It has been, and will continue to be, an honor and a pleasure to know you.

My wife Celine endured many a night of my reciting newly acquired ideas from classes and research, as I often excitedly regurgitated my professors’ insights, with bombast and hyperbole, and she humored me to no end by engaging me in dialogue and banter. Her support and encouragement throughout our courtship, engagement, marriage, and birth of our daughter, has been the real story of the past 5 years, and this degree but the notes in the margin. I am eternally grateful to her for her love, support, patience, and passion.

To the members of my thesis committee, Dr. Tamer Amin and Dr. Saouma BouJaoude, I owe you a debt of gratitude for taking the time to share your brilliant intuitions, meticulous attention to detail, and erudite insights.

I want to sincerely thank the principals and teachers who willingly and enthusiastically agreed to participate in my study. I extend my appreciation to all the teachers that participated in the survey, and to all the administrators that helped facilitate the minutiae of protocol and procedure.

I am most grateful to the love and support of my brother Matthew and my mother Jeannette. From Matt’s transcendent commitment to the lived experience and Mom’s headstrong wisdom for what matters most, I built my will to try. They pushed me, helped me thread the clunky disparate parts of my life through this stimulating episode, and saw me through it all to the other side.

Last but not least, to my father, Afif. His love for his family was boundless, and his only wish for his sons was that they surpass him in pursuit of a fulfilled life. This acknowledgement is in tribute to his memory.

AN ABSTRACT
OF THE THESIS OF

Mario Afif El-Jamal for Master of Arts
Major: Educational Administration and Policy Studies

Title: Examining leadership and organizational context for an enabling environment: The case of fostering creativity in schools

Cultural, socioeconomic, and environmental challenges in the 21st century have shifted the attention of educational researchers toward the value and urgency of creativity in the classroom. Studies into creativity strongly demonstrate the importance of the climate or surrounding environment for fostering creativity and creative thinking. The relationship between school leadership and creativity in education is limited, with research parallels coming mostly from business literature. This study explored the role that leadership plays in fostering and nurturing the climate for creativity in schools. A two-case qualitative study was conducted in two schools with a common organizational and religious history. The study involved the administration of an adapted version of the KEYS creative climate survey to teachers of both schools. The results of the survey were analyzed by simple descriptive analysis. One-to-one interviews with principals, as well as two focus group sessions with 4 volunteer teachers from each school, were analyzed using the constant comparative method. The study relied on a grounded theory approach to knowledge building. Themes extracted from the transcripts were contrasted with results from the climate survey, the literature, and the lived experience of the researcher. The findings of the study yielded new attributes and perspectives on how school leaders affect the school climate as a whole. Leadership attributes promoting creativity include *being open to new ideas*, *accepting of differences*, *showing encouragement*, *communicating a desire to promote creativity*, placing emphasis on the *students as priority*, showing *passion for work* and *practicing distributive/collaborative leadership*. Leadership attributes that hinder a climate conducive to creativity include *being outcome*-oriented, *running a one-man show*, *lacking a vision for creativity*, placing *increased teacher workload*, and delivering *negative feedback*. The study unearthed unexpected new avenues for research in education, specifically in relation to misconceptions of creativity, lack of a firm grasp of organizational structure and school climate, and a conflation of effective leadership with leadership aligned towards a specific goal, such as promoting creativity. The implications of the findings rests in the potential that school leadership plays as a mediating role in fostering creativity through specific acquired leadership attributes and practices of the individual that are accentuated throughout the school.

Keywords: School leadership, creativity, school climate, leadership attributes

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CHAPTER I

INTRODUCTION TO THE PROBLEM

Introduction

Creativity has been a growing focus point of educational researchers, industry and business professionals, and policymakers around the world for decades (Craft, 2001). Creativity (and related terms such as innovation and divergent thinking) is seen as a valuable resource for tackling the increasingly complex socioeconomic, environmental, medical and political challenges of the 21st century (Dietrich, 2016; Newton & Newton, 2014; Reid, 2015; Runco, 2004; Sternberg & Lubart, 1991; Tan, 2015). It is the vital process underpinning the progress of human civilization from antiquity to the present (Csikszentmihalyi, 1997; Dietrich, 2018; Guilford, 1950; Patrick, 1956; Reid, 2015; Runco, 2004; Tan, 2015). Yet while the value of creativity is common parlance in the business and professional world, creativity itself is rarely addressed in education beyond sound bites, marginalized in the curriculum due to the continued high reliance on standardized assessments as measures of success (Allen, 2016; Dollinger, 2011; Guilford, 1950; Patrick, 1956; Plucker et al., 2004; Sternberg, 2015). This is problematic, especially considering the strong evidence suggesting the importance of creative thinking not just for problem solving, but for success in general in other academic pursuits and numerous professional fields (Ahmadi & Besançon, 2017; National Advisory Committee on Creative and Cultural Education [NACCCE], 1999; Newton & Newton, 2014; Reid, 2015; Runco, 2004; Tan, 2015).

The evidence for the value of creativity is buttressed by the research into how creativity is fostered. Many studies demonstrate the importance of the surrounding environment and the workplace climate as a key factor for fostering creativity (Brundrett; 2004; Craft, 2003, 2005; Davies et al., 2013; de Souza Fleith, 2000; Hondzel & Gulliksen, 2015; Hong et al., 2014; Hunter et al., 2007; Kandler et al., 2016; McCoy *&* Evans, 2010; Pang, 2015; Shalley & Gilson, 2004; Tan et al., 2016). Organizational climate can be defined as the "enduring characteristics that describe the psychological character of a particular school" as perceived by employees, such as teachers (Sergiovanni & Starratt, 2002, p. 82). Elements such as openness, tolerance of risk, engagement with challenging problems, and autonomy are often cited as key ingredients in promoting a creative environment (Amabile 1983, 1997; Amabile & Pillemer, 2012; Benedek et al., 2016; Blamires & Peterson, 2014; Charyton et al., 2013; Craft, 2001; Csikszentmihalyi, 1997; Davies et al., 2013; Ferizovic, 2015; Haigh, 2007; Hong et al., 2014; Hunter et al., 2007; Kandler et al., 2016; Runco, 2004; Shalley & Gilson, 2004).

Studies also demonstrate the role of leadership as the key influencer in shaping the organizational climate or work environment (Allen, 2016; Dutta & Sahney, 2016; Leithwood et al., 2010; Martin, 2009; McCarley et al., 2014; Moolenaar et al., 2010; Robinson et al., 2008; Sergiovanni & Starratt, 2002; Tajasom & Ahmad, 2011; Wong-Kam, 2012). The bulk of studies on leadership and creativity comes from business and industry research, and much of what informs educational researchers on this topic is drawn from there (Allen, 2016; Mayfield, 2009; NACCCE, 1999). Allen's (2016) limited case study identified certain qualities and attributes of leadership that foster a climate conducive to

creativity. This study expands on Allen's work by attempting to differentiate attributes that foster such a school climate versus those that hinder it.

Rationale

There are several reasons for pursuing a study into the relationship between educational leadership, school climate, and creativity. First, there is very little empirical research on the role educational leadership plays in fostering school creativity (Allen, 2016; Hemlin et al., 2013). A recent systematic literature review of creative learning environments yielded 210 studies, none of which addressed the role of the school leadership directly (Davies et al., 2013). There are also limited studies on the creative experience from the perspective of the creative subjects themselves (Lassig, 2012), which in this case includes the teachers and the leaders.

A key connection found among existing research is the influential role of the organizational climate on creativity (Craft, 2001; Dutta & Sahney, 2016; Ferizovic, 2015). Organizational climate is a concept that combines properties of the work environment as perceived by the employees (James & Jones, 1974). Leadership plays a central role in the crafting of the organizational climate (Hulpia et al., 2011; James & Jones, 1974). Though the connection between the organizational climate and creative output has been observed and recorded, there are almost no studies that delve into what attributes of leadership generate a particular perceived organizational climate, specifically, one perceived by its teachers and learners as being conducive to creativity.

One of the few studies about the mediating role between leadership and creativity is Allen's (2016) case study of one school principal who was determined to foster a climate where creativity can thrive. The study identified several attributes of the principal's role in

promoting a creative climate as perceived by both the teachers and the principal (Allen, 2016).

Although Allen's study broke new ground in identifying attributes of a leader that are favorable to promoting a climate conducive to creativity, it was limited to a case study of a single principal. Furthermore, there remains an absence of a counterweight study to Allen's, where leadership attributes inhibiting or hindering creativity are singled out in a principal.

A study on educational leadership in Lebanon found that there is a growing demand from teachers for school leaders to be more involved in their schools (Mattar, 2016). A comprehensive grounded study on the role of the Lebanese school principal explored common themes on how Lebanese principals perceive their own profession (Karami-Akkary, 2014). The study, involving interviews with 53 school principals, found that Lebanese school leaders shared a common set of role expectations, including: limited attention to the instructional supervision aspect of the role, limited responsibility as a change agent, and carrying an authoritarian stance (Karami-Akkary, 2014).

The role expectations of Lebanese school leaders from the Karami-Akkary (2014) study sound antithetical to crafting a climate conducive to creativity. For example, the findings from Allen's (2016) study, as mentioned above, pointed to a supportive, more involved school leader for helping to develop a creative climate, not someone with a limited attention to instructional supervision or distanced responsibility for school vision and growth (Karami-Akkary, 2014).

This study aims to fill a gap in the literature about the impact of leadership on fostering a climate conducive to creativity in the context of Lebanon, building on Allen's

findings on the role of the principal in fostering a creative school climate. Allen's (2016) study identified 3 attributes (grouped as Personal, Core Educational Beliefs, and School Vision) where the principal's role contributes to crafting a school climate conducive to creativity. Allen recommended several avenues for further research, including conducting more case studies of principals in order to further refine the themes and attributes presented in her findings, as well as looking at how school leaders grow creative confidence, which is defined as the belief in the ability to create change in one's environment (Allen, 2016). This study will build on Allen's study by exploring the commonality (or generalizability) of these attributes (and underlying themes) and further refining them by looking at two cases in a new socio-cultural context. In order to better triangulate the role of the principal in the big picture, it will also explore evidence of leadership attributes that are antithetical to creativity in schools.

Research Questions

This research study is guided by the following research questions:

1. What are teachers' and school leaders' conceptions of the following:
    - Creativity and its manifestation in the classroom as enacted by both students and teachers
    - a climate conducive to creativity in the classroom?
2. What organizational arrangements are needed to facilitate the enactment of a climate conducive to creativity as perceived by teachers and school leaders?
3. What attributes and practices of school leadership promote or hinder a climate conducive to creativity as perceived by principals and teachers?

4. How do attributes and practices of school leadership promote or hinder a climate conducive to creativity as perceived by principals and teachers?

Significance of the Study

This study aims to fill a gap in the literature regarding the role of leadership in promoting or hindering creativity in the classroom. The benefit of such a nugget of knowledge is that it can contribute to the criteria in the selection of school leaders that better match a school vision for creativity. Furthermore, knowledge of how and in what capacity climate is shaped by leadership can inform future studies on crafting the architecture of a work environment, and further our understanding of both how best to lead schools and organizations for creativity, and how to help students, employees, and citizens get the most of their talents and potential.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

This chapter delves deeper into the established literature on the topic of creativity, leadership, school climate, and the relation between the three. Since the focus of the study is on identifying attributes and practices of school leadership that foster and hinder a climate conducive to creativity, it is essential to elaborate on what the literature already says about leadership, creativity, school climate, and the interplay between these elements. This section will also look at the conceptual lens through which the methodology of the study will be designed and implemented, and will provide initial direction for the data collection and analysis.

Research into the available literature for the study was done primarily through the AUB Library portal, through which access to the ERIC, JSTOR, ScienceDirect, ProQuest Central and Shamaa databases provided online access to most of the relevant literature. Some references, such as *All Our Futures* by the NACCCE, and *Creativity in Schools*, by Anna Craft, were available as free downloads online, and accessed through the Google Chrome search engine.

The following list of keywords and descriptors were used for narrowing down the search through the online AUB library portal.

Creativity, education, creative learning, creative thinking, hinder, promote, foster, leadership, educational leadership, school culture, school climate, school, creative

learners, divergent thinking, convergent thinking, types of creativity, organizational structure, organizational climate, organizational context.

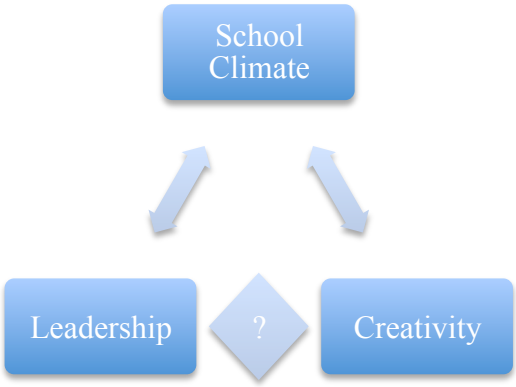
Several filters were used to narrow the search further, including filtering for education, peer-reviewed journal articles, and full-text access.

Overview of Relevant Literature

The problem that this study aims to explore is nestled within a web of social, educational, psychological, and organizational cross points, so much so that it is essential to delineate and clarify the subtexts of each separately before putting all the pieces together. Broadly speaking, these elements are: creativity, the value of creativity in education and in society, what is known about how creativity is fostered, what is known about how creativity is hindered, what role the climate plays in fostering or hindering creativity, school leadership, the role leadership plays in shaping the school climate, and ultimately, the role that leadership plays in fostering creativity (directly or indirectly). It is already established from the literature that there is an indirect connection between leadership and creativity, through the influence of leadership on school climate. What is being explored further is the closing of the triangle of confluence between the three elements.

Figure 1

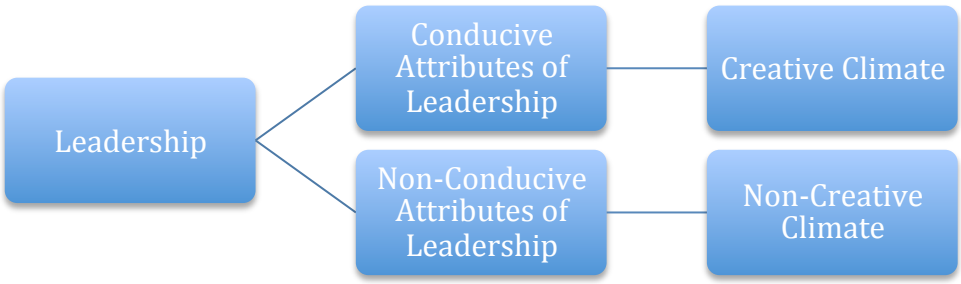
The Mediating Effect of Leadership on Creativity Through School Climate



In order to do so, attributes of leadership conducive to generating a climate for creativity are to be singled out and differentiated.

Figure 2

Leadership Promotes Creative or Noncreative School Climates Through Leadership Attributes Conducive or Non-Conducive to Such a Climate



Driving the impetus to explore the link between leadership, school climate, and creativity is Allen's (2016) case study of a principal focused on crafting a climate conducive to creativity in the classroom. The key takeaways from the study placed importance on specific leadership attributes that contribute to crafting a creative climate, including sharing personal experiences, projecting attitudes and outlooks that engender a "whole child" approach to education, communicating clearly the importance of creativity, placing the importance of valuing people as key to growth and progress, demonstrating

vision of the school through goal-oriented behavior, as well as demonstrating equality of expectations from others (Allen, 2016). However, the study did not explore leadership attributes that hinder a climate conducive to creativity. Furthermore, the study was limited to a case study of one principal. In order to set the stage to expand on the work of Allen's, the literature review will start with a closer look at the underlying understanding of creativity, organizational climate, and leadership.

Exploring the Literature on Creativity

At the core of this study stands creativity, an elusive concept that is sought out by leaders in business, technology, medicine, and other fields, including education. Creativity is a loaded term with a lot of baggage that needs to be unpacked and carefully scrutinized in order to align the concept with its intended effect. We begin by exploring the definition of creativity, followed by some stubborn myths and misconceptions about creativity, then about its relation to risk and risk tolerance, the biological nature of creativity, how creativity is assessed, what is its added value to education, and finally exploring factors that foster and hinder creativity.

Definition of Creativity

Despite there being a tremendous amount of literature on the topic of creativity, there is a good deal of confusion over the definition of the term (Plucker et al., 2004). The confusion is compounded by the plethora of synonyms and stand-in terms, such as innovation (a new more effective take on an old concept or theme), inventiveness (a product of the imagination), originality (the ability to think independently or creatively), divergent thinking (a thought process to generate new ideas), convergent thinking (combining an array of facts or ideas to a single unit, or solution), lateral thinking

(perceiving non-obvious patterns), as well as similar sounding terms, such as creative thinking (looking at something in a new way), creative learning (acquiring knowledge through creative processes), creative teaching (innovating new approaches to teaching), or teaching for creativity (crafting teaching lessons or methods that promote creativity in the classroom), to name but a few of the terms that pepper the literature (Allen, 2016; Craft, 2001; Craft, 2003; Patrick, 1956; Runco, 2004; Van Harpen & Sriraman, 2013; Wong-Kam, 2012). One of the delineating definitions arise from the difference between what is deemed as high, or capital C, creativity, generally understood as that type of creativity identified with genius, and everyday, or small c, creativity, such as is generated by people, either on a regular basis or through a concerted effort (Beghetto & Kaufman, 2014; Craft, 2001; Craft, 2003; Haigh, 2007; Kaufman & Beghetto, 2009; Patrick, 1956). Craft (2003) cites the British National Advisory Committee on Creative and Cultural Education that creative thinking skills "enable pupils to generate and extend ideas, to suggest hypotheses, to apply imagination, and to look for alternative innovative outcomes" (p. 116). Another definition, very commonly quoted in the literature, is that of Plucker, Beghetto, and Dow (2004):

> Creativity is the interaction among 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. (p. 90)

A similar one states that creativity is "the production of novel and useful ideas in any domain" (Amabile et al., 1996, p. 1155). Drawing on the guiding source material for this paper, the definition of creativity is summed up by Allen (2016) which defines creativity as "the generation of ideas that are new and useful within the context where they

were generated" (p. 22). This study considers Allen's summary of creativity to be the guiding definition, with the following amendment: "Creativity is the generation of ideas that are new and *meaningful* within the context that they were generated."

The Myths of Creativity

Several pervasive myths persist in the research on creativity. Landmark researchers Plucker, Beghetto, and Dow (2004) shed light on these misconceptions. They include:

1. that people are born creative or uncreative
2. that creativity is associated with negative aspects of psychology and society
3. that creativity does not have a solid basis to build research on (that it is a "fuzzy soft construct"); and last but not least,
4. that creativity is enhanced within group work. (p. 85–87)

In fact, the research has shown that creativity is bred in combination with genetic and environmental factors, and personality traits, and exceptional cases aside, creative thinkers are generally not born creative (Craft, 2003; Plucker et al., 2004; Sternberg, 2015). The link between psychopathy and creativity is tenuous at best (Lauronen et al., 2004; Neihart, 1998). As for the last myth, it has been often assumed (especially in corporate business cultures) that working in groups enhances creativity. In fact, research has shown that brainstorming sessions conducted individually then pooled together as a group yield greater creative output than brainstorming as a group (Plucker et al., 2004).

Creativity and Deviance. One of the most pervasive beliefs in society is the link between creativity and mental disorder. It is frequently cited in the literature, and there is a great deal of research that has been done on the connection between the two. A recent

literary review by Laurenen et al. (2004) showed that despite there being a positive association between creativity and mental disorder, especially affective disorders, there is no clear stance from research on the causal link between creativity and mental disorder. Reviewing over 100 cases, the findings state that there is a link, but it's underlying cause is uncertain (Laurenen et al., 2004). Do certain mood disorders foster creative thinking, or does creative thinking develop vulnerability for mental disorders?

Neihart (1998) delineates the divide between creativity and mental disorder by drawing a definition based on outcome. The paper's main premise is that creativity results in the production of something original and containing value, while madness is defined as "self-destructive deviant behavior" (Neihart, 1998, p. 47).

Shunning the term madness as outdated, Spooner (2006) clarifies the difference between creativity and deviance as behavior that is a matter of being socially acceptable or socially non-acceptable. In a study involving 26 participants ranging in age between 18 and 31, a series of surveys and interviews was conducted to determine the degree of creative expression in their lives, and whether or not their creativity was deemed socially acceptable. The study found that creative thinking helped curtail psychopathological tendencies among the participants. Many participants found creative output a way to channel negative affectation, emotional sensitivity, anger, and depression (Spooner, 2006). Still, one of the challenges faced by participants in the study concerned the cultural differences between what is socially acceptable creativity (Spooner, 2006).

Creativity and Risk. One of the reasons why creativity is misconstrued for deviance stems from the fact that creative people tend to have a higher tolerance for risk (Charyton et al., 2013; Craft, 2001; Davies et al., 2013; de Souza Fleith, 2000; Shalley &

Gilson, 2014; Spooner, 2006; Sternberg, 2005). Common traits attributed to creative thinkers include unconventionality, wide interests, insightfulness, and confidence, among others, traits that are procreative, as opposed to "countercreative attributes" such as cautiousness, conservativeness, and narrowed interests (Charyton et al., 2013, p. 351). The studies on the link between creativity and risk-taking found that creative thinkers predominantly take calculated risks, as opposed to rash decisions (Charyton et al, 2013). The significance of this suggests that the dividing line between creativity and deviance becomes one where the risk is no longer a calculus affair, but a throwaway impulse, and possibly the symptom of an underlying or developing mental disorder.

The Biological Nature of Creativity

The biological basis of creativity, according to Runco (2004), is not a right hemisphere versus left hemisphere divide, but rather the interaction of both hemispheres. His research demonstrates that assuming creativity is a right hemisphere activity is a major a flaw, and he cites studies involving EEG analysis of brain electrical activity that suggest the creative process employs various elements of both hemispheres (Runco, 2004). Runco's studies echo findings from two decades earlier that showed children with integrated thinking styles (using both left and right hemispheres) were more creative than those with either left or right hemisphere thinking (Kershner & Ledger, 1985).

More recently, advances in the neurocognitive understanding of consciousness have generated new theoretical frameworks about the physiological process of creativity (Dietrich, 2018). The theory argues that since creativity has effectively been proven to be almost entirely a deliberately controlled and thus consciously-driven affair, that situates

much of its process within the prefrontal cortex, which is the "seat of consciousness", so to speak (Dietrich, 2004, 2018).

Assessing Creativity

Identifying creativity has always been a tricky endeavor, with often poor or inconclusive results (Benedek et al., 2016; Patrick, 1956; Runco, 2004; Said-Metwaly et al., 2017; Sternberg, 2015). Certainly, it is crucial to know if a learner is being creative in order to provide the needed support and attention (Benedek et al., 2016). However, Gardner's (1995) study of creative people revealed that those proven to be creative hardly demonstrate it early in life. One meta-study into individual creativity found great variability even after accounting for sex and intelligence (Kershner & Ledger, 1985), and that in fact intelligence or academic achievement was not a reliable indicator for creativity (Freund & Holling, 2008; Guilford, 1950; Kershner & Ledger, 1985). Another field inquiry into creativity and academic performance concluded that many creative learners are underachievers in school (Kim, 2008). A related study also found a negative correlation between an anticreative learning environment and creativity assessment measures, and a subsequent positive correlation between the same subjects and the drop out rate in high schools (Kim & Hull, 2012). Though there is some evidence that college admission tests have demonstrated some capacity to identify certain creative applicants (Dollinger, 2011), they are hardly the standard-bearers for creative thinking.

Over the years, researchers have developed a number of different tools and instruments for assessing creativity. By far the most ubiquitous is the Torrance Test for Creative Thinking (Ahmadi & Besançon, 2017; Amabile et al., 1996; Blamires & Peterson, 2014; Kim, 2008; Runco, 2004). Despite the prevalence of this long-established "standard"

instrument for creativity assessment, a growing body of researchers, backed by more recent advances in the understanding of the neurophysiology of creativity, has cast doubt on the inclusiveness of the test, and on the reliability of creativity psychometrics in general (Allen, 2016; Dietrich, 2004; Said-Metwaly et al., 2017). For those studying creativity, this poses a serious problem: How can one know if learners are creative?

One model for assessment of creativity proposes a framework for identifying creative thinking and behavior in the classroom in a more organic and dynamic fashion, and includes teachers mindfully interacting with learners who actively question and challenge the topics, explore ideas, envision scenarios, reflect critically on the material, and maintain an open mind (Blamires & Peterson, 2014). Assessment of creativity in this way falls on the shoulders of the teachers themselves, and the importance of supporting the creativity of learners requires that teachers are creativity minded, or at least, aware of providing a climate conducive to creative thinking (Benedek et al., 2016).

Added Value of Creativity in Education

Creativity is most often associated with the arts (Foster, 2009; Gardner, 1995; Spooner, 2006). While the definition of creativity as a process of generating new and useful ideas is now established, it follows to ask, why creativity? What is the value of creativity for education? What is the value of creativity in the larger context of society?
Plucker et al. (2004), among others, stress that its value lies in the utility of the creative process (Freund & Holling, 2008; Reid, 2015; Runco, 2004). It is not simply that a novel idea has been generated, but that it can be used within the context that generated it. Yet there is more to the value of creativity than simply the utility or instrumental use of an idea. The 21st century world is rife with complex, interactionist challenges that demand creative

solutions (Allen, 2016; Crowe, 2010; Dietrich, 2018; NACCCE, 1999; Newton & Newton, 2014; Reid, 2015; Runco, 2004). The need for creativity has grown exponentially with the rise of knowledge-based societies (NACCCE, 1999; Newton & Newton, 2014; Runco, 2004; Tan, 2015). Creativity is now considered an essential resource for tackling political, economic, and societal issues (Newton & Newton, 2014; Reid, 2015; Robinson, 1998; Runco, 2004; Sternberg, 2005; Sternberg & Lubart, 1991). The business world has appreciated the importance of creativity and innovation for some time, as much of the literature on creativity and the environment is drawn from business literature, and in fact many businesses invest in courses to improve creativity of employees in the workplace (Allen, 2016; NACCCE, 1999).

The value of creativity extends beyond the need to find innovative solutions to problems. Studies show that most successful professionals, from science and engineering to business and industry, are commonly involved in some creative pursuits and "avocational interests", whether through literary works, the practices of music, dance, or painting, or crafts and workshop pursuits such as carpentry and metal-works, and tinkering with electronics (Root-Bernstein, 2015, p. 203).

Reid's (2015) analysis of creativity in education stresses the overarching importance of creativity across the spectrum of topics, explaining that its value lies in its occurrence "in any subject or realm, from math to engineering, from geography to astronomy and beyond" (Reid, 2015, p. 1). It underpins the discoveries and leaps in every field of human endeavor, lying as the common key to human progress across history, and consistently ranked as one of the essential 21st century skills (Csikszentmihalyi, 1997; Dietrich, 2018; Patrick, 1956; Reid, 2015; Tan, 2015).

Why should schools teach for creativity? Standardized testing does not cater to the malleable divergent thinking that creativity embraces, and schools are predominantly oriented towards training students for landing university acceptances. But creative thinking is not limited to hypothetical exercises in the classroom for group interaction. A multilevel study performed in Germany on 1133 students aimed at examining the predictive link between reasoning ability, creativity, and academic performance, found that there is a significant positive correlation between reasoning ability, creativity, and GPA scores (Freund & Holling, 2008). Their findings also noted that the predictive nature of the creativity measures used varied from classroom to classroom based on the degree of creative teaching practiced in that particular classroom! (Freund & Hollig, 2008). This suggests that more creative classroom teaching might be correlated with better academic performance.

Factors that Foster Creativity

Studies on creativity have unearthed a plethora of factors that contribute to creative output, including genetics, the environment, workplace climate, the pursuit of artistic interests, tolerance to risk, provision of time, and encouragement for the pursuit of diverse ideas (Allen, 2016; Craft, ; Patrick, 1956; Plucker et al; 2004; Runco, 2004; Sternberg, 2015).

Creative thinking employs various combinations of specific thinking tools, which include observing, imaging, abstracting, recognizing and forming patterns, drawing analogies, modeling, playing, transforming, body thinking, dimensional thinking, empathizing, and synthesizing (Spooner, 2006). A combination of pattern recognition, empathy, observation and synthesizing information span the spectrum of left-brain to right-

brain hemispheric function, and lend credence to the integrated thinking style of creative thinkers (Runco, 2004; Kershner & Ledger, 1985). How can these tools help educators to train creative thinkers? If creativity produces something new and useful for society, and that is influenced by the external environment, can it then be taught?

Craft (2003), for one, thinks so, and states that creativity is the "business of the education system" (p. 115). If creative people are heavily influenced by their environment, then no doubt the mechanism to promote creative thinking must naturally include the learning environment.

While creativity is not limited to the arts, artistic pursuits are a strong factor in promoting creativity and creative thinking (Amabile et al., 1996; Neihart, 1998; Pang, 2015; Sowden et al., 2015). Patrick's (1956) early work on the process of creativity described various activities creative pioneers would undertake to generate, stimulate, and nurture creative thinking. Though it is traditionally assumed that creative people are born creative (Patrick, 1956), studies have shown otherwise (Craft, 2003; Plucker et al; Sternberg, 2015). For decades now, research into creativity has uncovered great variability in creativity from one individual to another. For example, studies exploring factors that influence creative output have uncovered a range of positive correlations as diverse as humor (Ziv, 1976), walking (Oppezzo & Schwartz, 2012), informal playtime (Davies et al., 2013; Goor & Rapaport, 1977), bilingualism (Lambert et al., 1973), having passion (Luh, 2012) and even silence (Bigo, 2018), as a small sampling.

In education, artistic expression and exploration of ideas is often inherent within the context of the classroom, often couched within the curriculum, whether through improvisational activities to enhance divergent thinking or through ideational tasks (the

practice of generating ideas) (Pang, 2015; Sowden et al., 2015; Tan, 2016). Nonetheless, given the growing list of factors that have been demonstrated to promote creativity in the workplace and the classroom, a more targeted approach to creativity in education would necessarily include looking at how an organizational climate conducive to creativity can be developed.

Organizational Climate

Organizational climate plays a hinge role in the study on the link between creativity and leadership in schools. Before going further into what the literature says about the connection between the two, it is incumbent upon the researcher to define the term in question. Following that, we will look at how climate and creativity are related.

Defining Organizational and School Climate

Organizational climate is a tricky concept. According to the established literature, organizational climate can be generally understood to mean the characteristics of a work environment as perceived by its workers (Hoßbach, 2019). Hoßbach (2019) clarifies that, although the definition of organizational climate varies somewhat from a subjectivist (shared meaning attached to workplace characteristics) versus objectivist (behavioral patterns independent of individual perceptions) point of view, both approaches measure climate by agglomerating individual perceptions (see also, Ekvall, 1987). Turning specifically to school climate, Sergiovanni and Starratt (2002) summarize school climate as the "enduring characteristics that define the psychological makeup of a particular school" (p. 82). They go on to state that school climate is the collective "sum of teacher perceptions of the interpersonal life of the school as the faculty lives and works together" (Sergiovanni & Starratt, 2002, p. 316).

Climate and Creativity

The growing body of research on creativity points unambiguously towards the environment as a critical element in fostering creativity (Brundrett, 2004; Davies, 2013; de Souza Fleith, 2000; Hondzel & Gulliksen, 2015; Hong et al., 2014; Hunter et al., 2015; McCoy & Evans, 2002; Pang, 2015; Tan, 2016). For example, a study by Hondzel and Gulliksen (2015) conducted creativity tests on 8-year-olds from Norwegian and Canadian communities. They found that the size of the community itself has an effect on the level of creativity in children, and concluded that social environments have a strong influence on childhood creative development (Hondzel & Gulliksen, 2015).

Similarly, a German study exploring individual variations in creativity found that such differences are predominantly due to environmental factors, even when factoring for random and statistical error and variance in scores (Kandler et al., 2016).

Climate Factors That Foster Creativity

But what are the characteristics of the organizational climate that promotes or fosters creative thinking? A meta-analysis study by Hunter et al. (2007) identified specific climate dimensions, including autonomy and collaborative support, as strong predictors of creative output performance. Another study involving a series of interviews with seven Connecticut public school teachers and 31 grade 4 students found that classroom creativity was enhanced when the classroom climate provided a secure sense of acceptance of different ideas, boosted self-confidence, provided learners with semi-autonomy (ability to make choices for themselves), and catered to their strengths and interests (de Souza Fleith, 2000). Similarly, Hong et al. (2014) conducted a study involving 30 college students that examined the effect of a collaborative learning environment on the knowledge-building

process. They found that the perception of a progressively creative learning environment increased with increased collaboration between learners (Hong et al., 2014).

Following same thematic findings of collaboration and engagement, another case study of a primary school in England looking into the role organizational structures play in promoting creativity in schools, found that creativity is facilitated by a combination of factors, including delegation of work, collaboration among learners, and individual activity (Brundrett, 2004).

Craft's seminal research on creativity echoes many of these studies' argument for the effect of organizational climate (Craft, 2003, 2005). Essential to the creative process is the encouragement and support provided for new ideas, for taking initiatives to explore new and relevant information, and that the climate engender high tolerance for risk-taking and uncertainty, from both learners and teachers (Craft, 2003). The capacity to interact with others without due hindrance is also a key element to the generation of a creative learning environment (Craft, 2003, 2005).

Davies et al. (2013) more recent systematic literature review continues the trend of findings that stress the importance of the climate for creativity. Looking at 210 studies found strong weight for the following elements of the environment in promoting creativity, both for children and young adults: flexible use of space and time, availability of appropriate material, access to the outdoors, learner autonomy and a margin of playfulness, opportunities for peer collaboration, collaboration and interaction with external agencies, a firm and fluid awareness of learners' strengths and needs, and the necessity of non-prescriptive planning (Davies et al., 2013).

It seems that even the physical detail of the surrounding environment influences creative output. A commonly cited study by McCoy and Evans (2002) identified 5 characteristics of the environment that improved creative output, which included visual complexity of surrounding details, ability to see natural surroundings, and use of natural materials.

Research into climate factors that foster and positively influence creativity seem to converge on some common themes. In summary, these include: intrinsic motivation (Amabile, 1983; Amabile et al., 1996; Craft, 2001; Goor & Rapaport, 1977; Patrick, 1956), engagement with the problem (Amabile & Pillemer, 2012; Craft, 2001; Haigh, 2007; Hong et al., 2014; McCarley et al., 2016; Patrick, 1956; Van Harpen & Sriraman, 2013), collaborative or participatory learning (Davies et al., 2013; Hong et al., 2014), tolerance for risk-taking/looseness of structure (Charyton et al., 2013; Craft, 2001; Davies et al., 2013; de Souza Fleith, 2000; Shalley & Gilson, 2014; Sternberg, 2005), openness (Amabile 1983, 1996; Amabile & Pillemer, 2012; Benedek et al., 2016; Davies et al., 2013; Kandler et al., 2016), autonomy (Csikszentmihalyi, 1997; Davies et al., 2013; Hunter et al., 2007; Kandler et al., 2016; Shalley & Gilson, 2004), the physical or visual surroundings (Davies et al., 2013; McCoy & Evans, 2002), provision of resources (Abinun, 1984; Craft, 2001; Herrera, 2010; Mayfield, 2009; Patrick, 1956; Runco, 2004), feeling challenged/complexity of problem (Amabile & Pillemer, 2012; Blamires & Peterson, 2014; Craft, 2001; Ferizovic, 2015; Patrick, 1956; Runco, 2004; Shalley & Gilson, 2004), and provision of adequate time (Patrick, 1956; Shalley & Gilson, 2004).

Climate Factors That Hinder Creativity

Creativity can be hindered in as many ways as it can be fostered. Some of the most common hindering factors that recur in the literature include having an overloaded curriculum, placing emphasis on high-stakes exams, having low tolerance for risk, having an overly rigidly structured and controlled work environment, an abundance of choice, and extrinsic motivation.

If an open, tolerant, and supportive climate has a strong positive correlation with creativity, it can be assumed that an oppressive environment would have the opposite effect. But how can the climate hinder creativity? One form in which an oppressive environment can be manifested is through the nature of the school curriculum. Ahmadi and Besançon (2017), in a study aimed at exploring creativity as a means of developing other school competencies, noted that an overloaded curriculum is a strong hindrance on the development of creative thinking.

Besides dense curricula, a heavy emphasis on high-stakes exams has an inhibitory effect on creativity in the classroom (Sternberg, 2015; Sternberg & Lubart, 1991; Wong-Kam, 2012). Limits to creativity in education is embedded not just in the way the curriculum is organized, but also in conflicts of policy and practice that arise from centrally-controlled pedagogy (Craft, 2003; Sternberg, 2015). An inhibitory environment for creativity is encapsulated in low tolerance for ideas and risk-taking, excessive structural controls and overly controlling teachers (de Souza Fleith, 2000; Sternberg, 2015; Sternberg & Lubart, 1991). In essence, traditional conceptions of academic success have a negative correlation with innovative and creative thinking (Sternberg, 2015; Wong-Kam, 2012).

On the other hand, an abundance of choice and resources can also play an inhibitory role on creative output (Csikszentmihalyi, 1997). While Amabile's Componential Theory

of Creativity stresses the importance of motivation, it differentiates between intrinsic and extrinsic motivation, the latter having an inhibitory effect on creativity (Amabile, 1983; Amabile et al., 1996). Intrinsic motivation is defined as motivation that is generated out of interest in the activity, while extrinsic motivation is generated through pressure or a rewards system (Amabile, 1983; Amabile et al., 1996). In conclusion, there seems to be a need for a delicate balance of a supportive, resourceful framework that stimulates creative pursuit from within the individual, that doesn't stifle creative thought with its overly rigid structure, while at the same time preventing the abundance of a loose-jointed organization from dissipating the concerted effort needed for creative production to ensue.

The Role of Leadership

Educational research has been delving into the organization and leadership of schools for decades (Hallinger & Heck, 1996; Heck & Hallinger, 2005; Leithwood & Duke, 1999; Owens, 1998). Heck and Hallinger, veteran researchers in the field of educational leadership, have long touted the importance of the role of leadership in school effectiveness (Hallinger & Heck, 1996). They stress the mediating effect the principal plays on internal school processes, such as school policies, the establishment of certain norms, teacher practice and instructional leadership, as fundamental to shaping the culture and climate of the school (Hallinger & Heck, 1996; Heck & Hallinger, 1999). Their prediction in 1996 that the greatest progress in the field "will yield from research that places the principal in the context of the school and its environment" (p. 34) now seems like a prophecy of the research into educational leadership that has followed (Heck & Hallinger, 1996).

The Nature of School Leadership

Educational organizations have come a long way from the top-down, authoritarian style of leadership commonly employed in schools at the turn of the 20th century, but over the past 70 years there has been a large paradigm shift in the conceptual frameworks of social science research (Charmaz, 2014; Firestone & Seashore Louis, 1999; Hallinger & Heck, 1996; Leithwood et al., 2010; Heck & Hallinger, 1999; Hofstede, 1981; Owens, 1998). The nature of school leadership is now seen as embedded within a social fabric of the organization, with the effectiveness of leadership a part of a contextual construct that is fluid and organic (Charmaz, 2014; Firestone & Seashore Louis, 1999; Hallinger & Heck, 1996; Heck & Hallinger, 1999; Hofstede, 1981; Karami-Akkary, 2014).

School Leadership and School Climate

Owens (1998) states that "any concept of leadership deals with exercising influence on others through social interaction" (p. 200). As such, the method of practice of leadership has a ripple effect on its surroundings. Many studies have looked into how leadership effects climate of an organization, the preponderance of which continue to find that leadership that practices collaboration, semi-autonomy of workers, distribution of power, transparency and open communication yield the most effective outcomes from organizations (Alanezi, 2016; Dutta & Sahney, 2016; Firestone & Seashore Louis, 1999; Heck & Hallinger, 1999; Karami-Akkary, 2014; Leithwood, et al., 2010; Martin, 2009; Moolenaar et al., 2010; Robinson et al., 2008). Education is a complex social interaction, and learning occurs both individually and as part of the social network that is situated in a particular culture and climate (Charmaz, 2014; Creswell, 2003; Firestone & Seashore Louis, 1999; Heck & Hallinger, 1999; Hofstede, 1980; Leithwood & Duke, 1999; Merriam, 2009; Owens, 1998). Methods and attributes of leadership, theories of learning, and the role

of climate and culture color and contextualize this complex learning behavior (Charmaz, 2014; Heck & Hallinger, 2005; Heck & Hallinger, 1999; Hofstede, 1980; Leithwood & Duke, 1999; Owens, 1998). The identification of an effective leader is seen as one that is dynamic, authoritative (but not authoritarian), adaptable, communicable, and sensitive to the contextual nature of the problems and challenges posed by the environment (Hallinger & Heck, 1996; Martin, 2009; Moolenaar et al., 2010; Robinson et al., 2008). Transformative, collaborative leaderships most commonly demonstrate these necessary qualities for effective organizations and schools (Heck & Hallinger, 1999; Martin, 2009; McCarley et al., 2016; Moolenaar et al., 2010; Robinson et al., 2008).

Leadership influences the workplace indirectly, through the climate that it nurtures. For example, Dutta and Sahney (2016) state that leadership behavior does not have a direct association with teacher job satisfaction, but rather indirectly through the supportive school climate that they foster. Herrera (2010) noted that the availability of resources is one of two key predictors of school success (the other being culture) as perceived by teachers, and an indirect element of a leader's influence in school. Evidence of the impactful effect of leadership behavior on organizational behavior are plentiful. Leadership behaviors such as role clarity, goal-orientedness, and supportiveness are shown to be positively correlated with organizational commitment (Hulpia et al., 2011). Another study, combining some elements of each of the aforementioned studies above, noted that the perception of an effective school leadership has a positive impact on student achievement (Nichols & Nichols, 2009). A meta study by McCarley et al. (2016) corroborates the correlation between a supportive and engaged school climate with the engaged form of transformative style of leadership behavior. Finally, Blase and Blase (2000) identify two key ways that

leadership influences school climate: by promoting professional growth and encourage self-reflection among teachers.

Role of Leadership in Fostering or Hindering Creativity

In the words of Hemlin et al., (2013), "Leadership is…seldom studied in the academic literature as a creativity driver" (p. i). Despite there being a dearth of research on the topic, the available literature on leadership and creativity have seconded the studies on the importance of climate to creativity (Brundrett, 2004; Hallinger & Heck, 1996; Hemlin et al., 2013; Moolenaar et al., 2010; Shalley & Gilson, 2004; Wong-Kam, 2012). For example, Hemlin et al. (2013), speaking about creativity and leadership in science, state that one of two features of leadership should include the ability to "create, support and encourage…creative knowledge environments" (p. i) In another quantitative study on leadership styles and creativity involving 702 teachers and 5 principals, transformational leadership was found to have a positive correlation with innovative school climate (Moolenaar et al., 2010). Brundrett's (2004) study on organizational elements that contribute to a creative environment concluded that the role of the school principal, especially in portraying a genuine commitment to innovative practices, strongly influenced the development of an innovative climate in the schools.

One of the ways to do this is by enabling individuals to take the lead in organizing, planning, and implementing activities, which has a stimulating effect on creative processes (Brundrett, 2004; Shalley & Gilson, 2004). Sternberg (2005) forcefully iterates that people, and leaders, decide to be creative, by taking sensible risks, tolerating ambiguity, and putting in the effort to redefining problems. Allen's (2016) case study of one principal that chose to foster creativity in her school echoes Sternberg's views on creativity and leadership. Wong-

Kam (2012) stresses the need for school structure, school culture, and school leadership to be aligned coherently for creativity and innovation. Moreover, creativity can be argued as an essential element of effective leadership in general (Goertz, 2000). Goertz's (2000) study on effective leadership through self-reported traits of school leaders identified characteristics of creativity as indicators of effective leadership, including passion for work, goal setting, originality, flexibility, broad interests, and motivation.

Leadership and Creativity from the Business Literature

Models of how leadership practices influence creativity in education are few, but in the business world they are plenty. Mayfield and Mayfield (2008), citing Madjar et al. (2002) and Nonaka (1990), state that an organization necessarily depends on embracing creativity at all performance levels for its competitive survival. Their model for how leaders can nurture what they call "garden variety creativity," or what is more traditionally called small-c creativity, list behaviors and practices that include goal setting, providing feedback, coaching, allocating resources, and generally motivating employees toward creative thinking. Shalley and Gilson (2014), in their review of social and contextual factors that foster and hinder creativity, regurgitate many familiar themes now, including: for the individual leader, broad interests, autonomy, self-identifying as creative, and building a necessary skill set for creativity; for employees, autonomy of work, complexity of duties, and challenging but not demotivating problems; and for the organization as a whole, a tolerance for ambiguity and support for taking risks. Finally, they stress that if leaders desire creativity from their organization, it is incumbent upon them to communicate these desires clearly and unambiguously (Shalley & Gilson, 2014).

Allen's Study on Attributes of Leadership that Foster a Creative Climate

This research draws on a study conducted by Allen (2016) as a doctoral dissertation on the role of the principal in fostering a creative climate. As a single-case mixed methods study, it examines how one principal actively sought to foster a creative climate in school (Allen, 2016). Allen rightly acknowledges that there have been very few studies directly examining the role of the principal in school creativity (Allen, 2016). The findings of the study revealed that the principal sought to cultivate a creative climate by projecting a holistic set of attributes that help foster feelings of respect, support, and empowerment from teachers (Allen, 2016). The holistic set of principal attributes were broken down into 3 categories (grouped under the following titles: Personal, Core Educational Beliefs, and School Vision) (Allen, 2016). Themes grouped under "Personal Attributes" included Personal Experiences" (described as life, teaching, and administrative experience), "Whole Child Emphasis", and "Attitudes and Outlooks" (openness, transparency, risk-taking) (Allen, 2016). Themes grouped under "Core Educational Beliefs" include 3 major themes: placing importance on creativity, placing importance on people, and placing importance on growth; and 3 minor themes: "Exposure to New Ideas Sparks Creativity", "Teachers as Leaders", and a statement made by the principal that can be summed as "Growth Necessitates Creativity" (Allen, 2016). The third attribute of "School Vision" extends from the combination of the first two, and includes having "Common Expectations for All", and "Being Goal Oriented" (including structuring the school to meet its demands) (Allen, 2016).

Allen's creativity-minded principal emphasized the importance of sharing personal experiences, focusing on the "whole child" through projection of attitudes and outlooks, communicating the importance of creativity unambiguously, as well valuing people and the

importance of growth and progress, and reflecting on a sense of organization and vision through demonstration of goal-oriented behavior and equality of expectations from others (Allen, 2016). Allen's study is enlightening as a case study of how a single principal determined to create a specific type of climate in a school, but stressed that there remained several avenues to pursue following the findings, including more case studies to better refine the themes and attributes, as well as conducting studies that look into how school leaders inspire creative confidence, or the belief in the ability to create a new reality (Allen, 2016). Allen's findings strongly inform the research questions and methodology of this study.

The Context of this Study: The Nature of School Leadership and Creativity in Lebanon

Progress in research on educational leadership has slowly begun to take form in corners of the world where the light of academic progress was dimmed for decades. One such place is Lebanon, a country that was wracked by a devastating 15-year civil and regional war and which has been undergoing a dizzyingly rapid pace of structural, economic and social reconstruction. Researchers in education in Lebanon have begun to examine the nature of school leadership there, and preliminary findings point to looking at the cultural context for understanding the diverse state of education in the country. Though there is evidence that transformational leadership is being practiced, there is also a great deal of commonality in the vision of a school leader as embedded in the traditionalist, authoritarian view of the position (Karami-Akkary, 2014; Mattar, 2016). The role of the principalship in Lebanon, based on preliminary studies of the past 5 or 6 years, has found that the organizational leadership in schools suffers from many of the social ailments of

nepotism, favoritism and corruption that are rife within governmental organizations, ministries, universities and big businesses across the country (Karami-Akkary, 2014). These findings are to be taken with a certain degree of caution, primarily because there are not many studies on modern educational leadership in Lebanon compared with other nations. And within the context of this research paper, there were no studies found that looked at the state of creativity in Lebanese schools.

Conceptual Framework

Allen's (2016) study on the role principals play in fostering a climate conducive for creativity is situated on a conceptual framework that is assembled from the defining elements of three disparate but related models: Pitner's (1988) Mediated Effects with Antecedent Effects model of leadership (as adapted from Hallinger & Heck, 1996), Amabile's (1997) Componential Theory on Organizational Creativity, and Mayfield and Mayfield's (2008) key leadership attributes for promoting what they call 'garden variety' creativity (Allen, 2016). Pitner's Mediated Effects with Antecedent Effects model basically situates the role of the principal as having an indirect effect on student outcomes that is "influenced by internal processes (past experiences, beliefs), and external factors such as training, organizational structure and environmental variables" (Heck & Hallinger, 1996, p. 28), an observation well-supported in the literature (Dutta & Sahney, 2016; Hallinger & Heck, 1996; Heck & Hallinger, 1999; Herrera, 2010). Amabile's Componential Theory of Creativity was designed to shed light on how the climate or environment affects creativity, and is the basis for the creativity survey called KEYS, designed to explore the link between creativity and the environment as perceived by employees (Allen, 2016; Amabile, 1997).

Finally, in order to help identify or guide the study's findings, Mayfield and Mayfield's (2008) study framing of leadership behaviors that promote creativity was considered.

Combined together, the conceptual framework is one that rests on the fundamental concepts that leadership has an indirect influence through work climate, that leadership that promotes creativity can be ascribed to specific behaviors (such as motivation, goal setting, feedback, coaching, and securing needed resources), and that these behaviors can be perceived by employees. For this reason, this study leans on the pillars of Allen's (2016) conceptual lens, with the exception of a slight expansion, modification, and adaptation of the survey instrument used, as will be explained in the methodology chapter to follow. Moreover, this study leans heavily on a constructivist-interpretivist paradigm that uses the methods of the grounded theory approach to knowledge-building.

CHAPTER III

METHODOLOGY

Introduction

The type of school leadership exercised in a school plays a powerful role in shaping a school's climate (Martin, 2009; Robinson et al., 2008; Sergiovanni & Starratt, 2002). Fostering creativity in the classroom has been repeatedly demonstrated to be strongly correlated with school climate and the surrounding environment (Allen, 2016; Beghetto & Kaufman, 2014; Craft, 2003; Freund & Holling, 2008; Runco, 2004). In order to explore and develop a deeper understanding about what and how attributes of school leadership contribute to creativity in schools, a closer look at the school climate is needed. The previous chapter shows the potential link between three elements: school leadership, school climate, and creativity. The gap that the educational research literature continues to struggle with is what attributes of a school leader promote or hinder a climate conducive to creativity look like, as perceived by teachers and school leaders.

Organizational climate is a perceived set of properties about one's work environment (Sergiovanni & Starratt, 2002). It is considered a significant indicator of the creativity of a school as perceived by its members, be they teachers or learners. Exploring leadership attributes that foster a climate conducive to creativity can begin with exploring in depth the perception of key players at the school level on the role of leadership in a climate that supports or hinders the development of creativity. This exploration will be done against the backdrop of an exploration of the school climate. Specifically, the exploration includes determining the schools' climate as it pertains to creativity.

Research Design

The following section outlines the research design as it pertains to collecting and analyzing data in order to answer the research questions guided by the conceptual framework of the study. The study used a qualitative case study research design to examine the conception of creativity, organizational context, and attributes of leadership that foster or hinder a climate conducive to creativity, as perceived by teachers and school leaders.

Study Design

The study used a qualitative case study research design to examine the conception of creativity, organizational context, and attributes of leadership that foster or hinder a climate conducive to creativity, as perceived by teachers and school leaders.

The qualitative case study design is used to explore what attributes of leadership contribute to crafting a climate conducive or inhibitive to creativity. It also delved into how these attributes foster or hinder creativity. The study aimed to understand what it looks like to promote a creative climate as a school leader, as well as what it looks like to hinder a creative climate as a school leader (regardless of whether the leader is actively or inadvertently hindering).

The two-case-study approach examined the underlying factors that promote creativity in a school through the mediating role of leadership. The case study approach was appropriate here because the uniqueness of the two sister schools had the potential to provide a great deal of information on the phenomenon (Merriam, 2009). This was done by conducting open-ended, semi-structured interviews, in English, with the two schools' respective principals, as well as two focus groups, one from each school, with a representative group of four teachers each.

The research questions aim at delving into a deeper understanding of how the principal or school leader behaves to generate a certain outcome, whether it is as perceived by the leader, or as perceived by the teachers embedded within that climate (which is the outcome). As Allen (2016) put it, it is about shedding light on underlying "processes and mindsets" (p. 52). For this reason, the "unit of analysis" as per Merriam's (2009) explanation of case studies, is bounded to the role of the school leader. This is further justified by the precedent study of Allen (2016), which focuses on the methods and behaviors of the principal as framed within the conceptual lens of Amabile's (1983) Componential Theory of Creativity and Pitner's (1988) Mediated Effects with Antecedent Effects model of leadership (described earlier in chapter 2).

Case studies can employ six types of data collection methods: (1) documents, (2) archival records, (3) interviews, (4) direct observations, (5) participant observations, and (6) physical artifacts (Yin, 2014). In this study, three types of case study data were utilized: interviews, participant observations, and direct observation, as available from the researcher's own reflections from the lived experience with the School Network.

The qualitative approach that was adopted in this study subscribed to an interpretivist-constructivist research paradigm, a two-case study design following grounded theory methodology that allows for closing the gap between theory (social systems theory, education) and practice (organizational management, leadership in practice) by situating knowledge-building within the subject's internal and environmental context (Charmaz, 2014; Creswell, 2003). In order to explore the nature of the relationship between leadership, climate, and creativity, there was a need to situate the schools with respect to their school climate as it pertains to creativity. A survey was conducted in the two

participating schools to gauge the overall characteristics of their climate with respect to creativity. Selection of participants involved convenience sampling by locating the schools within easy geographic distance inside the greater Beirut region. The two participants schools formerly belonged to a School Network in which the researcher was employed, which granted him easy access that would have been impossible under the circumstances of local and regional unrest, and the global pandemic. The findings of the survey were used to inform the qualitative data analysis.

The research questions that guided the study are listed once more as follows:

1. What are teachers' and principals' conception of the following:
    a. Creativity and its manifestation in the classroom as enacted by both students and teachers?
    b. A climate conducive to creativity in the classroom?
2. What organizational arrangements are needed to facilitate the enactment of a climate conducive to creativity as perceived by principals and teachers?
3. What attributes and practices of school leadership promote or hinder a climate conducive to creativity as perceived by principals and teachers?
4. How do attributes and practices of school leadership promote or hinder a climate conducive to creativity as perceived by principals and teachers?

The objectives of the creative climate survey are as follows:

1. to situate each participant school within a creative climate spectrum
2. To inform the qualitative study, where appropriate, about certain parameters or measures of the school climate that are reflected in the teachers' and principals' answers.

The objective of the qualitative study are as follows:

1. to identify common attributes of leadership that promote or hinder a school climate conducive to creativity as perceived by teachers and school leaders
2. to understand how these attributes promote or hinder a climate conducive to creativity.

Procedures for Selection of Participants

The following is a description of the process followed for the selection of the participating schools.

Case Selection

Sampling of the schools was limited to the greater Beirut region. Convenience sampling was used due to the proximity and accessibility of the two participant schools.

Two schools from the Greater Beirut region were approached for the study. The schools were former members of a broader School Network, and the researcher works as a coordinator with one of them. Both schools were approached with telephone calls to the reception followed by a series of emails with the school principals.

The schools were selected based on similarity of size (medium size, defined as approximately 1000 students per school), containing K-12 range, primarily English language focused, privately run, and utilizing the same Lebanese baccalaureate curriculum. The reasons for this are as follows: generally large schools (for Lebanon) have a broader range of teachers and teaching techniques; their curriculum is more contiguous when it includes K-12 range of grades (especially when incorporating the National Lebanese Curriculum); it is easier to get a general sense of the climate of a school when there are a larger number of participating teachers in the survey; privately-owned schools are generally

better funded, and hence, funding and resources is less of an issue in promoting creativity; and Beirut-based English-language private schools that employ the same Lebanese baccalaureate system, reduces the number of variables that could skew findings about creativity.

The researcher surveyed two schools using the modified KEYS survey on organizational climate and creativity. The survey aims to collect data that can help identify a spectrum of organizational climates within the selection pool, from school climates highly conducive to creativity to those that are highly inhibitive.

Participants' Selection

The principals from the two schools were approached for an in-depth interview. The structure of the interview questions were aimed at delving deep into how leaders promote or hinder a climate conducive to creativity (see Appendix B). Both principals were eager to participate in the interview for the study.

Teachers from the two schools were invited to participate in a focus group session. The sessions lasted approximately one hour, and the questions delved into the teachers perception of leadership attributes, school climate, the conception of creativity and a climate conducive to creativity, as well as organizational arrangements (see Appendix C). The focus groups were comprised of four representative teachers for each school.

Data Collection Procedures

The following matrix shows which data collection method was used to tackle each research question.

Table 1

Data Collection Methods Targeting Each Research Question

Research Question	Data Collection Method
1. What are teachers' and school leaders' conception of the following: ▪ Creativity and its manifestation in the classroom as enacted by both students and teachers? ▪ a climate conducive to creativity in the classroom ?	• KEYS climate survey • In-depth interview with principals • Teacher focus groups • Researcher's personal reflections
2. What organizational arrangements are needed to facilitate the enactment of a climate conducive to creativity as perceived by teachers and principals?	• KEYS creative climate survey • In-depth interview with principals • Teacher focus groups • Researcher's personal reflections
3. What attributes of school leadership promote or hinder a learning environment conducive to creativity as perceived by principals and teachers?	• KEYS creative climate survey • In-depth interview with principals • Teacher focus groups • Researcher's personal reflections
4. How do attributes and practices of school leadership promote or hinder a climate conducive to creativity as perceived by principals and teachers?	• In-depth interview with principals • Focus groups • Researcher's personal reflections

KEYS Creative Climate Survey

Assessing the creative climate of the school utilized an organizational climate survey. The KEYS to Creativity and Innovation is an organizational survey first created by Amabile (1983, 1997) for assessment of management practices that impact creativity. Its main purpose is to identify factors that foster or inhibit creativity in the work environment, as perceived by staff (Allen, 2016; CCL, ccl.org). It consists of 78 items across 10 dimensions and outcomes, which are themselves categorized into 4 groups: Management Practices, Organizational Motivation, Resources, and Outcomes. The items are rated on a four-point scale (never or almost never, sometimes, often, always or almost always).

Table 2

Categories and Dimensions of the KEYS Survey

Categories and Dimensions of the KEYS Survey

	Categories	**Dimensions**
Work Environment	Management Practices	Freedom (4 items)
		Challenging Work (5 items)
		Managerial Encouragement (11 items)
		Work Group Supports (8 items)
	Organizational Motivation	Organizational Encouragement (15 items)
		Lack of Organizational Impediments (12 items)

	Resources	Sufficient Resources (6 items) Realistic Workload Pressures (5 items)
Outcomes	Outcomes	Creativity (6 items) Productivity (6 items)

The KEYS survey is an established assessment tool for measuring how employees perceive the promotion or hindrance of creativity of their work environment (Allen, 2016; Ferizovic, 2015; Mathisen & Einarsen, 2004). It was designed through the work of Amabile (1983, 1997) and frequently modified and updated, and is considered to carry a high degree of validity and reliability for its intended purpose (Allen, 2016; Ferizovic, 2015; Mathisen & Einarsen, 2004). Amabile et al. (1996) have studied the survey's internal reliability and found that they range between .66 and .91, depending on category, with similar conclusions following a three-month test-retest assessment. Amabile et al. (1996) also conducted three-phase validity tests to assess whether the survey distinguishes between environments with high and low creativity. The first phase asked participants to rate two recently completed projects as high or low creativity, after which they completed the KEYS survey for each specific project; the second phase utilized external experts to rate the creativity of the projects without knowing the ratings of the first group; the third phase used a different set of participants, also blind to the purpose of the study, to fill out the KEYS questionnaire regarding the same projects (Amabile et al., 1996). The results of the first phase demonstrated that the high and low creativity projects drew big differences in the survey rating. The second, expert phase echoed similar results about the projects designated as

highly creative or not highly creative by the first phase, though interrater reliability (how much homogeneity exists among the raters) was average at .58. The third phase also resulted in the same two projects getting categorized as high or low creativity from phase one, but none as sharply contrasted as the first phase participants. According to numerous researchers over the years, the KEYS survey is generally considered to be a thorough, valid and reliable instrument (Allen, 2016; Amabile et al., 1996; Ferizovic, 2015; Mathiesen & Einarsen, 2004).

Since the survey was initially designed for business workplaces, the language of the survey questions was modified to cater to a schoolwork environment (See Appendix A). Furthermore, not all the questions and items were necessarily relevant for the purpose of this study, and were shed from the final questionnaire (see Appendix A). The reason for this was to make the survey less cumbersome, especially given the amount of surveys required of teachers by their schools throughout the year. Questions for the survey were then skimmed, with the result being questions that target the key specifics that are already understood to be factors and attributes of leadership and the climate related to creativity. For example, the section on lack of organizational impediments was removed due to its repetitive statements of the previous section, organizational encouragement. Also, several questions from within each dimension were removed where they were deemed to be peripheral (for example, the budget for my project is adequate; My principal serves as a good work model) or repetitive/redundant (e.g.: the tasks in my work are challenging; I feel challenged by the work I am doing). The result is a lean and attractive, easy-to-fill survey that strikes at the heart of the matter (see Table 2, and Appendix A). Both Allen (2016) and Ferizovic (2015) have adapted the KEYS survey language for a similar purpose with no

negative affect on the reliability and validity of the results. Permission to use and modify the survey items was sought and granted by the Dr. Teresa Amabile and the Center for Creative Leadership.

The final survey consisted of 35 questions, with an introductory set of demographic questions (Appendix A). The demographic questions aim to contextualize interesting discrepancies that arise following collection and analysis, but are not the primary focus of the study.

Table 3

Categories and Dimensions of the Adapted KEYS Survey

	Categories	**Dimensions**
Work Environment	Management Practices	Freedom (2 items)
		Challenging Work (3 items)
		Managerial Encouragement (7 items)
	Organizational Motivation	Organizational Encouragement (7 items)
		Lack of School Impediments (7 items)
	Resources	Sufficient Resources (1 item)
		Realistic Workload Pressure (5 items)
Outcomes	Outcomes	Creativity (3 items)

These measures of shrinking and adapting the KEYS survey are not without precedent; both Ferizovic (2015) and Allen (2016) have adapted the KEYS survey appropriately for their respective dissertations.

The use of the survey as a source of data was helpful in providing context to interpret the interview data while answering certain aspects of the research questions that were revisited to get a general school-wide perspective. For example, the survey is helpful

in getting a general idea of whether the teachers perceive their school as being creative. It is helpful in determining the sense of workload pressure, freedom, and organizational and managerial support. Since the survey itself is not designed to answer the research questions of the study, especially questions of leadership attributes, or how participants conceive of phenomena that does not necessarily exist in their environment, the findings from the survey are limited to supplement the interview data.

In-depth Interviews with Principals

The questions selected as a guide for the interviews are based on Allen's (2016) interview question guide, and further informed by Charmaz's (2014) protocol for leading with broad questions and delving deeper with probes (see Appendix B). They are semi-structured, aimed at beginning with a broad understanding of the role of the principal, the principal's conception of climate, the principal's understanding of creativity and its importance or value to education, and how the principal behaves to promote creativity in their school. With consent from the principals, the interviews will be recorded for later transcription.

Focus Group Interviews

Focus groups are a good way to uncover information about a topic that is usually not often discussed (Merriam, 2009). While individual interviews are helpful in getting a private, internalized perspective on a topic, focus groups provide an opportunity for participants to activate and build on each other's ideas (Merriam, 2009). This makes it ideal for gathering as much information as possible within a shorter time frame.

The questions guiding the focus group interviews are also based on Allen's (2016) focus group guide, as well as Charmaz's (2016) and Merriam's (2009) suggestions for how to

structure and lead focus group interviews (See Appendix C). As with the principal interview, the focus group interviews involved semi-structured questions. These questions began by exploring what teachers understand about creativity and a creative climate, how their climate is shaped (what forces shape the climate of the school), and guiding the discussion to how the principal's behavior promotes or hinders a climate conducive to creativity. With consent from all participants, the interviews were recorded for later transcription.

Data Analysis

Analysis of the survey data were kept minimal to simple statistical averages. Data analysis of the transcribed interviews and focus group sessions involved qualitative techniques as outlined in Charmaz (2014) and Merriam (2009).

Statistical Analysis

Mean scores of each of the sections of the modified KEYS Survey were computed using SPSS. The KEYS survey uses a 4-point Likert scale (never or almost never, sometimes, often, always or almost always) that falls within the standard range for surveys. The resulting chart of mean scores for each section of the survey was used to inform a general idea of how the two schools compared.

Qualitative Analysis

Data analysis of the interviews and focus groups employed grounded theory methods drawing from a constructivist-interpretivist paradigm of social research (Charmaz, 2014; Merriam, 2009). It is the researcher's belief that schools as social organizations grow and change in an organic fashion best studied as processes of open systems, and as such, require an interpretivist approach to extract meaning from how those processes change

(Charmaz, 2014). In this study, the process of fostering a climate conducive to creativity through attributes derived from leadership practices would likely vary from one organization to another, possibly even from one area of an organization to another. Even the same organization's climate might behave or react differently to identical factors given a certain lapse of time. How these changes arise necessitates an interpretivist approach.

This study is focused on understanding the role of the principal in creating a creative school climate. In order to triangulate a more holistic understanding of the principal's perspective, a combination of data collected from interviews with the principal and with teachers (through focus groups) compared with the researcher's lived perspective helped to provide interpretations and to structure to the narrative and reliability of the gathered data. Analysis of the data was done by careful and thorough review of the transcript notes of the interviews, with the identification of key codes gathered and categorized into common themes further grouped into attributes of leadership as concerning climate and creativity (Charmaz, 2014). Data analysis employed the constant comparative method ; in order to understand how leadership attributes and practices effect a creative climate, the literature states that information gathering about this reality must begin from the ground up (Charmaz, 2014).

Initial coding aimed to gather fragments of sentences or key words from transcripts; focused coding will start grouping initial codes together (Charmaz, 2014). For each school, the initial round of coding following the principal interview informed the next step of the data collection, namely, the focus group sessions. Themes extracted from carefully coded transcripts of the interviews were later be examined against attributes identified from

Allen's (2016) study as well as practices and leadership behaviors from the literature regarding the fostering or hindering of a climate conducive to creativity.

All analyses of transcripts, themes, and data involved memo-writing and reflection as recommended by the common literature on qualitative and grounded theory research (Charmaz, 2014; Merriam, 2009). Table 4 is a tentative summary for data analysis procedures of the research questions.

Table 4

Data Analysis Methods for Each Research Question

Research Question	Data Analysis Method
1. What are teachers' and school leaders' conception of the following: ▪ Creativity and its manifestation in the classroom as enacted by both students and teachers? ▪ a climate conducive to creativity in the classroom ?	• Descriptive statistical analysis • Initial coding • Refined coding to extract themes • Memo writing • Comparison with data from Member-checking
2. What organizational arrangements are needed to facilitate the enactment of a climate conducive to creativity?	• Descriptive statistical analysis • Initial coding • Refined coding to extract themes • Memo writing • Comparing data from Member-checking
3. What attributes of school leadership	• Comparative analysis of findings with

promote or hinder a learning environment conducive to creativity as perceived by principals and teachers?	survey data • Analysis of RQ#1 and RQ#2 to compare themes and identify possible connections or relationships between them to develop categories • Thematic relationships extracted though memo-writing
4. How do the attributes of school leadership foster or hinder a learning environment conducive to creativity as perceived by principals and teachers?	• Analysis of RQ#1, RQ#2, and RQ#3 to compare themes and identify possible connections or relationships between them • Thematic relationships extracted though memo-writing

Ethical Measures

All participants in the study were provided with consent forms that clearly outline the purpose of the research study, the confidentiality of their participation, the time requirements, as well as contact information of the researcher. Audio transcripts remained accessible only to the researcher, and participants' names were withheld and coded throughout the process. School names and affiliations were also withheld.

Measures for Meeting Criteria of Credibility and Trustworthiness

The study aimed for meeting the criteria for credibility and trustworthiness of the results by employing several research methods that are accepted as methods that reinforce trustworthiness of qualitative research. One of these methods is triangulation, which involves gathering data about a phenomenon from several different sources (Merriam, 2009). In order to ensure that the data being collected is a close approximation of reality, the same behavior (for example, that of the principal) is compared from the principal's perspective and the teachers' perspective. For the research questions in this study, this amounts to gathering data through one-on-one interviews, focus groups, and the lived experience of the researcher.

Furthermore, all the proposed steps of the research, including the coding and memo-writing, were conducted in an organized manner, and all research activities were well supervised and approved by the thesis advisor, who regularly reviewed and guided by the selection, completion and interpretation of the KEYS survey with its subsequent basic descriptive analysis, and the analysis of qualitative data.

Limitations of the Study

There were several factors that limited the scope and quality of the findings of this study. This section will address them one by one.

Small Sample Size of Participants

The sample size of the study was limited in several respects. First of all, there were only 2 participating schools in the study. While it is a qualitative case study aimed at exploring a topic untouched in Lebanon and little studied abroad, the sample size is not generalizable to the broader population. The number of participants in the interviews and focus groups was also generally small, with only 4 teachers per focus group and 2

principals, for a total of 10 participants. Findings from a sample size this small can be skewed and underrepresent other members of the school community even within their own schools.

Lack of Diversity

Besides the small sample size, the research setting of the schools themselves cannot be held representative of the local and regional community as a whole. Both schools are private religious schools that are owned and managed under the auspices of the same religious body. Furthermore, both schools presented nearly identical results on the adapted KEYS survey. While this result created an interesting opportunity to investigate similarities and differences between two nearly identical schools, it does not allow to compare findings with a school that holds a lower rating on the KEYS creativity index.

2020 Pandemic-Imposed Limitations

Part of the limitations of including more schools in the study stems from the limitations imposed from the 2020 pandemic. As the study was being done during the Spring of 2020, it's timing coincided with a 3 months hard lockdown of the country that severely limited accessibility to schools and participants in general.

The KEYS Survey

The KEYS survey is one of the best instruments designed to assess creativity in the workplace. Despite being widely used to assess creativity in education, nonetheless, the survey was designed for business environments, and thus does not fit perfectly for assessing teachers' perceptions. There is also the matter of the survey having been modified and truncated for the purposes of the study, in order to make it less cumbersome to participate in, which could also have affected the accuracy of its results.

Chapter Summary

This chapter delved into the methodology proposed for this study. Given the contextual and relational nature of the phenomenon being studied, a qualitative approach is explained and justified in the text, followed by a standard breakdown of the steps of data collection and analysis. Given that the subjects involved are schools in the Beirut region, a general description of sampling and selection, using a convenience sampling technique narrowed the selection to two participant schools. Following that, the chapter describes the method of qualitative data collection (in-depth interviews, focus groups) and the data analysis procedures that followed data collection.

CHAPTER IV

RESEARCH FINDINGS

Introduction

The study explored teachers' and school leaders' perspectives on how leadership mediates school climate for creativity. This was done by examining the teachers' and school leaders' conception of creativity and a climate conducive to creativity, organizational arrangements that facilitate a climate for creativity, and what and how leadership attributes foster or hinder a climate conducive to creativity. This chapter provides a report of the findings as divided into 4 main sections, and an introductory section. The first introductory section describes the history of the schools in order to situate the schools within the context of the School Network to which they belong. The second section delves into the findings regarding conceptions of creativity and its enabling climate (the first research question). The third section looks at the findings as they pertain to teachers' and school leaders' understanding of organizational arrangements that promote creativity (the second research question). The fourth section describes the findings relating to how teachers and school leaders conceive of leadership attributes that promote or hinder a climate conducive to creativity (the third and fourth research questions). The fifth section of the chapter relates the findings from the researcher's perspective as having worked within this School Network for a number of years. Finally, the last section summarizes the results.

Introducing the Two Schools' Macro Context: A Dissolved Educational Network

The story of Schools A and B is riven to the history of a dissolved educational network. Both of these schools have individual and separate histories that fall under a broader religious umbrella. The religious body that guided them spiritually had once fused them administratively, along with two other schools, under one management system, from which they had only recently been unshackled. As such, it is impossible to understand the results of the findings of the two schools without looking at the context of their common management history.

The School Network

For the sake of anonymity, we will call the educational management organization which constituted the broader institutional context shared by both schools, the School Network. The School Network was an ambitious organizational initiative that, at its peak, numbered 5 schools in its ranks. Its broad mission was to unify and professionalize the schools under one management umbrella, and to provide them with a massive set of resources that fell under a variety of divisions and departments. The vision of the School Network was to achieve excellence while sustaining a high level of innovation through professionalizing their education system, empowering educators while providing a muscular support system that enables teachers to fulfill their roles with the maximum amount of resources that it could make available. Such resources included establishing assistive curricular departments such as digital curriculum development, a department of assessment, tests and measures, a comprehensive special education department, a large IT division, and multiple oversight bodies to manage the multitude of departments and divisions within the organization. There was also an active professional learning program that provided the opportunities and resources for continuous professional advancement for

employees. This was supported by a policy mandating a rotation of employees among the schools to expose them to different job demands, hence promoting ongoing opportunities for on the job professional development in various environments. Additionally, academic departments exercised a healthy supervision of instruction, including a formative and summative performance appraisal with regular feedback, meticulous curriculum coordination, classroom observations, and assistance with preparation of assessment and planning. Within the Network, the division heads were granted a great deal of autonomy to exercise within their respective divisions. The principal ran the school through structural arrangements intended to allow for participative decision making whereby multiple middle management heads provided their input to the principal and the head of the network through the participation in several boards and oversight bodies (e.g. academic board, faculty board, executive board, budget committee). While the School Network had a power structure with a good deal of delegation of authority along specialization within the Network's departments and divisions, power remained firmly established at its executive apex, the director of the Network. According to Hall (in Hoy and Miskel, 2008), it would be labeled a Weberian bureaucracy with pockets of professionalism; to Hoy and Sweetland (2001) it has many of the characteristics of a learning organization that could be generally described as mindful and enabling.

The School Network was founded sometime around 2004 and dissolved around 2018. The reason for its dissolution remains publicly unknown, a decision taken at the top beyond the executive director of the network, with no internal consultations, similar to the decisions taken by the religious body that had formed the network in the first place.

The two schools in this case study have emerged two years after the dissolution as independent educational institutions, with employees, many of which have been trained and socialized within this School Network, and some of which, due to the Network's policy of rotating staff positions, have undoubtedly worked in both schools. Perhaps just as important, the organizational structure of the schools remains mostly identical to the original School Network organizational structure as a whole, albeit operating on a smaller scale, with the same division of academic departments exercising the same strong instructional supervision approach. Similarly, the educational levels divided between elementary, middle and high school run by heads of divisions maintained a sizable share of decision making authority with those heads acting as de facto principals in their respective divisions. However, many of the centralized supportive resource departments (such as digital curriculum, or Assessment Test and Measures) that existed in the Network are either gone or stripped down to little more than a name. The financial resources, made available for both schools, have also shrunk. Also, delegation of positions has cemented and rotation of staff positions has effectively ceased, and the professional development program has become little more than an HR exercise in self-reflection for performance appraisal.

A Brief Description of Each of the Case Schools

Within this organizational context, let us look briefly at the individual history of each school.

School A. School A is a private school located in the heart of Beirut, Lebanon. It has 174 staff (of which 102 are teachers) and 845 students. It was founded several decades ago, and its management is overseen by a religious body in the city. At the turn of the twenty-first century, School A became a member, along with two other schools, of the

School Network, and remained so until the Network was dissolved. Since that time, the school has been run by many of the same employees of that time, and maintained its identity as a religious school belonging to the religious body, although catering to all confessions and denominations. Administrative positions in the school are not occupied by religious individuals.

School B. School B is also a private religious school located in Beirut, Lebanon. It has 246 staff (of which 147 are teachers) and 1430 students. The school has founding roots that stretch back to the 19th century. At the turn of the 21st century School B was amalgamated (along with School A) into the School Network. After the School Network was dissolved School B has been run independently, though also remaining under the auspices of its religious body. Just like School A, its intake includes learners from all confessions, and administrative positions are not held by religious individuals.

The majority of employees in the two schools today, whether in management or in teaching, were trained or have gained most of their professional experienced within this professional School Network system. As such, it is through this particular lens, as two schools that have emerged from within the shadow of a larger management body, that this study must maintain as its context.

Conceptions of Creativity and Its Enabling Climate

Prior to determining what attributes of a principal are conducive to creativity, it is essential to ask what are the teachers' and school leaders' conception of creativity, as well as their conception of a climate conducive creativity. From the common standpoint that this provides, we can then examine their perception of the leader's attributes and how they promote or hinder a climate conducive to creativity. It also gives us a reference point prior

to examining how teachers and school leaders perceive the role of the organization as a whole in the crafting of a school climate that promotes creativity. Wherever possible, the results of the adapted KEYS creative climate survey were used to inform the meaning of the results as they may pertain to the schools as a whole.

School Climate Based on the KEYS Creative Climate Survey

According to the results of the modified KEYS climate survey taken by teachers in both schools, the survey scores show that the climate in both schools is relatively conducive to creativity. For example, in the results of the survey domain section titled Creativity, Schools A and B scored 2.88 and 2.90, respectively. These are above average scores, meaning that teachers in both schools perceive their school climate as being conducive to creativity.

Both schools show a climate survey score that is above average, suggesting that the schools have a climate that is generally conducive to creativity. The modified KEYS survey describes a climate conducive to creativity according to parameters defined by Amabile et al. (1996). A climate conducive to creativity, according to the KEYS survey, is one where the teacher has a degree of freedom and autonomy to pursue their work, that the work they are tasked with has a degree of complexity (it is challenging), that management openly encourages new ideas and clearly communicates these expectations, that the organization as a whole has a foundation of open communication and flow of ideas, that the organization as a whole is tolerant to risk taking, that the atmosphere in the school is devoid of negative criticism, that the school management is flexible and open toward change, that resources are provided for creative and innovative proposals, and that teachers in general are exposed to a realistic workload that allows them the room to pursue new ideas if they so choose.

These parameters are broken down and examined under specific domains previously discussed in Methodology, the domains being: Freedom, Challenging Work, Managerial Encouragement, Organizational Motivation, School Impediments, Resources, Workload Pressure, and last, Creativity.

Table 5 includes the results of the survey for each of the survey's domains. The survey provided data that gave additional context to interpret some of the findings of the study. For example, when a participant spoke about the need for freedom in a creative climate, it was useful to cross-reference the results of the survey to see how teachers as a collective perceive freedom as a component of that school climate. Moreover, the survey provided a guide to identify which components of organizational climate was weak or strong in each respective school, and how those weak or strong components compare with the other school. It also allowed us to see that the organizational climate for both schools is remarkably similar with only minor deviations in scores for both schools, for each domain, and an overall total score that was nearly identical. In general, both schools show a high degree of managerial encouragement (encouragement that comes from the school leader), and fairly high organizational motivation with minimal restrictions impeding creativity in the schools. They demonstrate above average access to resources, fairly high workload pressure, an above average range of challenging work (work that is complex and stimulating) resulting in above average scores on creativity. They show an average range of freedom in both schools. Thus, these results helped highlight on the organizational context that provided high degree of support to its employees and reinforced many of the inferences drawn from the interview data. A complete score report of the results that includes each item in the domains is found in Appendix D.

Table 5

Domain and total results of the adapted KEYS climate survey for both schools

Domains	**School A**	**School B**
Freedom	2.53 *(0.74)*	2.43 (*0.70*)
Challenging Work	3.08 *(0.87)*	2.90 *(0.64)*
Managerial Encouragement	3.35 *(0.73)*	3.42 *(0.50)*
Organizational Motivation	2.87 *(0.82)*	3.02 *(0.58)*
School Impediments*	3.06 *(0.74)*	2.99 *(0.64)*
Resources	2.85 *(0.93)*	2.90 *(0.42)*
Workload Pressure*	2.92 *(0.74)*	2.85 *(0.62)*
Creativity	2.90 *(0.82)*	2.88 *(0.62)*
Total Average	**2.94 *(0.80)***	**2.92 *(0.59)***

Note: Domains with an * are reverse scored. Numbers represent mean and standard deviation.

The overall score for each school was calculated as an average of all the domain means. In School A the overall score for the school of 2.92 is above average. The school scored the highest in the category of Managerial Encouragement (3.35) and lowest on Freedom (2.53). Like School A, School B scored the highest in the category of Managerial Encouragement (3.42) and lowest on Freedom (2.43). The overall score for School B was 2.94, an above average creative climate score, and nearly identical to the score for School A.

The Conception of Creativity

Creativity is conceived quite broadly by both teachers and principals.

Following the interviews with the principals and teachers in Schools A and B, their conception of creativity can be grouped under 4 general themes. These themes encompass the teachers' and principals' answers as extracted from the interviews and sheds light on how they understand the concept of creativity. The themes are: freedom and autonomy to create, thinking outside the box, innovative problem solving, and striving to improve student learning. Table 6 summarizes the participants' answers regarding their conception of creativity.

Table 6

How Creativity is Conceived by Teachers and Principals

	Freedom and Autonomy to Create	Thinking Outside the Box	Innovative Problem Solving	Striving to Improve Student Learning
Principal A	✔			
Teacher E		✔	✔	✔
Teacher P			✔	✔
Teacher Z				✔
Teacher T		✔		
Principal B	✔	✔		
Teacher R			✔	
Teacher Y	✔	✔	✔	✔
Teacher I		✔		✔
Teacher S	✔			

Freedom and Autonomy to Create

Two teachers and the two participating principals perceived creativity as something that is manifested through freedom of thought, movement, or expression. Creativity was presented as pursued and achieved with a great deal of autonomy. Teacher Y from School B said that "you have to have [a] margin of freedom to be able to create". Principal B says creativity has to do with "the freedom to take initiative." Teacher Y described creativity as the freedom to take some liberties with lesson plans and approaches, while Principal B supports this interpretation with her statement that freedom is the empowerment to try something new.

With all participants placing great emphasis on freedom as a key driver of creativity, it is important to examine what they meant by freedom and autonomy to be creative. For Principal A, creativity is rooted in freedom, as she explains: "Not freedom from rules and regulations no. Freedom from the inside. Free to do, to be creative, to impress, to make mistakes, to fail." Principal A's response reflected a tacit understanding that freedom to be creative is something to be enabled and pursued within the halls of the school. She emphasized that "we should create this autonomy; we should create a climate that allows the people to work independently." By "we" here, she is implying the management of the school.

For Teacher S from School B, creativity is manifested as the freedom for the teacher to control her own class. Teacher S says that "now the teacher feels more free to be controlling her class," by 'now' meaning since the dissolution of the School Network. Her perspective overlaps with that of Teacher Y, especially about having a margin of freedom to take initiative, but it adds the implication that the teacher's margin of freedom lies within the classroom walls, and thus localizing where her creativity should be.

Thinking Outside the Box

The most common answer given for the meaning of creativity among all participants was thinking outside the box. When pressed for clarification, thinking outside the box was frequently described as breaking from norms and conventions, or looking at a problem from a fresh perspective, or trying to step outside of one's role to capture the bigger picture.

For Teacher E of School A, creativity is about "going beyond the traditional, going beyond the board, going beyond the paper and pencil, going beyond everything which is known to everyone." The teachers in the same Focus Group echoed the same sentiment; Teacher T states that creativity is about "get[ting] out of the tradition of thinking in the old method."

In School B, Principal B frequently returned to this phrase in describing creativity. "Creativity for me is thinking outside the box," she says, "thinking outside the box and coming up with ideas that fit the situation." When asked what she means by fitting the situation, she elaborates that when teachers "face a special incident or a case they should be creative enough to think of something outside the box and come up with an alternative or anything that fits the situation." For Teacher I in School B, creativity is simply "thinking outside the box." Teacher Y from School B also views creativity as thinking outside the box, but more specifically as part and parcel of critical thinking. She says that as a science teacher she wants her learners to be able to "think creatively as critical thinkers…to think outside the box."

Innovative Problem Solving

Creativity was also conceived as innovative problem solving. Four participants described it while referring to learners in the classroom, as a process of innovative problem solving. What they meant is that creativity is a problem solving skill that arises from practicing critical thinking and reflecting deeply on finding a solution to a problem.

For example, for Teacher R in Focus Group B, creativity is "in my opinion, how to be a problem solver." Teacher Y in School B elaborates on this point with an example pertaining to promoting students' creativity:

> As a science teacher I want them to be creative as critical thinkers…I have to put them in any problem situation where they have to find a solution…and this is where for them [they have] to be creative and to be able to solve it and to think outside of the box.

Teacher E from Focus Group A explains that creativity for students is something "beyond critical thinking, it is the highest level of knowledge building"; Teacher P concurs by adding that it is following Bloom's taxonomy about "being able to use that knowledge to provide something new." Creativity is thus perceived as the logical peak of problem solving skills for learners.

A Venue to Improve Student Learning

Five teachers from the focus groups agree that creativity is conceived as a pedagogical tool or skill for teachers that allows them to improve their student learning. This is orientation manifestation of creativity as it pertains to teachers being creative in their profession.

In School B, Teacher I explains how the "curriculum tells us what to teach, but it doesn't tell us how to teach so it's up to the creativity of the teacher how to teach the

curriculum and the content." For Teacher I, creativity is about striving to improve student learning. "I think creativity in my case is how to engage my students in new activities. I like just to implement hands-on activities in class so just creating these activities and implementing them is by itself a creativity." His fellow science colleague Teacher Y agrees. She says: "I'm creative for creating this [critical thinking] problem; it's not easy to create a problem where its linked to your lesson and to your everyday life."

In School A, Teacher Z perceives being creative a teaching method "that let students acquire the object[ive or lesson] with a lot of ease." She adds that creativity "is choosing of the correct and the exact way in which you explain the objective." Her colleague Teacher P understands being creative as being able to "transfer your knowledge in a unique way," meaning, to find a fresh approach to achieving the learning outcomes of a lesson. Teacher E from School A also adds that it is about "transferring your knowledge in a way that is not usual that boosts the acquisition of the competency."

Conceptions of a Climate Conducive to Creativity

The second part of the first research question concerns how principals and teachers conceive of the characteristics of a climate conducive to creativity. The distinction between the two parts is important. In the first part, we determined how the participants in the study define creativity broadly. Here we are exploring how they apply that definition within the school, and specifically in the classroom.

Following the interviews and focus groups, the following themes emerged in common with several participants in each case, and summarize the findings of the study as it pertains to the second part of the first research question. Table 7 summarizes the themes that correspond to the participants' answers.

Table 7

How Teachers and Principals Conceive of a Climate Conducive to Creativity

	Autonomy within a clear structure	Encouragement of New Ideas	Collaborative Work Environment	Open-mindedness to Change
Principal A	✔	✔	✔	
Teacher E		✔	✔	
Teacher P		✔		✔
Teacher Z		✔		
Teacher T				✔
Principal B	✔	✔	✔	
Teacher R				✔
Teacher Y		✔		
Teacher I				
Teacher S	✔		✔	

Autonomy Within a Clear Structure

According to the two principals and at least one teacher, a climate conducive to creativity is a climate that provides a degree of autonomy within a clear framework or structure of rules and regulations. Their emphasis on this characteristic did not align with the results of the KEYS survey, In fact, looking back at the results of the climate survey, the first domain called Freedom, and which states "I feel little pressure to meet someone else's specifications in how I do my work", netted the lowest score of all items on the survey for both schools A and B, at 1.85 and 1.80, respectively. The Freedom domain in sum, with its 2 questions, had the lowest score overall in the entire survey for both schools,

with 2.53 and 2.43, for A and B, respectively. This means that freedom is indicated as an average, but not a strong, factor, in the two schools in general.

In School A, the principal focuses on freedom and highlight it as a necessary factor within the organizational structure that would enable a climate conducive to creativity. However, the Principal appear ambivalent as she stressed on the need of freedom while pointing that this freedom needs to be contained within a structure. The practice of freedom she described is one where freedom to move and to interact and to make mistakes is contained within an order of hierarchy, a clear organizational structure. Principal A says: "I appreciate autonomy, I want [teachers] to be able to work independently, but at the same time I like frames, I like guidelines." She envisions a climate conducive to creativity as a climate that allows freedom and autonomy within the framework of the school's rules and regulations. "I like to have institutionalization, I like this corporate idea, but this corporate idea respects the freedom and creativity and autonomy of each and every person in it."

The Principal of School B echoes a similar sentiment about the need for structure and guidelines while practicing freedom. She says:

> There are certain guidelines and protocols that we should all abide by, and within this frame I believe there is a big marketing to encourage freedom, autonomy, and creativity, as long as we are all respecting the general philosophy of the school.

On the other hand, teachers' responses reflect that the freedom and autonomy that they associate with a school climate conducive to creativity, are the ones confined to the classroom and falling within their role in it. For example, Teacher S from School B describes the climate conducive to creativity as the teacher being "more free to control [your] class". She feels that the teacher needs the autonomy of the classroom to express

herself naturally and from this natural environment creativity emerges in teaching. There was no clear indication from the responses of the teachers to this question that they situated their views within the broader organizational context of the whole school.

Encouragement of New Ideas

According to most participants in the interviews, a climate conducive to creativity is one that is imbued with encouragement for new ideas. There is broad consensus by all participants in both schools on the importance of encouragement of innovation, encouragement to think outside the box, as necessary components of a climate conducive to creativity in the classroom.

When talking about the sources of this encouragement, the principals' responses emphasized the organizational structure and the extent to which it can reflect the acceptance of creativity by creating the space for freedom of thought and expression within the norms and regulations that the organization mandates. However, their responses centered on their role as principals in enacting these norms and policies. Principal B defines encouragement for new ideas as the encouragement to adapt with fresh approaches in the teaching methodology. She says that she makes it a point to communicate this sense of support to the teachers, she notes: "the teacher is the leader in her class, and I always encourage them to be creative." Principal B elaborates how she encourages new ideas, and what she means by that exactly: "even if they want to get out of the unit plan within limits, what they feel is suitable for their kids on the spot they are free to do that." She also speaks continuously about the importance to encourage teachers to propose new plans and initiatives: "I personally always welcome any original plan, any proposition, and they [the

teachers] usually feel encouraged to propose such things." As an example, she describes the case of a new teacher in her school:

> A philosophy teacher came up with the plan for proposing Poetry Club although he's a philosophy teacher but he's so into poetry so I directly approved his plan and he came up with the club and he did all the planning and he launched it in the secondary division.

Similarly, Principal A's views on the structural encouragement for new ideas centered on how she brings that encouragement as part of her role as a principal. She asserts that it is important for teachers and learners to feel free to be creative, and she lists components that bring about that encouraging atmosphere: "Transparency is one of them," she says, "consistency is another one, fair treatment, open discussions, openness, I think these are part of the components of a climate that can encourage people to feel free to be creative and to be autonomous."

Similarly, the teachers emphasized the role of the leader. Their responses reflect their views that the need for encouragement and acceptance of differences should come directly from the leader or superior to promote a climate conducive to creativity. In School B, Teacher Y places importance on encouragement of new ideas as a means to keep motivation going. She explains: "whenever you do something you're very encouraged by everyone to do [it], to continue what you [are] doing…so it always has this positive reinforcement [to keep doing it]."

In School A, Teacher P also points at the centrality of encouraging innovative ideas as a characteristic of the climate conducive to creativity and of the critical role the leader plays in enforcing that encouragement; "Encouragement, encouragement, encouragement,"

she says. For Teacher P, public encouragement and praise provide a stronger sense of support from the leadership because it communicates authenticity and honesty of intentions:

> How the leader is encouraging you and how she's boosting your morale you know, sometimes many of us do something really booming, especially now in this pandemic, through PowerPoint presentations, and she's really encouraging us, she's congratulating us on our work, and on how we are doing or presenting our PowerPoint presentations… That's the main thing, how she's encouraging us, I mean, she's not encouraging us just one to one, no, in front of everyone, she is doing that, you know, that's the most important thing.

Teacher Z from School A echoes the same sentiment of the importance of being encouraged to try new things. She says it "motivates you to do the best for your students." Teacher E from School A provides insight from personal experience into the impact of encouragement of innovative ideas on a climate of creativity. He portrays the responsibility of the school administration to encourage as a make it or break it factor. Describing a lived experience of lacking this encouragement, he says "I didn't feel encouraged to bring up or promote my creative initiative," when reflecting on his time in the math department. He feels that such creative pursuit requires concerted efforts to materialize which must have value to superiors, and the superiors need to articulate it either directly to the teachers or within the school mission and vision.

Collaborative Work Environment

Both principals agree that a climate conducive to creativity emerges out of a collaborative work environment. According to Principal B, collaboration among colleagues

is necessary for a creative work environment to manifest itself. She notes: "a teamwork spirit, you know this indirectly leads to encouraging creativity and taking initiatives." Principal B describes applying distributive leadership as part of the strategy to enhance cooperation among different members of the school. She explains: "I believe in delegation of tasks giving authority to key persons in the school. Let them have initiatives to take initiatives."

Similarly, the Principal of School A considers that it takes a collaborative effort to generate a climate conducive to creativity. She also connected promoting a collaborative effort by providing a degree of autonomy and ownership among a broad base within the school. She explains: "How can we reach this vision [of a creative school climate]?" she asks, "we prefer to have to avoid that the decision is made by one person, it should always be combined collaborative [decision]." Part of the rationale as she sees it for collaborative decision-making is that everybody owns the decision, and therefore everybody feels contributive to the climate. According to her, this ownership allows people to feel a sense of autonomy necessary for creative or innovative ventures.

In addition, some teachers from both schools also spoke of the positive effect of collaboration on a climate conducive to creativity. Teacher S from School B supports the vision of a collaborative work environment being conducive to creativity. Her rationale is that it removes the specter of oppression and opens you up for creative thinking. She notes:

> You don't have the bossy feeling, that you are in a specific hierarchy going through one individual to another. You feel that we are all as a teamwork one hand, we work together to reach a specific target.

Teacher E from School A says that the spirit of teamwork is fundamental for a climate conducive to creativity. He explains:

> What motivates also, when we celebrate together, little successes, even if it's just one person, we all celebrate together as a team. If someone makes a mistake we know that we made a mistake.

Open-mindedness

According to both principals and 3 teachers from the focus groups, open-mindedness is fundamental to a climate conducive to creativity. In School B, Teacher R states that creativity requires being open-minded. With creativity perceived as the presentation of something novel, being receptive to new things seems elemental to the process. Principal A lists openness as one of the necessary components of a climate conducive to creativity. Principal B also iterates the need for openness with both teachers and learners. About learners, she says that she "always opens the floor for learners' suggestions especially in upper classes," while for teachers and administrators she adds that "you have to be open to others, you have to learn from others."

In School A, teachers linked open-mindedness at the school with administrators responsible for the supervision and expressed their belief of its criticality to a climate conducive for creativity. "It depends on your supervisor how open-minded he is, if he trusts you, boosts your projects," Teacher T says. She elaborates on the point by adding that openness has to be part of the organization: "This goes back to the management how much they are open-minded to changes, how open-minded they are to new ideas, how much they trust you to move forward in new projects." Teacher P agrees with this stance and shares an example of openness from her principal when she presented a fresh idea to her:

> [The principal] said [to us] I am open to any suggestions as long as I can apply them….the other day I had an idea and she was like wow it's really nice please go ahead and apply it and I do not mind at all, which I thought she might say no to.

She explains that the ease to get approval to pursue her idea had a positive impact on her sending the message that there is indeed open-mindedness in the school administration for new ideas.

On the other hand, for Teacher R, being creative means taking the initiative and putting yourself out. "Creativity requires courage," she says. "Fear could be a setback, it could be crippling," she adds. However, she concurs with her colleague that the school principal bears the responsibility to help them overcome that fear. She explains that it is important that the school administration "allow us to take initiative, [that] we're not judged…I think that this is very important to work in a place where your ideas are appreciated."

Organizational Arrangements for a Climate Conducive to Creativity

The second research question asks: What organizational arrangements are needed to facilitate the enactment of a climate conducive to creativity? The climate of a school or organization is strongly related to the componential arrangements of the organization itself. What this means is that the way the organization is structured, from its vision and mission to its authority distribution to its type of leadership to the management of its human resources, plays a big part in shaping the climate of the school (Amabile, 1997; Amabile et al, 1996).

This aspect of the factors conducive to creativity played by the organizational arrangement is also reflected in the domains of the adapted KEYS survey on organizational

climate. The survey includes 3 categories that target organizational arrangement specifically, and that fall under the domain of Organizational Motivation: Organizational Encouragement, School Impediments, and Resources. The survey distinguishes clearly between organizational encouragement and managerial encouragement, the latter reflecting the encouragement that is provided specifically by the school leader.

Both schools show scores for organizational motivation that favor a climate conducive to creativity. For the category of organizational encouragement, School A holds a score of 2.87 while School B holds a score of 3.02. It is notable that in this respect, with a score of 3.02, School B has a noticeably higher score than School A (2.87) despite the fact that both schools share the same history as part of the Network and have kept the same organizational arrangements with no differential policies to date on this front, though this might not be statistically significant. In the category of School Impediments, a category that is reverse-scored, School A holds a score of 3.06 while School B has a score of 2.99. The differences in these two scores are not particularly significant, and suggest organizational arrangements that do not present impediments to a climate conducive to creativity.

In the category of Resources, School A scored 2.85 while School B scored 2.90. Their scores reflect a favorable resource management environment for a climate conducive to creativity. The differences between the scores of the two schools appears to be too small to hold any significance.

The results of the school interviews regarding what organizational arrangements facilitate a climate conducive to creativity are described below, under their respective themes. It is important to note that while there is a broader set of agreement regarding the overarching organizational arrangement among the participants here, there is reduced

consensus as one looks at the details of their responses. Table 8 summarizes the themes that correspond to the participants perspectives.

Table 8

A Summary of Organizational Arrangements as Stated by Participants

	Autonomy within a clear structure	Communication with transparency	Risk tolerance	Formalized regular feedback	Access to resources	Continuous professional development	Encouragement of originality
Principal A	✔	✔		✔			
Teacher E		✔	✔		✔	✔	✔
Teacher P				✔	✔		✔
Teacher Z					✔		
Teacher T		✔	✔	✔		✔	
Principal B	✔		✔	✔	✔	✔	✔
Teacher R	✔		✔	✔	✔		✔
Teacher Y					✔		✔
Teacher I			✔				
Teacher S					✔		✔

Autonomy Within a Clear Structure

According to both principals, an organization enabling a climate conducive to creativity is one whose organizational arrangements creates room for autonomy within a clear structure. What they meant is that the schools needs to adopt an organizational structure that enables autonomy for teachers and learners to pursue creativity, while at the same time delineating the boundaries, defined by the organization's protocols for behavior, order of responsibility (organizational hierarchy), and the mission and vision of the school,

within which this autonomy must be enacted. Principals in both schools communicated the importance of organizational structure for facilitating creativity.

For example, when talking about autonomy for creativity, Principal B explains what it means to be placing autonomy within a structure as follows:

> There's the structure of the school, there are certain guidelines and protocols that we should all abide by. Within this frame I believe there is a big marketing to encourage freedom, autonomy and creativity as long as we are all respecting the general philosophy of the school.

Principal B articulated autonomy for creativity as being enacted within a "margin of freedom" that is bracketed by the school's organizational structure. Principal B views one of the organizational arrangements for creativity as being a clear organizational structure that allows a "margin of freedom" for creativity.

In School A, when describing how she conceives of creativity, Principal A begins with a vision of learners moving, interacting, sitting everywhere, but adds that she sees "a structure…I see proper channels of communication, anything that the child needs to grow in a safe place, but in a free place." Here Principal A is situating autonomy, freedom of movement (basically the elements she understands constitute creativity) within a safety containment, namely, the organization's own rules and regulation of what constitute allowed behavior.

Notably, all teachers except one did not bring up the view of freedom within structure adopted by the principals. Most teachers were mainly concerned with the need for the organization communicating its intent for encouraging creativity more clearly. Teacher R from School B, the only teacher participating in the focus groups to mention structure

specifically, while discussing some of the differences in her school before and after the dissolution of the School Network, describes current administrators as being more open-minded, but adds that "still there is a structure, it's structured." What she seems to be communicating here is that structure remains an important component of how the organizational behavior of the school members is bounded, while alluding to the degree of freedom that is felt as a result of the less restrictive leadership style of the current principals compared to that of the Network director.

Communication with Transparency

According to several participants from School A, an organization that promotes a climate conducive to creativity practices clear communication. the administration intentions should be clearly and transparently communicated to the employees, whether through the school mission and vision, regular internal circulars, in oral communication, or other means of conveyance.

Teacher E from School A places great emphasis on the importance of communication. "I really believe in the shared vision," he says. He elaborates that the principal, the head of division, human resources, should all be communicating the same vision and speaking the same language. He adds:

> We have to call things what they are when we speak the same language….we have to state we promote creativity; we state it clearly. This is where we succeed in creating a climate conducive to creativity.

Teacher T from School A agrees while pointing out that the ease of communication is a notable element of organizational arrangement. She notes that during the School Network days, communication was slower and more labored as it had to go through several

stopgaps before decisions were taken. She characterized this as an impediment that increased the risk of miscommunication and at times demotivated teachers from being creative.

> During [School Network] there were more restrictions…if we wanted a response for something [a new idea, a suggestion] it used to take a lot of time and we would become demotivated. Once it [the organizational structure] shrank we felt more relaxed, we had the HOD, coordinator and we could reach the principal, we no longer had a long path to reach our goals. With time our management in the school became better, more clear and open.

For Teacher T, ease of communication brings clarity, to expectations, pursuit of initiatives, and accomplishment of goals.

Principal A specifically singles out communication as foundational for the extent to which this structure is conducive to creativity. "I see a structure, I see proper channels of communication, anything that the child needs to grow," she says. The organization is essentially hinged on clear communication, and the infrastructure for creating a climate conducive to creativity hinges on communication.

> We start with expectation sharing. Sharing the Expectations in the vision of the school with everyone…How can we reach this vision?…We create channels of communication between us and the community.

For Principal A, a shared vision has to be "shared out loud," and in describing a climate conducive to creativity, she states that there needs to be transparency in communicating that creativity is part of the vision. She explains that the needed transparency is achieved through frequent communication, through general assemblies,

meetings, emails, website messages. She says she "always need[s] to remind everyone about this vision, not just in one message per year."

Systemic Openness/Risk Tolerance

Both principals as well as three teachers feel that organizations that aim to promote creativity must have a tolerance to risk and an openness to innovative ideas that is embedded within their system. This means that they are open to allowing their employees to pursue new ideas and initiatives, and they are prepared for the calculated risk that comes with trying new things.

Principal B says: "you have to be open to others, to their ideas, to their suggestions." She sees this as being part of an organization-wide attitude. "You cannot always think that you know everything," she says. "You have to be open and tolerant of other's point of view." She says this in the context of how a school needs to be governed to promote creativity. Principal B agrees and additionally believes that this openness leads to flexibility on a personal level, a key element in tackling the many challenges that a school faces.

Principal A believes that being open has to do with understanding that people have different rationalizations to problems. She lists acceptance of differences as key to practicing the opened that a climate conducive to creativity needs. "You have to accept that there are people who think differently," she says, "being open to discussions, openness, these are key components of a climate for creativity."

On the other hand, teachers were more likely to emphasize what I understood more explicitly as risk tolerance rather than mere acceptance of differences or openness to ideas. From their more vulnerable positioning within the school, enacting creativity requires

going beyond openness to ideas to willingness to take the risk involved in advancing those ideas that challenges existing practices. In fact, teachers' responses revolved around the need for the organization to allow for mistakes so that teachers feel less at risk to try new ideas and practices. Teacher R from School B offers an example, she says that to be more open to creative ideas the organization has to be more tolerant and accepting of taking initiative" allowing hence more "room for error, to accept that we're humans and we make errors." Teacher T in School A states that much of acceptance of ideas "goes back to the management how much they are open-minded to changes how open-minded they are to new ideas, how much they trust you to move forward in new projects." Teacher E from School A explains why this is hard to come by in organizations. "Sometimes school administration have this fear of trying something new or being creative they like to stay in the traditional because it's the comfort zone…that is the fall back." He feels that this is why organizations are often hesitant to take risks.

Interestingly, while the rewards are not guaranteed and while members of the school administration might be willing to try new approaches, they are wary of the stakeholders, whose threshold for risk tolerance might be much lower. The results from the adapted KEYS survey partly support this findings. While the scores from participants showed a majority agree that failure is accepted in the school as long as the effort was genuine, risk tolerance scored lower, with an average score of 2.40 – 2.50 in both schools, suggesting that risk tolerance is desired but not completely adopted in the school to promote creativity.

Formalized Regular Feedback

Two principals and three teachers agree that a school that enables a climate conducive to creativity needs to have a formalized regular feedback appraisal system that is

aimed at improvement and learning rather than focused on taking punitive measures. According to the survey, both Schools A and B report that they receive constructive feedback about their work. Teachers are frequently given feedback on their performance, constructive criticism, and encouragement and praise for taking initiatives. Regular feedback, as opposed to infrequent, or annual, performance appraisal, is viewed to improve communication between the administration and the faculty, and provides teachers with an avenue to propose new initiatives and receive encouragement and support for these proposals.

Teacher P in School A describes that the performance appraisal is a means to receive constructive feedback that can be used "to work on ourselves." He critically reflects on the usefulness of the system of one annual performance appraisal. "Why isn't it developmental? We shouldn't have to wait until the appraisal as a judgment that falls from god but rather something developmental, ongoing [throughout the year]." For him, to ensure that the feedback system promotes creativity, it must be frequent and aimed at allowing opportunities for exploration and learning. Teacher T from School A also says that it is important that the supervisor informs them of mistakes made on the spot, "not have to wait 6 months to get a feedback." She adds:

> Appraisals for competencies that are long-term I understand, but small things appreciation, constructive remarks are very important on a regular basis [for maintaining motivation].

Teacher Y in School B states that whether you are doing something right or wrong, there has to be a feedback mechanism to notifies you. "You should have the space for

creativity to give your ideas and to have feedback," she says, and adds that the feedback has value whether it is positive or negative.

Principal B adds a slightly different take to the feedback system. She agrees that it is necessary to have regular feedback, and acknowledges the importance of positive feedback as a reward for taking initiatives. However, the principal sees appraisal and feedback main role as being part of a "system of merit" for promoting outstanding performance rather than a mean to encourage creativity. She explains by an example from her experience:

> We follow the policy of promotion from within; I was a teacher and I was promoted and I became a principal...So this is part of rewarding. You see the positive aspect that they fit the criteria of a position and you promote from within.

On the other hand, she clarifies that her observations during the pandemic have led her to believe that providing feedback as a source of emotional support is what matters for the teachers and seem to have impacted positively their sense of taking new initiatives. She explains:

> not all the rewards should be materialistic…[during the pandemic] I made it a point that I reply to every single teacher separately, individually encouraging and giving remarks about the work they have prepared…I'm sure this encourages them.

Access to Resources and Technology

According to most participants in the focus groups, a key organizational arrangement for enabling a climate of creativity is the provision of resources, particularly resources that are adequate and relevant for taking initiatives and generating innovative ideas. Access to resources scores above average in the creative climate survey for both

schools, with scores of 2.85 and 2.9 for Schools A and B, respectively, signifying a fairly resourceful work environment. The importance of resources is emphasized by teachers more than principals. Teachers generally feel that resources provide a critical set of tools by which to unlock creativity in the classroom.

Teacher P in School A states that while teachers need to be creative, resources, whether they be a book, a toy, a game etc., are "the basic tools in the hands of the teacher." Teacher E in School A believes that there is a strong link between appropriate resource provision and promoting teachers' creativity in the classroom:

> From my point of view there is a strong correlation between the effort being put by the school to provide teachers with resources that boost creativity, and the creativity of the teacher, the ability of the teacher to promote creativity among the students.

Access to resources can be a key facilitator for the delivery of a creative lesson. For example, Teacher Z in School A says that being creative is in many ways nothing more than providing a fresh or new resource for learners. Teacher Y in School B states that being creative often means "finding other resources to make [students] more engaged." She adds that since the dissolving the School Network there are fewer hurdles to request and get access to resources through the administration. She explains that provision of resources is given a priority by the organization because it is seen as a necessary means to an end, to facilitate the teachers' job: "It is very easy to get resources because there is this general idea of 'We need more activities', that's why they are helping us to get these resources better." Teacher Y includes examples of such resources as round tables for discussions, a functional library, fully equipped labs, a budget for trips, and the provision of physical space on campus.

Teacher R from School B agrees about the importance of the school being very generous on resources but adds that the budget remains a limiting factor which puts limits on the readiness of the school administration to provide these provisions. When resources are affordable it is not an issue, but "when you are talking about something that is a little bit expensive then it's not possible to actually receive it", she says. Similarly, Teacher Y explains that part of the issue is about seeing resources as a critical priority for promoting creativity and planning ahead for the budget committee to allocate the funds for resources. She adds that there is not much room for spontaneity to provide support for an emerging idea: "if I want anything out of the blue [then] definitely no."

Both teachers' description of the experience with resource acquisition is further confirmed by Principal B response. She says that each year heads of divisions and academic departments are asked to meet with teachers once at the start of the year to ascertain resource needs and compile a list, "whether it's for educational or class or any type of resources and this we take it into consideration when preparing the budget for the coming year." Teacher S from School B speculates that this practice can be considered to align at least partially with the school's objective for promoting creativity, that planning for creativity requires preparation beforehand. When notified on time "they are ready to provide the material needed," she says. "They don't always say no. They like to get resources…to enhance the way we are doing the learning style."

Continuous Professional Development

Promoting a climate conducive to creativity, according to 2 teachers and 1 principal, includes providing continuous professional development. One of the reasons provided for this has to do with the fact that teachers are often not trained to be creative. Teacher E from

School A believes that creativity is often something that is acquired through practice, by being exposed to it, while Teacher T from School A says some of that exposure come from professional growth, participation in workshops, self-reflection, and engaged collegial atmosphere.

Teacher E from School A says that creativity is not something that teachers naturally have. “In the secondary level we are less and less creative because of the curriculum…we are not being trained to teach; most of us we majored in our subjects,” as opposed to in education as a professional major. Teachers’ creativity can be stimulated through participation in workshops. Teacher T in School A laments the lack of training that is provided for teachers through workshops:

> They used to take teachers to workshops, continuous learning, but for the past 2 years [since the collapse of the School Network] we didn’t go on any workshops. This sort of thing doesn’t motivate the teachers because you aren’t learning anything new, except maybe what you are learning from teaching your own students.

Principal B also believes in the effect of professional learning programs on the development of the teacher as a professional, including a creative one. “Providing them with a professional development…helps in promoting an atmosphere of creativity, of positivity in taking initiatives,” she says. She also believes that the school policy that encourages internal promotion of teachers and adopt the rotational appointment of its administrative team enhances professional learning and boost the teachers’ motivation to engage in it and to give more, try more, take initiative. “I think when you reward teachers and you motivate them this leads them to give more,” she affirms.

Encouragement of Originality

According to Principal B and most teachers from the focus groups, a school that promotes creativity encourages originality in its employees. Both schools scored average (and even a little below average) on the item that highlights encouragement to take risks, on the creative climate survey, with scores of 2.43 and 2.53 for Schools A and B, respectively, but scored high on encouragement to solve problems creatively, with scores at 3.00 for both schools. in fact, the participants in the interviews spent more time explaining how important encouragement is to fostering a climate conducive to creativity.

Principal B said it clearly when she stated that she always encourages teachers and staff to come up with original plans. “I personally always welcome any original plan, any proposition, and they feel they usually feel encouraged to propose such things.” She gave the example of the philosophy teacher who liked poetry and started a poetry club as a direct example. But encouragement by the principal does not mean that it is an organizationally aligned protocol to encourage originality. Looking at the survey, both schools scored average regarding the statement that the school is strictly controlled by upper management. This doesn’t mean that the school is authoritarian, but neither does it mean that management is liberal and heavily engaged in collaborative decision making.

Perhaps the strongest evidence of a belief in the impact of encouragement of originality on inducing creativity comes from Principal B, who states that she actively encourages her organization to bring forward new initiatives and rewards those that make the effort. Teacher R from School B affirms this view and talks about how the principal has been trying to encourage ideas and activities for holidays and events. Teacher S from School B also talks about how the principal always “welcomes anyone suggesting new

ideas, new suggestions to the school." Teacher Y from School B states that there is a large amount of support from the organization to take initiative, and adds that this is a new development she places within the context of the collapse of the old School Network:

> Now we can take more initiative in our class, in our school environment, in the activities that we can do….nothing is rigid anymore. We can make new initiatives, we can add more activities, to our lessons; definitely have to go back to the HADs and HODs, however this has opened more room for us to be more creative.

According to the principal, her encouragements for the teachers and the provision of a clear formal channel to propose initiatives through middle management (HODs and HADs) implies that there is a clear organizational arrangement to promote originality in the school.

Answers from School A had a marked difference in some respect to those from School B. While encouragement of originality is agreed upon by many teachers as a necessary component of the organizational arrangement for a climate conducive to creativity, teachers seem to be pointing at this factor despite their perception that there is an absence of organizational processes that facilitate the enactment of this encouragement. Teacher P from School A praises her principal as "someone who encourages us to think creatively," but rather lays some blame on the HR department for not contributing to encouraging creativity more actively, either by not setting up workshops and initiatives or by not frequently communicating a vision that includes a desire to promote creativity.

Leadership Attributes That Affect a Climate Conducive to Creativity

The central theme of this study is tackled directly by research questions 3 and 4, which aim to explore what attributes of leadership can promote or hinder the realization of

a climate conducive to creativity, and to try to understand how these attributes promote or hinder a climate of creativity, as perceived by teachers and principals. Analysis of the results of the adapted KEYS survey and the answers extracted from the interviews, led to emergence of several themes that hold some degree of consensus among the participants in the study. Attributes of leadership that promote a climate conducive to creativity are discussed first, followed by attributes that hinder.

Leadership Attributes that Promote a Climate Conducive to Creativity

Following analysis of the principal interviews and the focus group sessions, attributes of a leader that promote a climate conducive to creativity were extracted. Some of them came directly from the responses of the participants, others emerged as themes synthesizing the researcher understanding form multiple sources of data. The following is a breakdown of the positive attributes and how they seem to impact a climate conducive to creativity. Table 9 summarizes the findings of positive leadership attributes as they relate to the participants that support them.

Table 9

Attributes of Leadership That Promote a Climate Conducive to Creativity as Perceived by Teachers and Principals

	Communicating Desire to Promote Creativity	Practicing Distributive Leadership	Openness to Initiatives/ Ideas	Love and Passion for the Work	Acceptance of Differences/ Reserving Judgment	Showing Support, Encouragement, and Understanding	Students are Priority
Principal A	✔	✔	✔	✔	✔	✔	✔
Teacher E	✔	✔			✔	✔	

Teacher P		✔			✔	✔
Teacher Z	✔					
Teacher T				✔	✔	
Principal B	✔	✔	✔	✔	✔	✔
Teacher R				✔	✔	✔
Teacher Y					✔	✔
Teacher I					✔	
Teacher S		✔			✔	

Communicating Desire to Promote Creativity

One teacher and one principal state that a leader promotes a climate conducive to creativity by communicating the desire to promote creativity. This can be done through numerous means. One of the most far reaching ways to communicate this desire is through including it in the vision of the school and reiterating this vision frequently. According to Principal A, one of the essential components of promoting creativity is to have a vision, a "shared vision, shared out loud."

Principal A explains that sharing the vision is important so that people know what to expect of you. Before pursuing the avenues of creativity the leader needs to "share the expectations of the vision for the school with everyone." Teacher E from School A concurs and restates the importance of communicating through the school vision. "I really believe in the common vision," he says, that the same language is spoken in terms of goals by the principal, the heads of divisions, the teachers. The reason is because the mission and vision "set the values and objectives. Once these are clear then you will have a climate conducive to creativity."

Practicing Distributive Leadership

Several participants, including the principals in both schools and at least 2 teachers from both schools, voiced their belief that a leader seeking to promote creativity in their school practices distributive leadership. Distributive leadership is understood slightly differently by different participants. Principal A describes what she calls collaborative leadership, and talks about being afraid of being held responsible for a unique vision alone, that she prefers the vision is crafted collaboratively. “I had a fear that when I leave I didn't want them to say that she did this or she initiated this it's more like a collaborative vision.” What this means is that Principal A draws a wide group of people from the school into the decision-making process. When discussing shared visions, she asks “How can we reach this vision, each one from his position?” The answer is by avoiding “that the decision is made by one person; it should always be combined collaborative.” That way no one feels left out of the loop and everyone feels ownership over the decision and implementation of the vision. “I always wanted them to be shared and discussed…This was my main concern.”

For Principal B, practicing distributive leadership is equated with promoting teamwork. Principal B believes that it is through delegation and distribution of tasks that everyone lifts the weight of the entire vision for creativity together. “I believe in delegation of tasks giving authority to key persons in the schools Let them have initiatives to take initiatives.” She adds that she attributes this to her success as a principal: “Part of my success story is the teamwork and delegation of tasks.”

Teacher E from School A praises the distributive leadership approach as one that is more inclusive and empowering of its employees.

> Some [leaders] have the distributed or shared leadership, they distribute their tasks, they share their knowledge, we celebrate our victories, we take responsibilities of the mistakes. This is the positive way of management that has a positive effect on our performance and our work.

Teacher Z from School A echoes similar sentiments. Distributed leadership is seen as a way to engage the school community as a whole into becoming a more caring community.

> I think that shared leadership style…involving input from all staff, teachers, students, everyone available at school, will have a positive effect on teachers as well as progress on the school becoming a caring place for learners.

Teachers in general seem to prefer to be engaged in the decision-making process. Many teachers might not have mentioned the term distributive leadership directly, but they nonetheless hinted at it when they say things like preferring to be asked for their input, or their leader having an open-door policy for sharing ideas. The survey does not provide much insight into participants' stances on distributive leadership, except to ask if the school is strictly controlled by upper management, for which the responders for both schools gave an average score of 2.5, suggesting that it is neither strictly authoritarian nor is it highly collaborative. This tells me that the participants are acutely aware of the differences in leadership styles, and they have voiced their desire for one over the other.

Openness to Initiatives/Ideas

At least two principals and two teachers feel that leadership that aims to promote a climate of creativity needs to be open to initiatives, new ideas, and new directions. According to the KEYS climate survey, a principal open to new ideas is a fundamental

component of a creative climate. Teachers and principals both perceive the attribute of openness as essential for a climate conducive to creativity.

For example, when asked about how they perceive their principal's goals regarding creativity, Teacher P from School A states that her principal was very open to suggestions as long as they can be applied. "I felt she's open to anything I can do," she says. Teacher S from School B says that her principal "always welcomes anyone suggesting new ideas, new suggestions to the school." These perceptions are important because both schools scored high on the creative climate survey, and particularly on the item in the survey that asks whether the principal is open to new ideas. Principal B doesn't put a lot of stock in personalities that try to run the whole show. "You cannot always think that you know everything," she says, in justification of her collaborative leadership style, "you'll have to be open to others." And when asked about how to manifest a climate conducive to creativity, Principal A lists openness as a component among several others. So it is evident that being open to ideas is at least a desirable attribute in a leader that wants to promote creativity.

Love and Passion for the Work

According to the principals from both schools, crafting a climate conducive to creativity requires passion and dedication from the principal as well as the whole school staff. Principal B believes that this is because it is eminently difficult to achieve anything if one is not dedicated to the desired outcome.

"If you don't love what you're doing and if you're not really passionate about it I don't feel one can succeed," says Principal B. "The key terms for me in my job are love and passion for what I'm doing." For Principal A, love and passion extend to colleagues as well:

"We should love our work, we should love the people we are working with, we should have good energy [together]."

While love and passion were important attributes as described by principals, no teachers identified love and passion for work specifically as a necessary attribute in a principal for manifesting a climate for creativity at the school. On the other hand, the absence of a principal from the day to day affairs and the hallways, in general, is identified by teachers as an attribute that hinders creativity.

Acceptance of Differences and Reserving Judgment

According to three teachers and two principals, leaders that promote a climate conducive to creativity are generally accepting of the differences of others and are slow to pass judgment on others. This is perceived as necessary for promoting a safe environment to experiment and explore new ideas.

Teacher E from School A describes a climate conducive to creativity as a climate that "accepts everything." Teacher T from School A says that accepting all differences is essential. "We're role models for the students," she explains. Teacher E says that acceptance has to do with being able to be on a journey with someone else's idea. "If you're not convinced by the feasibility of an idea you stop being creative." Principal A lists acceptance as one of the fundamental attributes of a leader promoting creativity. The reason is that you have "to accept there are people who think differently and you might not get them to the same outcome as you want," but this is part of allowing others to "learn and grow at their own pace." How does one learn to accept differences? Principal A says simply "no judgment, no judgment at all, no impulsiveness."

Principal B says that you have to "be tolerant and accepting of others' point of view." Tolerance and acceptance she lists as qualities of a leader seeking to promote creativity. Teacher R from School B describes her leader as promoting creativity by being very accepting and nonjudgmental. She "allows us to take initiative, we're not judged, you don't feel like you're being judged." "They are more accepting" she says of the new management in general, "you feel comfortable actually speaking of your ideas." This is an important insight, because School B, as stated before, has scored relatively high on the creative climate survey.

Showing Support, Encouragement, and Understanding

Almost all teachers and principals agree that leaders promote a climate conducive to creativity by being supportive and showing encouragement. It is not enough to communicate; it is also how the leader communicates that allows the sentiment to be felt. Both schools scored high on the items for the managerial encouragement domain on the creative climate survey, indicating that they generally perceive that their principal is encouraging and supportive toward their creative or innovative endeavors. Furthermore, the consensus on the importance of support and encouragement inform a leader as a means to promote a climate conducive to creativity is the most frequently supported of all themes, with almost all participants in the interviews sharing a point that falls under this theme.

Principal A says that being a leader that promotes creativity means being a good listener, while Teacher I and Teacher R from School B both describe a climate conducive to creativity as having leadership as that is being very supportive in that regard. Teacher R describes overt efforts by her principal to encourage and support creative initiatives among

teachers in her school, while Teacher S adds that the school policy is clearly geared toward encouraging learners to be creative.

Teacher P from School A says her principal is supportive, “she really wants the best for us,” emphasizing a leader “that encourages you, that boosts your morale,” whereas Teacher E from School A says that if the management leadership encourages creativity in teachers, the teachers will encourage creativity in the classroom. Teacher T from School A says that she doesn’t need to be encouraged to be creative, but admits that “a word of encouragement from the leader is nice…it's very encouraging, whenever you do something [new] you're very encouraged.”

Principal B says she personally encourages creative initiatives in her school. She believes it is often the missing nudge to unleash creativity from those resisting to taking initiatives on their own. During the pandemic lockdown, for example, she says that she was determined to communicate her encouragement to each individual teacher, to show her appreciation. “I'm sure this encourages them,” she says. Teacher Y from School B explains that she more often feels the encouragement and support of her principal albeit indirectly through the head of division.

Placing Students as Priority

Two principals and 3 teachers from both focus groups agree that promoting a climate conducive to creativity necessitates placing students as priority. What this means for Principal B is that for the leader of the school, enabling a climate conducive to creativity is part of a vision that is centered on prioritizing creativity as a learning outcome.

Principal B seems to embody this characteristic when she says “I work with priorities, setting priorities and keeping in mind the learners best interest all the time.”

Principal B believes that any vision for the school, including one about promoting creativity, must always begin with how this relates to or benefits the learners. So, at all times, prioritize the learners.

Teacher Y from School B makes it clear that students must be placed as the priority, because the school goals center on empowering learners. She explains that "one of the most important goals is to raise learner's that are also creative that are problem solvers that are Critical thinkers." Teacher Y understands that the school's priority is to raise creative learners that can tackle the challenges of the 21st century. Teacher R describes the school principal as strongly committed to encouraging creativity in learners. She says regarding creativity-boosting activities that "you can tell that the principal wants the learners to take part in these activities."

Teacher P from School A states that her principal also places the learners at the center of her vision for the school. "The students they are at the top priority," she says, before adding, "which is something very normal." For Teacher P, it goes without saying the learners are prioritized in an educational institution. This is because keeping learners the target of one's focus plays a motivational role in seeking new methods, techniques, and creative lessons.

Reaching the learners is one of the challenges that Principal A discusses regarding crafting a climate conducive to creativity. She says that when she personally communicates her encouragement to be creative to the learners, such as during an assembly session, she feels the learners dismiss her message as the obvious motivational sound byte of the principal. Instead, she turns to the heads of divisions, the academic heads and the teachers

to translate her sentiment to the learners. “When I share it properly with the team and with the teachers, they can help me to reach the students in a better way,” she says.

Leadership Attributes that Hinder a Climate Conducive to Creativity

Zeroing in on what specific attributes of a leader are a hindrance to a climate conducive to creativity is a little bit more ambiguous. Participants’ responses conducive to answering this research question sometimes point to the antithesis of what they highlighted to be attributes that promote a climate of creativity. For example, if showing support and encouragement is conducive to creativity, being unsupportive is a hindrance to creativity. Therefore, it can be clearly understood that the absence of the attributes mentioned above under those that promote creativity are perceived to result in hindrances. What will be described in this section are the attributes that emerged from the data and are distinct from those mentioned as those promoting creativity. Table 10 summarizes the participants’ perspective on leadership attributes that are a hindrance to a climate conducive to creativity.

Table 10

Leadership Attributes That Hinder a Climate Conducive to Creativity as Perceived by Teachers and Principals

Participants	Being Outcome Oriented	Running a One Man Show	Increased Teacher Workload	Lack of Clear Vision	Negative Feedback
Principal A	✔	✔			
Teacher E				✔	
Teacher P					✔
Teacher Z					
Teacher T			✔		✔
Principal B	✔	✔			

Teacher R	✔	✔
Teacher Y		✔
Teacher I		✔
Teacher S	✔	

Being Outcome Oriented

Principals from both schools believe that a leader being outcome oriented can hinder the manifestation of a climate conducive to creativity. Both principals have explained that what they mean by outcome oriented here is placing emphasis on standardized assessment outcomes. There is a shared understanding that associate standardization of assessments and evaluations to being qualified as a principal with an outcome-oriented mindset. Principal A explains that if a principal places excessive focus on the outcome to be reached instead of on the process of learning this can constitute a hindrance for promoting creativity. She says:

> When you don't care about the learning process to reach an outcome…you don't care about the process or the learning path the person could reach, you kill his creativity. Because the only thing you're talking about is the outcome.

For Principal A, the process includes paying attention to engaging learners individually and differentiating instruction to respond to their varied learning styles:

> When we deal with everyone as if they all have the same learning style and have the same capacities, I mean when we deal with everyone as if they're in a box…treat everyone the same, we don't personalize the approach.

Creativity and a climate conducive to creativity for Principal A have to do with the learning process of the learner, how they learn more than what they learn. “The process could be more creative than the outcome,” she concludes.

Resisting being outcome oriented is difficult, because generating grades is ultimately an outcome of education. Principal B admits that this is a hindrance to creativity, and seeking new ways to assess learners is one of the challenges. This became clear to her following the pandemic and the lockdown, as the school had to adapt to limited means of assessing and evaluating learners. It has also opened up possibilities for new ways of looking at assessments.

> There is a challenge for all of us to switch to different types of teaching and assessment. Even the assessment mode that we usually follow and the stress that we put on kids should be changed, this is my belief and I'm planning to work on this with teachers and coordinators.

Running a “One Man” Show

Principals from both schools pointed at what they thought is the antithesis of distributive leadership labeling it the one-man show. Principal A has voiced her concern that running a one-man show leaves the school’s vision detached from the reality on the ground, as the members of the school struggle to connect with it. She needs the organization to own its vision in order to carry it forward regardless of rotating leadership tenures. “When we see that in the absence of the leader things are fine and everything is working quite fine” that’s how she knows the institution is working properly.

Principal B has also repeatedly touted the virtues of distributive leadership as opposed to trying to run the whole show herself.

> You cannot be like I told you a one man show, you cannot always think that you know everything, you'll have to be open to others, you have to learn from others and from your own experiences.

Her emphasis on delegating work to others she says is the source of her success. “I think part of my success story is the teamwork and delegation of tasks with my teams,” she adds. “If you don’t delegate work, you start to breed mistrust among your colleagues.”

Increased Teacher Workload

The most consistent factor mentioned by all participants as the hindrance to a climate conducive to creativity is having increased workload pressure. When asked about the hindrance to a climate conducive to creativity, the first thing that teachers mentioned was the overloaded schedule. It follows that a leader aiming to promote a climate conducive to creativity needs to balance the load of the teachers’ schedule, according to the focus groups. Results from the climate survey reflect similar sentiment from the whole school, with scores on the Workload Pressure domain, especially the item about not having enough time, being average, at 2.5 and 2.57 for Schools A and B, respectively.

Teacher S and Teacher R from School B both reiterated the full packed schedules as a hindrance to pursuing anything creative. “It leaves no room for creativity sometimes, and you’re drained,” says Teacher R. “A full schedule with a high number of learners, sometimes it will make [you] think twice” before trying something new and experimental, says Teacher S. When asked how she envisions a creative school climate, Principal A says she sees, among other things, “teachers not asking me about the school schedule,” meaning that the workload is balanced enough that it does not factor in as a hindrance. Teacher T from School A describes her school as calm and healthy but quickly corrects to add that

"there is stress, pressure of work requirements demanded of us, sometimes they push too much." She sums up the frustration of the teachers succinctly:

> There is the increased workload pressure, we have the load of our work, and we have to prepare in the afternoon, and we have to correct exams; we don't have enough time for exploring how to be creative, to do research on techniques, on methods, learning methods, how to prepare for example some cute material for preschool. We don't have enough time to do all of the things we are supposed to do. We keep running running running.

Lack of Clear Vision Promoting Creativity

One teacher, corroborated by the lived experience of the researcher, believes a lack of a clear vision is a leadership attribute that hinders creativity in the school. Since sharing a vision for creativity is a strong attribute for promoting it, it goes to say that a lack of a clear vision hinders creativity. The climate survey shows a high score for both schools on the desire for a shared vision in their school. Only Teacher E from School A specifically pointed out a lack of clear vision as a hindering attribute. He says one of the problems with pursuing creativity in his school is that the vision and mission "for me, they are not clear. I have nothing clear in our goals in terms of creativity." He stresses that there has to be a clearly articulated vision for promoting creativity in the school otherwise it will not be understood that this is something valued and desired by the management. Teacher E's answer can be understood to represent an attribute that hinders a climate conducive to creativity. This is arrived at circumstantially, by correlating the generally high score for a shared vision on the survey, with the fairly high score on creative climate survey as a whole. Given the strong emphasis teachers placed on clearly communicating a shared

vision that includes creativity, it makes sense that not sharing the vision would be a hindrance.

One phenomenon that manifests a lack of clear vision, according to Teacher E, is an absent or distant leader. An absent leader cannot communicate the vision of a climate conducive to creativity. What is meant by an absent or distant leader here is a leader whose presence is not felt in the school, whether physically or managerially. For example, Principal A's philosophy on collaboration follows that the leader does not own the vision by him or herself. Success is "when we see that in the absence of the leader things are fine and everything is working quite fine." The replies of some participants argue that the leader needs to be felt in the school. Teacher E from School A states that he cannot articulate the vision of the school. "If you ask me right now what's our vision at the school I don't know what to tell you, if you ask me what are our values, I wouldn't know how to list them for you," he says. This affects the climate for creativity because the leader has not reinforced the vision for creativity. Just as the vision is not clear, the vision for creativity is not clear. Teacher E adds: "I have nothing clear in our goals in terms of creativity."

It is important to explain why I am distinguishing between type of leadership and absence of leadership here. The primary reason is that Principal B in School B also professes to practice distributive leadership, and in fact stresses heavily on delegating tasks and empowering others. But participants from School B never mentioned nor even hinted that their principal's presence was not felt or left wanting. This to me means that it is not the style of leadership that is the culprit, but a personal attribute of the leader specifically. It is as if the leader does not communicate her vision, and in this particular case, at least one

teacher makes a strong argument that the leader's lack of strong presence is translated also into an unclear vision for creativity.

Negative Feedback to Teachers

According to four teachers from the focus groups, negative feedback, especially destructive feedback, from a school leader, hinders a climate conducive to creativity. Under the School Impediments domain of the climate survey, results showed that both schools held an average score of 2.74 and 2.86 for Schools A and B, respectively. When probed about how negative criticism is a hindrance to creativity, teachers claimed negative criticism seems to dissuade people from taking initiative or proposing creative approaches or ideas. According to Teacher P from School A, negativity "undermines us and demotivates us." Teacher R from School B describes a time in her school history when "someone might actually judge you and attack you and actually humiliate you although you have very good intentions but at some point we used to feel we weren't allowed to take initiative." Teacher Y from School B agrees and shares the following thought: "For you to have an environment where you can be creative you shouldn't be judged all the time and you shouldn't be always attacked for doing something wrong." Negativity has a dampening effect on creative pursuits because it makes it harder to overcome the inertia to keep things as is. "If you're always surrounded by negativity, by downsizing your ideas, by telling you it's not going to work, this also can restrict creativity," says Teacher Y. Reflecting on how things used to be and drawing examples from experiences of negative feedback, Teacher I places fear as the demotivating agent behind destructive criticism. He argues that within a culture based on fear from the leader, there is little room for taking creative initiatives. He

asserts that "based on fear, fear could be a setback or could be crippling," but he admits that this has changed since the dissolution of the School Network.

The Researcher's Perspective

Prior to concluding this chapter, it is important to note the researcher's perspective on the findings of the study, as they pertain to the research questions as well as the context of the school history. Having worked in various capacities for five years within the School Network, the researcher has a unique insider perspective on these findings within the context of the now dissolved network. Therein, and for the remaining discussions in chapter 5, the researcher will continue writing in the first person.

Prior to starting the research into this study, I had developed an interest in creativity and education. My research led me to formulate an early appreciation for the definition of creativity as the creation of something novel or original that has value or meaning.

How I envisioned a climate conducive to creativity is a little different. Prior to this study, my perspective was that creativity was something that is best manifested under pressure or duress, and thus it was my belief that creativity would be found in a climate that is, not necessarily oppressive, but rather, sparse. It is the lack of abundance that necessitates "thinking outside the box," I believed. Upon delving into the literature review, I found there is some evidence in support of my notional beliefs. Nonetheless, the majority of studies revealed that creativity was something to be nurtured, through the provision of resources, encouragement, acceptance, collaboration, communication, and a host of other factors.

Once the vision of a study on creativity started to take form in my mind, I naturally gravitated towards how this would relate to leadership. I say naturally, since my core studies centered on educational leadership. I did not have a firm conception of what a

leader for creativity looked like, but from my experiences in education, both through the School Network and with other schools, I believed that leadership attributes for creativity included being firm, having a long vision, empowering others, communicating effectively (especially the desire to promote creativity), and being open to ideas from others. I believed that attributes that are a hindrance to creativity involve a high workload (which falls on the arrangement formed by the organization that places this heavy workload on the teachers), and the leadership quality of milking the teachers for every ounce of energy they have.

Finally, my perspective on how leadership attributes promote a climate conducive to creativity centered around the belief that the leader is the main driving force in school. Whether the leader impacts the school climate directly or indirectly was thought of as a trifling detail, though personally believed that leadership for creativity that involved direct interaction and communication with all members of the school was more effective and impactful.

These are the personal perspectives of the researcher prior to embarking on this study.

Chapter Summary

This chapter reports the findings from the analysis of the interviews data that were collected, in conjunction with the results of the creative climate survey, to answer the four research questions of this study. Attributes of a school leader that promote and hinder a climate conducive to creativity were arrived at from the data collected, especially from the principal interviews and the teacher focus group interviews. A summary of the findings is presented below.

In combining the answers of the teachers and the principals from the two schools, certain themes emerged that provide a picture of how teachers and principals conceive of creativity, a climate conducive to creativity, organizational arrangements for a climate of creativity, and attributes of a principal that promote or hinder a climate conducive to creativity.

Conception of Creativity

Teachers and school principals generally defined creativity to be (1) the freedom and autonomy to create, (2) the ability to think outside the box, (3) as an innovative solution to a problem, or (4) a pedagogical tool to improve student learning.

A Climate Conducive to Creativity

Participants in the study generally agreed that a climate conducive to creativity has certain qualities that promote creativity. These qualities are: (1) autonomy within a clear structure, (2) a sense of encouragement of new ideas, (3) a feeling of a collaborative work environment, and (4) an open-mindedness to change.

Organizational Arrangements Conducive to Creativity

Participants understood organizational arrangements conducive to creativity as being almost synonymous with their conception of climate. An organization that has a climate conducive to creativity practices the qualities that promote said climate. These are defined as: (1) providing autonomy within a clear organizational structure, (2) practicing communication with transparency, (3), having a high tolerance to risk, (4) having a formalized regular feedback to its employees, (5) providing access to resources, (6) having the organizational arrangement for continuous professional development, and (7) encouraging originality.

Attributes of a Principal that Promote a Climate Conducive to Creativity

Participants identified 7 attributes that school leaders employ to promote a climate conducive to creativity: (1) communicating a desire to promote creativity, (2) practicing distributive leadership, (3) being open to initiatives and new ideas, (4) having a love and passion for the work, (5) being accepting of differences and reserving judgment, (6) showing support, encouragement and understanding toward staff, and (7) placing students as priority.

Attributes of a Principal that Hinder a Climate Conducive to Creativity

From the interviews and the focus groups, 6 themes emerged that can be defined as attributes of a school leader that hinder a climate conducive to creativity. Each theme was communicated by at least 2 participants, which has some value given the limited number of participants. They are: (1) being outcome oriented, (2) running a one man show, (3) placing increased workload pressure on teachers, (4) lacking a clear vision, and (5) showing negative or destructive criticism to staff.

Wherever possible, data from the participants was compared with the results of the school survey. Some of the answers were supported by the survey, such as how teachers conceive encouragement to be a quality of a climate conducive to creativity, or, a leader that is open to new ideas, as attributes of leadership that promotes creativity. Increased workload pressure, lack of access to resources, and destructive criticism, as hindrances to creativity, are also partially supported by the results of the survey.

CHAPTER V

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The aim of this study was to build an initial understanding of teachers' and school leaders' understanding of the role of school leaders in manifesting a climate conducive to creativity. It followed a qualitative research design method, combined with quantitative survey data, to collect and analyze data pertaining to the research aims. The research aims included first (1) identifying the teachers and school leaders' conception of creativity and how it is manifested in the classroom, (2) their understanding of the organizational arrangements needed to enable a climate conducive to creativity, (3) and the attributes of a school leader that promote and hinder a climate conducive to creativity. Following the analysis of the results from chapter 4, this chapter will pursue a discussion of the results of the study, as well as draw conclusions about it. Implications of the study will focus on how to proceed for further research, as well as recommendations for practice.

Reviewing the Purpose of the Study

The purpose of this study was to understand what attributes of school leadership foster and hinder a climate conducive to creativity, and how they do that. While there is a growing body of literature on the topics of creativity, leadership, and school climate, there is very little about how all three interact. The understanding reached from the literature review was mainly drawn from the findings of one study by Allen (2006) that explored the attributes of one principal seeking to foster a climate of creativity at her school. Her study framework was based on research from business literature on climates in the workplace and

how leaders effect workplace climates (Amabile et al., 1996), research on creativity in education from pioneers in the field such as Teresa Amabile, the author of the KEYS creative climate survey (Amabile et al., 1996), with established literature on the mediating role principals play in shaping their school climate (Hallinger et al, 1996; Leithwood and Janzi, 1990). The researcher was guided by Allen's framework while designing a two-school case study on leadership and creativity in a school climate, with the aim of discovering new perspectives on leadership attributes that foster creativity, as well as break new ground on attributes that hinder a climate conducive to creativity. The conceptual framework guiding the study, from chapter 1, is illustrated below in two figures.

Figure 3

The Mediating Effect Of Leadership On Creativity Through School Climate

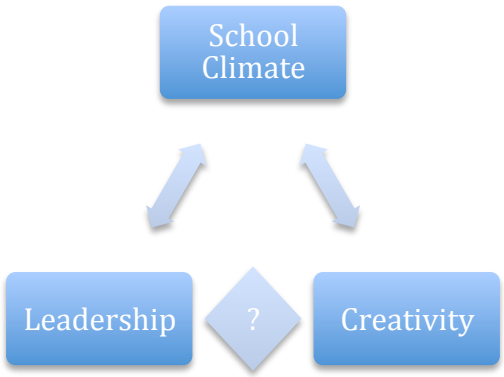
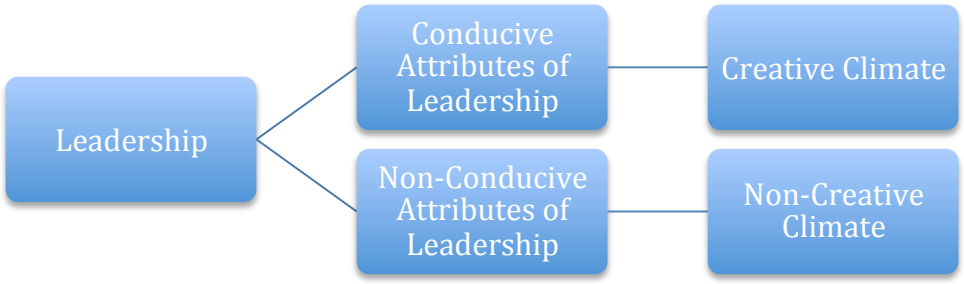


Figure 4

Leadership Promotes Creative or Noncreative School Climates Through Leadership Attributes Conducive Or Non-Conducive To Such a Climate



In order to perform the study, four research questions were drawn up that aimed to systematically arrive at, or at least point the way toward the answers. These were:

1. What are teachers' and school leaders' conceptions of the following:
    a. Creativity and its manifestation in the classroom as enacted by both students and teachers?
    b. A climate conducive to creativity in the classroom?
2. What organizational arrangements are needed to facilitate the enactment of a climate conducive to creativity, as perceived by principals and teachers?
3. What attributes and practices of school leadership promote or hinder a climate conducive to creativity as perceived by principals and teachers?
4. How do attributes and practices of school leadership promote or hinder a climate conducive to creativity as perceived by principals and teachers?

The first two research questions were intended to provide a reference point with respect to how creativity is perceived and understood by the participants, from which all other answers to research questions are interpreted. This creates a sort of fail-safe, a means to orient the teachers' and school leaders' perceptions of leadership attributes shaping school climate from their conception of creativity and the organizational context. It is believed by the researcher that a study following the grounded theory methods such as this

one necessarily needs to present a point of origin for the interpretation of the data, and presenting that point of origin from the way the participants define creativity and organizational arrangements.

Summary of the Results

A quick summary of the results of the study pursuant to the four research questions are covered here. Four themes, common among participants in the interviews and focus groups, emerged to respond to the first question that relates to how teachers and school leaders conceive of creativity and a climate conducive to creativity. For the definition of creativity, participants alternately described it as (1) the freedom and autonomy to create, (2) the ability to "think outside the box", (3) as an innovative solution to a problem, or (4) a pedagogical tool to improve student learning. Participants outlined a climate conducive to creativity as providing (1) autonomy within a clear structure, (2) a sense of encouragement of new ideas, (3) a feeling of a collaborative work environment, and (4) an open-mindedness to change.

The second research question aimed to examine participants' understanding of the organizational arrangements needed to manifest a climate conducive to creativity. Here participants provided more varied answers, the range being couched within the following 7 themes: (1) providing autonomy within a clear organizational structure, (2) practices communication with transparency, (3), showing a low tolerance to risk, (4) having formalized regular feedback, (5) securing access to resources, (6) providing a system for continuous professional development, and (7) encouraging originality.

The third research question addresses the main target of the study, the attributes of a principal that foster or hinder a climate conducive to creativity. The themes that emerged

from the participants' answers for attributes that foster creativity are (1) communicating a desire to promote creativity, (2) practicing distributive leadership, (3) being open initiatives and new ideas, (4) having a love and passion for the work, (5) being accepting of differences and reserving judgment, (6) showing support, encouragement and understanding toward staff, and (7) placing students as priority. Attributes that hinder a climate conducive to creativity from a principal are (1) being outcome oriented, (2) running a one man show, (3) placing increased workload pressure on teachers, (4) lacking a clear vision, and (5) showing negative or destructive criticism to staff.

The fourth research question aims to understand how these attributes foster or hinder a climate conducive to creativity, as perceived by the teachers and school leaders. The answers here are varied and circumspect.

Generally, leadership attributes that foster a climate conducive to creativity are understood by the teachers and leaders as doing so by modifying the general sentiment of the teachers or students towards the organization and thus resulting in the desired behavior (see table 11). For example, being passionate for work instills a sense of vigor and motivation in others to work, showing acceptance of differences communicates a feeling of equality to the staff, and stating that students are priority reiterates the focus of the organization on the students as a whole. Each attribute is explained to communicate a particular factor that modifies the school climate.

Table 11

How leadership attributes foster a climate conducive to creativity

Attribute	Effect

Communicating Desire to Promote Creativity	-makes expectations clear for everyone
Practicing Distributive Leadership	-everyone feels they have a stake in the outcome
Openness to Initiatives/Ideas	-being receptive to new things empowers others to propose new things
Love and Passion for the Work	-provides a source of motivation to keep going during challenges
Acceptance of Differences/Reserving Judgment	-acceptance and being nonjudgmental extends a feeling of equality among staff
Showing Support, Encouragement, and Understanding	-encouragement and support provides the motivation to try something new
Students are Priority	-placing students at the center of the priority keeps goals and objectives in perspective

Just as leadership attributes that foster creativity adjust the sentiment as perceived by the teachers in some positive direction, hindering attributes of leadership shift the dial in such a way as to discourage creativity initiatives (see table 12). For example, if a leaders is particularly outcome-oriented, and their vision aligns and communicates this sentiment, teachers and students might sense that the principal is less attuned to a more divers definition of achievement that would be more inclusive of the diversity of individuals, and ultimately that the principal is less concerned with the learning process of individuals. More acutely, running a one-man show, where the principal exercises tremendous control

over all aspects of management and decision making, can communicate a sense of distrust in the competence and capabilities of the staff.

Table 12

How Leadership Attributes Hinder a Climate Conducive to Creativity

Attribute	Effect
Being Outcome Oriented	-standardizing outcomes neglects the diversity of individuals -focusing on the outcome ignores the learning process
Running a One Man Show	-running a one-man show breeds a climate of distrust
Increased Teacher Workload	-overloaded schedules and heavy deadlines leave no room to tinker with creativity
Lack of Clear Vision	-lack of vision fails to place value to creativity in the school -fails to communicate vision for creativity
Negative Feedback	-demotivates teachers and learners and breeds a climate of fear

Discussion of the Results

The research questions were designed to build on a small study aimed at the intersection between leadership attributes, workplace climate, and creativity. It aimed to fill

a gap in the literature about how these three components interrelate; and about the mediating role of the principal on school climate and creativity. The data gathered were fairly substantial, and the findings open several new avenues to pursue for this field. The following sections will address how the findings relate to the literature for each theme that informed the research questions, namely, the conception of creativity, the conception of a climate conducive to creativity, organizational arrangements, attributes of leadership that foster creativity, and attributes that hinder a climate for creativity. Following the discussion of how the findings compare with the literature, the researcher presents a discussion of the findings as they pertain to the unique school context of both schools, from the perspective of the researcher's lived experience in those schools.

Conceptions of Creativity

The literature review for this study began with a definition of creativity. The reason for that is because the conception of creativity varies widely in the literature and across the decades of research into the phenomenon. Therefore, it was important to situate the participants' answers within their conceptual context. The overall findings show a confusion and misunderstanding of the definition of creativity. Let us begin with similarities between the literature and the way the participants understood the term.

Similarities Between Findings and the Literature

The definition of creativity in the literature most commonly refers to a process of generating something new or novel. The definition that was adopted at the start of this study states that creativity is "the generation of ideas that are new and meaningful within the context that they were generated". Bearing in mind this point about the generation of a new idea of value to its context, several participants' answers fit this understanding to some

extent. For example, four participants in the study describe creativity as *a process of innovative problem solving*. Teacher E talked about how creativity utilizes knowledge to generate something new. This conception of creativity fits the definition adopted for this study, and echoes similar conceptions of the term from the literature.

In a similar vein, five participating teachers placed creativity within the context of a tool for improving student learning. Teacher I views creativity as emerging in the context of teaching from finding *innovative ways to impart knowledge to learners*. When Teacher I says "I'm creative for creating this critical thinking problem", he is describing the generation of something new or meaningful (a fresh or novel approach to a lesson or a critical thinking exercise) within the context where it is generated (the curriculum, the classroom, so forth). In this regard, these particular conceptions of creativity parallel aspects of the definition of creativity adopted for this study.

Differences between Findings and the Literature

Participants' answers regarding how they conceive of creativity tended, as often as not, to veer from the literature. Most participants, for example, commonly referred to creativity as the act of "thinking outside the box". This answer is somewhat problematic. While it is not unusual to equate thinking outside the box with creativity, the literature is clear in describing thinking outside the box as part of a process, with the production of something new and meaningful as the final outcome. Creativity, in short, has to produce something of value or meaning as an end result. It is clear then, that thinking outside the box is only a step in the process, rendering the participants' answer incomplete.

More problematic is the conception of creativity as *freedom and autonomy to create*. Some similar variation on this theme was provided by both principals as well as 2

teachers from the focus groups. The problem with this answer is that it doesn't provide a conception of creativity (as per the definition adopted by this study or otherwise) so much as it attempts to describe a climate conducive to creativity. It confuses creativity with the climate needed to promote it. The literature frequently has similar descriptions about factors that foster creativity in a climate. For example, Shalley and Gilson (2004) describe autonomy as one of several contextual factors that foster creativity. Similarly, Hunter et al. (2007) identifies autonomy as a climate dimension for creativity. Addressing the freedom aspect of the theme, Davies et al. (2013) describes having flexible use of time as a beneficial factor for promoting creativity. Some studies even talk about curricular flexibility as a facilitating classroom context for creativity (Beghetto and Kaufman, 2013).

These answers imply a certain degree of confusion relating to a definition or understanding of creativity. Whether this, at parts ambiguous, at parts incomplete, conception of creativity is a phenomena limited to the participants in the study, or pervasive among their peers or among all schools, opens an avenue for investigation. How this relates to the context of the schools' common management history is discussed in a section further down.

Conceptions of a Climate Conducive to creativity

Participants had a variety of answers describing how they perceive a climate conducive to creativity to be. Much of what was said echoes what was reported in the literature.

Similarities Between Findings and the Literature

The principals of both schools talked a great deal about a climate of creativity existing within a structure. For example, when asked about how she envisions a climate

conducive to creativity, Principal A talks about *Autonomy Within a Structure*. "I see freedom, but within a structure", she says, and frequently repeats the assertion that she is comfortable with the "corporate idea of education", meaning the well-defined organizational structure (note: more on this later in the section below). Principal B similarly talks about there need to be "procedures, rules, guidelines", in short, a structure around the whole vision for creativity. The idea of autonomy within a structure as a climate that fosters creativity is not unique, as there is some evidence for it in previous studies. For example, Beghetto and Kaufman's (2014) paper on classroom contexts for creativity place a degree of responsibility on school administrators to provide "enough structure and curricular flexibility for teachers to teach for and with creativity" (p. 65). In other words, it is as if to say a room for creativity literally means providing a room for creative activities, whether physically or metaphorically.

The findings include broad support by the participants for encouragement and open-mindedness as climate factors conducive to creativity. This too is in line with established findings in the literature. Encouragement to pursue new ideas is said to be a common component of a climate conducive to creativity (Brundrett, 2004; Craft, 2003). Open-mindedness allows for new ideas to be put forward and presented (Craft, 2003; Kandler et al., 2016).

Both principals along with several teachers also talked about a *collaborative work* environment as being conducive to creativity. Findings from Brundrett's (2004) study on leadership and creativity similarly identified a "mixture of delegation, collaboration and individual activity" (p. 75) facilitates creativity in the school classroom. Davies et al.

(2013) systematic literature review on creative learning environments specified peer collaboration as one of the important factors for a climate conducive to creativity.

In summary, one can say that findings from the participants on how they conceive a climate conducive to creativity is mostly supported by and relatable to established studies on the phenomenon.

Differences between Findings and Literature

Though there is evidence from the literature showing the importance of organizational structure for promoting creativity, there is also evidence of rigidity of this structure as a hindrance. De Souza Fleith (2000) warns of excessive structure as a hindering component of a climate for creativity. The theme about structure voiced by the principals can be taken both ways, as something necessary to provide the room for creativity, or as something oppressive and overly rigid that hinders it. Determining whether this is the case at the schools is difficult, but it is notable that this is an answer primarily provided by the principals, with only one other teacher mentioning organizational structure as a component of a climate conducive to creativity, notable because principals, as school leaders, view the organization necessarily from their position top down. More on this point will be discussed in the section on School Context.

Organizational Arrangements

When asked what organizational arrangements are needed to facilitate a climate conducive to creativity, the findings show a list of answers that befuddle, for a lack of a better term, the researcher. Here the participants' answers seem to fall everywhere, sometimes hitting something close to the target (professional learning programs), other times missing it altogether. This broadness of answers about organizational arrangements

seems to reflect a generally ambiguous understanding by the participants of the role and nature of the organization as a whole. The participants' answers show an unclear conception of what counts as organizational arrangements, and organizational structure in general. For this reason, we start with a brief breakdown of what is meant by the term.

By organizational arrangements, the research question is referring to how the organizational structure facilitates creativity. As touched upon in chapter 4, the two case schools existed until recently as part of a larger School Network that had a strong support structure with numerous supervisory and oversight bodies and a large list of academic support departments, what Mintzberg would call a technostructure (Hoy & Miskel, 2008). According to the literature, these academic, technical, supervisory, and administrative divisions effectively facilitate and coordinate the distribution and allocation of tasks, duties and supervisions that work to accomplish the organization's vision and mission (Pugh, 1990). In education, it usually includes supervision of instruction and curriculum coordination; it could include a budget committee, or a resource management department. Some of the organizational arrangements can also include an embedded system of professional learning development, possibly connected to human resources, and even, as it does in these schools, an advisory department that provides a reflection hour in the mornings, determines the theme of the year, and prepares activities and sets goals throughout the year related to that theme. The schools in this study have many, if not all, of these arrangements within their school structure.

Let's begin by looking at how participants' answers compare with the literature on the topic. A discussion of how these findings pertain to the school context will follow.

Similarities Between Findings and the Literature

The participant answers that most closely resemble organizational arrangements are *regular formal performance feedback, professional development*, and *access to resources*. Mayfield and Mayfield's (2008) study on how to nurture garden-variety creativity lists a set of model leadership behaviors that develop creativity in the workplace. These include providing regular performance appraisals and securing access to resources. Access to resources is a very common organizational factor for promoting creativity (Shalley & Gilson, 2004). Performance feedback and professional learning, especially practices such as coaching, self-reflection, and goal-setting, are found to impact positively on the creativity of the work climate (Blase & Blase, 2000).

Several other themes singled out in the participants' answers also resonate with findings reported in the reviewed literature. For example, *risk tolerance* is sited by Shalley et al. (2004) as a necessary organizational level factor for fostering a climate conducive to creativity (Shalley & Gilson, 2004), although it is not clear in that study how the organization enables a tolerance to risk. And *encouragement of new ideas*, as shown before, is frequently stated as a factor conducive to a climate for creativity (Brundrett, 2004; Craft, 2003).

Differences between Findings and Literature

The problem with the similarities in the findings of this research question and with relating them to the findings in Mayfield and Mayfield's (2008) paper is that the latter study is specifically about leadership behaviors, not organizational arrangements per se. It can be assumed that these leadership behaviors are meant to enact such arrangements through the organization, but what would those arrangements be exactly? And how do they foster a climate conducive to creativity? Furthermore, discussion on formalized feedback

and promoting professional learning involves a system reinforcement that falls on middle leadership in the school (Blase & Blase, 2000). The role of middle management in the school, from heads of divisions to academic coordinators, was not included in this study, so a clear delineation from organizational arrangement to systemic application cannot be drawn without investigating the connection with middle managers supervisors.

Also, as discussed in the previous section, there is support for the concept of *autonomy within a structure* as a factor that fosters creativity, although this answer is given by the principals for both RQ1 on how a climate for creativity is conceived, as well as RQ2 about what organizational arrangements would enact this factor. This implies that there is not a very clear idea of what organizational arrangements means exactly, even by the principals. This point will be discussed further in the School Context section.

Furthermore, many of the themes described by the teachers, such as risk tolerance, and encouragement of new ideas, which carry similarities with findings from the literature, are not identified in the literature as organizational arrangements, but as factors of a climate conducive to creativity. Even access to resources is not necessarily a certainty as an organizational factor needed for fostering creativity, as at least one study found that an abundance of resources might negatively impact creativity in the classroom (Csikszentmihalyi, 1997). What is missing here is how, or what, does the organization do to manifest such elements in the school climate, that they may ultimately foster creativity?

Finally, there is the theme that doesn't seem to have precedent in the literature, *communication with transparency*. All the participants that described this component belonged to School A. In fact, as will be seen in the subsequent section on attributes of leadership, clarity of vision, sharing the vision, and communicating the vision, are related

elements that often come up from the teachers in School A as factors for fostering creativity in school. Perhaps they feel a lack of communication, or that communication in their school is not as transparent or as forthcoming as they would like it to be. Teacher E frequently alludes to this when he speaks about how there is nothing clear about creativity in the school vision. This particular point is further discussed in the section on School Context.

Attributes of Leadership that Affect a Climate Conducive to Creativity

The core target of this study upon which all research questions circle, is the determination of attributes of leadership that enable or hinder a climate conducive to creativity, and how they do so. Participants had a lot to say about this, with some of their answers supported by the findings in the survey, some by the literature, and some forging new ground that will need further exploration. We start, as before, with similarities with the literature.

Similarities Between Findings and the Literature

The findings on attributes of leadership that foster a climate conducive to creativity are generally well reflected in the literature. Themes such as *communicating desire to promote creativity*, *openness to new ideas*, being *accepting of differences*, and showing *support and encouragement*, are all well represented in previous studies as leadership attributes favorable for fostering a creative climate (Allen, 2016; Beghetto & Kaufman, 2014; Benedek et al., 2016; Craft, 2001; de Souza Fleith, 2000; Kandler et al., 2016). Allen's (2016) case study reinforced all the above-mentioned attributes while examining the case of one principal that actively sought to foster creativity in her school. Openness has been demonstrated to improve creativity in school teachers (Benedek et al., 2016), although the study provides indirect support for the observed findings as it does not look at

leadership attributes. Teachers perceive a climate conducive to creativity in the classroom as being accepting of different ideas (de Souza Fleith, 2000).

Most of the participants in school A, as well as the principal of School B, cited *distributive leadership* as an attribute that promotes creativity. In fact, there is a wealth of support for this position in the literature, with several studies highlighting the effect of collaboration and distribution of responsibility as facilitating creativity in schools (Brundrett, 2004; Hulpia et al., 2011; Shalley & Gilson, 2004). A systematic literature review by Davies et al. (2004) also found evidence in support of collaborative efforts as promoting creativity in work environments.

Some participants discussed the attribute of *communicating a desire to promote creativity*, which has important precedence in the literature. Sharing a vision of creativity is necessary to promote creativity. Leaders that are keen on seeing creativity in their workplace need to communicate this desire to their employees in order to effect such a change in their work climate (Mayfield, 2009; Shalley & Gilson, 2004).

Finally, there is some support for the theme of *prioritizing students* as a workplace philosophy from the leader to the employees and learners that impacts the climate for creativity. Allen's case study of a principal that sets out to promote creativity in the school identifies placing students as priority as a specific attribute of leadership that fosters creativity (Allen, 2016).

Although, like other themes explored so far, there are few if any studies about attributes of leadership that hinder a climate conducive to creativity, there is quite a bit of literature about leadership and creativity, and climate factors that negatively impact creativity. Findings from this study in this regard show a good deal of support from the

literature that identifies attributes by participants as a hindrance to a climate conducive to creativity. For example, one of the themes highlighted by participants, particularly principals, is the negative impact of *being outcome oriented*. The Principals here mean being focused on results that are based on standardized testing, especially the national exams. Reducing standardized testing has long been a talking point among creativity experts in education (Sternberg, 2015). Studies have demonstrated the detrimental effects of the stress of high expectations on innovation, and showing that removing high stakes examinations has a positive impact on creativity in the schools (Tan, 2015; Tan et al. 2016). Wong-Kam (2012) high expectations hinder individual innovations and that traditional notions of success in general have a dampening effect on a climate for creativity (Wong-Kam, 2012). These studies reinforce Principal A and Principal B's perceptions about the deleterious effect of being outcome-oriented on creativity in the classroom have merit.

Craft (2003) suggests that a "centrally controlled pedagogy" (meaning, in this study, a more authoritarian leadership style) can be a hindrance to a climate for creativity in the classroom, a finding that implies that a *one-man show*, as described by the two principals in this study, is not conducive to creativity. The finding from the literature is a small one, and leaves open possibilities for more research on authoritarianism and creativity in schools.

Differences between Findings and Literature

Several leadership attributes identified by participants, for both fostering and hindering a climate conducive to creativity, have little or no similarities in the reviewed literature in this context. These include, *love and passion for work* as a positive attribute, and *negative feedback,* and *lack of vision*, as negative attributes.

The variable *passion for work* is not well studied in the literature as a leadership attribute for creativity. Amabile (1997) talks about how love for one's work can be a motivating force for creativity in the classroom, while Luh (2012) discusses the mediating role of passion as a cognitive style of students for creative achievement. There is no direct study supporting passion as a leadership attribute that fosters creativity. There is circumstantial evidence though, that suggests that passion for work is an essential indicator for effective leadership in general (Goertz, 2000).

The leadership attribute with the broadest consensus among participants in the study for hindering a climate conducive to creativity (5 out of 8 teachers, no principals) was *negative feedback* (or destructive criticism). There is not much in the literature that focuses on the impact of critical or negative feedback from the school leader or superiors in general on the climate for creativity. Most studies highlight the positive aspects of an environment, such as support and encouragement, as agents for creativity, and the opposite aspect is simply implied or assumed. For example, Kandler's et al. (2016) thorough and comprehensive study on the role of environmental factors on creativity specifies the "absence of social control or evaluative threat" (p. 242) as a necessary positive context for a creative climate. This makes negative feedback the clearest finding from this study of a leadership attribute that hinders a climate conducive to creativity.

A leader showing *a lack of vision* was communicated by one teacher as a leadership attribute that hinders creativity. The lack of studies on leadership attributes that hinder creativity means that this insight is a fresh and relevant observation. It is also supported circumstantially by the fact that there is already a good deal of evidence from the literature on the importance of communicating a desire or a vision for creativity in the classroom as a

positive leadership attribute for a climate conducive to creativity (Allen, 2016; Shalley & Gilson, 2016).

The other themes that participants voiced in favor of attributes of leadership that foster or hinder creativity have precedence in literature only as factors that affect the climate, or the organization as a whole. There is little evidence in the literature about these being attributes of a single individual leader in the school.

For example, the principals of both schools, were eager to tout *practicing distributive leadership* as a leadership attribute that is conducive to a climate for creativity in the school. While there is a good deal of support for this in the literature, the literature also describes this more as an organizational arrangement, not a characteristic of an individual (Alanezi, 2016; Hulpia et al, 2011; Shalley & Gilson, 2004). For example, Shalley and Gilson (2004) talks about distributive leadership as part of planning on an organizational level, particularly about having a flatter organizational structure with "wider spans of control" to workplace creativity. Hulpia et al. (2011) likewise talks about leadership "teams" that facilitate teacher commitment to school goals. Ultimately, they are talking about distributive leadership as a mechanism enacted by the organization as a whole, not a specific attribute of an individual.

Another example is how several teachers in the study talked about the hindering effect that work overload has on being creative in the classroom. There is a good deal of literature on this topic as well. For example, Ahmadi and Besançon (2017) warn that an overloaded curriculum can hinder creativity. Findings from Ferizovic's (2015) dissertation analyzing KEYS surveys of 244 teachers found workplace pressure to be a major hindrance on teacher creativity. The difference is that these and other studies do not single out the role

of the principal or school leader in the manifestation of an overloaded schedule. That the teachers assert this as a negative attribute in the principal suggests either that their principal plays a more direct role in overloading the teachers at their schools, or possibly a misunderstanding on the part of the participants on the distinction between leadership and structure impact of what hinder creativity.

Some aspects of the findings are surprising precisely because of their absence. For example, aside from Principal A and Teacher E from School A, no other participant talked about the need to communicate a desire to promote creativity as an important leadership attribute to promote creativity in the school. This is notably different from the literature, where there is great emphasis placed on leadership practices of communicating goals such as promoting creativity.

The next section will delve deeper into analyzing the results against the context of the schools' history, to try to better understand the meaning of the findings, including some of what were discussed in the preceding sections.

Contextualizing the Findings of the Study

Looking at the findings of the study strictly from the perspective of the existing literature goes some way to understand and partially fill the gap of knowledge that exists on the intersection of school leadership, school climate, and creativity in education. To better understand the implications of the findings though, it is necessary to consider the context of the subjects being studied. Educational practices, especially leadership practices, are complex endeavors nuanced by multiple factors, including social, geographical, cultural, ideological, and historical influences, among others (Clarke & O'Donoghue, 2017). Understanding leadership and management theories requires placing them within their

cultural context, culture here referring to national, regional, or even local culture (Hofstede, 2005). More succinctly, in studying leadership, it is important to understand what works in what settings, and this means situating the study within its appropriate context (Hallinger, 2011). In a review of leadership and context, Clarke and O'Donoghue (2017) define context (according to Braun et al., 2011) by differentiating between four contexts for school leadership (situated contexts, professional contexts, material contexts, and external contexts). Situated context is defined as context that is related to the school's history, setting, and intake (intake here refers to the diversity of the student body) (Braun et al., 2011). The historical, "situated context", that accounts for the school's history and setting, "where history matters" (Osborn et al., 2002, p. 708, as quoted in Clarke & O'Donoghue, 2017, p. 172), is the most suitable context to be highlighted for this discussion (Braun et al., 2011; Clarke & O'Donoghue, 2017). Because with the two schools presented in this study, history does matter.

The two schools present a unique opportunity to understand the findings from the context of their common management history. As described earlier at the beginning of chapter 4, both schools were run for a period of at least 14 years within the School Network, a broad umbrella management board that oversaw the administration of 4 separate schools with a common religious affiliation. For this reason, the following presents a discussion of the findings of the four research questions as they pertain to the schools' situated historical context. It is divided into 3 sections: the conception of creativity, the ambiguous understanding of climate and organizational arrangements, and the conflation of leadership attributes for creativity with notions of effective leadership. Here, the interpretations of the findings will also rely on data pertaining to the researcher's lived

experience as an insider, both within the School Network, as well as coordinator in one of the schools after the Network.

Contextual Understanding of the Findings on the Conception of Creativity

From the onset, the results of the first research question on the conception of creativity as provided by the teachers and school leaders presents a conundrum. Initially, the first research question aimed to create an anchor, a reference point from which to interpret the answers to the remaining research questions. The results show that participants do not have a clear understanding of the concept of creativity, with their answers providing, at best, an incomplete definition. This has some significance that is not immediately apparent outside the context of the schools' School Network history. The School Network to which they belonged once touted innovation as one of the pillars of their vision and mission for the schools. It is telling that the schools emergent from the dissolution of this Network failed to articulate a definition of creativity in a coherent and comprehensive manner. While the results coming from the teachers alone could be dismissed, the deficit from the principals' perspective, effectively the leaders of the schools, cannot.

What can be the reason for this? Either the understanding of creativity in the schools, following the dissolution of the Network, has faded due to a reduction in the circulation of the concept within the schools' communication, either it has ceased to be central to the mission or vision of the schools, or it was never very well defined even in the School Network era.

The latter reason offers the most likely explanation. The dissolution of the School Network was not so long ago that its influence could already have faded, as the first possibility suggests, nor could the definition of creativity have been forgotten even if it is

no longer central to the post-Network school vision. Most likely, the School Network had been communicating the *desire* for creativity more than the *definition*, or at least, having already shared the vision for creativity that they desired, left the articulation of that definition (the application on the ground) to the educators to work out. Meaning that no one really ever properly defined or understood creativity in the School Network, and this incomplete or partial comprehension of the term has carried on in the schools following the Network's dissolution.

Contextual Understanding Regarding Conceptions of a Creative School Climate and Organizational Arrangements

On the surface, findings relating to how a climate conducive to creativity is conceived, and what organizational arrangements would facilitate a climate conducive to creativity, mostly reflected some of what is found in the literature. Comparing the answers from both research questions, the most obvious observation about the findings is that some of these answers repeat between the two questions. What is revealing is the difference in these answers between the principals and teachers, and between School A and School B.

For the second part of the first research question, pertaining to the conception of a creative school climate, principals talked about autonomy within a structure, about the need for guidelines, rules, procedure, and about a collaborative work environment. Basically, they described organizational arrangements. On the other hand, the teachers talked about open-mindedness to change and encouragement of new ideas, namely, components of a school climate. In short, principals are equating school climate with organizational structure, while teachers are describing organizational arrangements as climate factors conducive to creativity. Regarding the second research question, most of the answers

consistent with a conception of organizational arrangements, such as professional development, resource access, formalized feedback, and collaborative leadership, came from Principal B, with some consistent answers from some of the teachers of School A. None of the answers are explained in terms of how they facilitate a climate conducive to creativity.

This tells me two things. One, principals place little emphasis on the difference between school climate and organizational structure. It is as if school climate is a component of the organizational structure, like supervision of instruction. Two, most participants do not have a clear conception of organizational structure and how it pertains to school climate.

From the context of the emergence of the two schools out of the massive organizational structure of the School Network, this makes sense. The principals were not the leaders of their schools so much as their schools' representatives at the executive board of the broader administrative entity. It is the executive board that makes all the organizational decisions. The principals really viewed their schools as components of a larger network, a network whose organizational structure is so pervasive that no individual school under its auspices had a unique, distinctive identity. Any description of their own respective schools was expressed through the lens of the Network as a whole. As a consequence, it was not really possible to ascribe a distinctive "School A" climate or a "School B" climate. There was just the organizational, professionalized, School Network climate. This is most clearly reflected in Principal A's comment about her fondness for institutionalization and "this corporate idea", when asked about a climate conducive to creativity.

When talking about organizational arrangements, one is talking about how does one structure aspects of the organization that would facilitate the enactment of a vision. If this vision were about creativity and innovation (as the School Network's was), then one would look at the structure to relate how they planned the enactment of that vision. For the participants, when asked about organizational arrangements that would facilitate the enactment of a climate conducive to creativity, they simply listed structural components of the School Network, such as the human resources' annual performance appraisal, or the professional development program. They did not explain further about how these arrangements facilitate creativity; they were simply equating their old School Network's "innovative" vision with its organizational structure reflecting a blurred understanding of the interrelationship between them.

Contextual Understanding Regarding Attributes of Leadership for Creativity

The participants listed many leadership attributes they identified as promoting or hindering a climate conducive to creativity. Several of them though were unconvincing because they just describe attributes of effective leadership.

For example, several participants, including the principals, describe placing *students as priority* as a leadership attribute that fosters a climate conducive to creativity. But when asked how this promotes creativity, the participants' answers of keeping goals in perspective is less than convincing. Similarly, the attribute of *love and passion for the work* can only be described as providing the necessary motivation to succeed, an attribute more relevant to the broad definition of effective leadership practices.

Another outcome to RQ4 that warrant further examination is how practicing distributive leadership promotes creativity. Recall, for example, that Principal B places

great emphasis on a collaborative work environment as being an element of a climate conducive to creativity. Principal B essentially believes that a climate conducive to creativity is generated when there is a strong positive teamwork spirit in the workplace, when the teachers, parents, and learners all feel like they belong to one family. While she stands by this sentiment, carefully perusing the transcripts from the interview reveals no clues about how being part of a family or team promotes a climate conducive to creativity. Instead it shows that the principal was more likely thinking about what makes effective management, more than what attributes enable a climate conducive to creativity. The answer is, again, more consistent with effective leadership practices than with leadership attributes that foster a climate for creativity.

What can we make of this discrepancy? The most obvious explanation must be linked to the results of the first research question. Recall that with RQ1 it was discovered that participants have, at best, an incomplete definition of creativity, and in RQ2 it is revealed that there is a tendency to confuse climate and organizational structure, as well as to list organizational components of their dissolved School Network, as opposed to organizational arrangements conducive to a climate for creativity. This tells me that participants seem to just describe what they know, namely what they have been exposed to in the past, and conflating it with how they perceive leadership, organization, and climate at the intersection for creativity. When looked at from this perspective, i.e. the context of the schools emerging from a dissolved professional school network, the answers about leadership attributes become consistent with the other answers.

Findings on leadership attributes that hinder a climate conducive to creativity provided some new knowledge with little precedent in the literature. Here too, though, we

have the opportunity to reinterpret the findings through the contextual lens of the schools' management history.

For example, looking at some of the answers, we find being *outcome oriented* and *running a one-man show* to be negative attributes provided only by the principals. Given that decisions used to be made by collaboration through a large executive board gives a revealing context to these answers. These principals have not been in the practice of running the schools and taking decisions by themselves. Here they are not so much voicing negative leadership attributes for creativity as they are bemoaning shouldering undesirable leadership responsibilities whose weight they used to share with other members of the executive board. Their explanations of how these attributes hinder creativity, referring to concerns of increasing likelihood of failure of meeting the vision of the school, or breeding distrust of the administration, are also indirect explanations at best, basically the concerns of a leader faced with running an organization on their own.

Recalling that Principal A has communicated to the researcher her reluctance at being at the driving center of the school's vision and mission, it becomes clear that what Principal A is actually communicating is her discomfort with the increased burden of taking on the full responsibility of leadership at the school, something that used to be shared with members of the executive board at the School Network.

On the other hand, the teachers' answers regarding negative leadership attributes (increased workload, lack of vision, negative feedback) were more descriptive of school climate than leadership practices. This again is a consequence of the School Network's lack of individual leadership of schools, so that there is no quality that teachers could attribute to an individual that they would identify as a hindrance to a climate conducive to creativity.

Instead they listed climate or environmental factors that prevent them from pursuing creativity in general, such as having a high workload, or fear of negative backlash from superiors. What this tells me is that the teachers do not really have a clear idea what leadership attributes promote or hinder creativity.

To summarize this section, the findings of the study provide flat similarities or differences with what is known from the literature. When situated within the context of the schools' common management history (meaning that of the School Network), a more three-dimensional picture emerges, where participants' misconceptions of creativity, confusion over the difference between school climate and organizational arrangements, and conflation of leadership attributes for creativity with effective leadership practices, are more consistent with and a reflection of the conceptual limitations of the dissolved School Network organization from which they have recently emerged.

Conclusion

This qualitative research study shed light on attributes of leadership that foster and hinder a climate conducive to creativity. The findings of the study reinforced some of the existing evidence that had begun through Allen's (2016) study of school principal attributes that promote creativity, while yielding new attributes and perspectives on how school leaders affect the school climate as a whole. The reinforced attributes of a leader promoting creativity include being *open to new ideas*, *accepting of differences*, *showing encouragement*, *communicating a desire to promote creativity*, and *placing emphasis on the students as priority*. New leadership attributes for promoting a climate conducive to creativity that need further study include showing *passion for work* and *practicing distributive/collaborative leadership*. Leadership attributes that hinder a climate conducive

to creativity are wholly new territory ripe for further studies, and include being *outcome-oriented*, running *a one-man show*, *lacking a vision for creativity*, placing undue pressure and *increased workload* on teachers, and delivering *negative feedback*.

It is true that there are many studies looking at leadership and climate, as well as climate factors and creativity, but this study attempted to go further by looking at the three elements as part of a whole system to try to understand how they interact and interrelate. From this perspective, the study was partially successful in building on previous studies, while forging new avenues for further research into the inter-relational dynamic of leadership attributes, school climate, and creativity in schools. Furthermore, the study unearthed unexpected new avenues for research in education, specifically in relation to misconceptions of creativity, lack of a firm grasp of organizational structure and school climate, and a conflation of effective leadership with leadership aligned towards a specific goal, such as promoting creativity.

Unique Views from the Participants on Creativity

One of the unexpected results of the study was discovering the diverse views of participants on the conception of creativity in general. At the start of the study, it was assumed by the researcher that asking participants about how they conceive creativity was a formality to establish a common groundwork for subsequent investigative questions. Instead it was revealed that participants had divergent and incomplete ideas of what is creativity. This finding by itself has some value that needs to be pursued in further studies and in diverse schools. It is important to understand how and why there is such a lack of consensus on what creativity is and how it is manifested, and any further studies into this

domain will need to establish or communicate a common definition among participants to ensure a common starting point for creativity studies.

Conflating Climate with Organizational Arrangements

Another tangential discovery in this study was the misunderstanding by participants of what organizational arrangements are, and conflating it with school climate. There is not a clear conception of the role of the organization and how it is structured for its functions, and this also needs to be explored further.

Conflating Effective Leadership Attributes with Leadership Attributes for Creativity

As a consequence of a lack of a clear understanding of what creativity is, participants conflated attributes of a leader conducive to creativity with attributes for effective leadership. This is evident when participants were unable to explain how a particular attribute, such as distributive leadership, promotes a climate conducive to creativity.

A Project Interrupted and its Impact on Creativity

My own qualifications at interpreting the findings through the context of the schools' management history stem from having worked in the School Network for four years prior to its dissolution, followed by 2 years as an academic coordinator in one of schools thereafter.

The School Network was an ambitious enterprise, an enterprise to professionalize education within these religious schools, to formalize the schools through a well-defined structural arrangement, to empower teachers with support systems, a professional learning program, and access to resources, to communicate clearly set goals, values, mission and

vision not just to the local community, but, through the media, to the national audience. Like I said, it was an ambitious project.

The Network empowered teachers, and its implementation of a regular rotation of staff across campuses and positions was a far-sighted capacity-building success. Many of the employees that grew professionally during their tenure at the School Network moved on to successful careers elsewhere, and many of them credit the Network for building their skills and abilities to be able to adapt to diverse environments and conditions. I know the benefits of the rotational policy from personal experience, as I myself was shifted through 3 different positions over a period of 4 years, from Digital Curriculum Writer, to Assistant Head of Division, to Head of Academic Department. The anxiety and uncertainty of taking on progressively more challenging and demanding positions is offset by the tremendous support and encouragement bestowed by the organization on you as an individual. It was a professional life-changer.

But there was also a tempered spirit in the schools' hallways that was hard to understand, from my early perspective. I believe now it had to do with the increased professionalization of the organization that had this dampening effect on the spontaneity of regular everyday schoolwork. Everything needed to go through a labyrinth of proper channels to be considered and approved. It isn't that a creative proposal would most likely be rejected, but that the process of grinding out proposals and waiting for them to be processed through several management boards, increased the frustration of attempting creative initiatives, and dulled the spark that usually initiates them. The manifestation of spontaneous behavior became less and less tolerated as unprofessional; extroverted expressiveness was frowned upon. Employees as a result assumed a sober and reserved

demeanor. The professionalized bureaucracy of the Network became a barrier to creativity even as it voiced a desire for innovation in its school vision. Having relocated from a secular private international school with a rather loose atmosphere, I found there was little degree of freedom that might nurture creativity in the halls of the schools managed by the School Network.

Looking at implications of the study's findings, we see teachers communicating a desire for continuous feedback, a fear of negative feedback, the inability to distinguish between leadership attributes and organizational arrangements, admitting they are not ready or able to be creative without guidance or assistance, communicating a need for professional development, coupled with an incomplete understanding of creativity due to an overreliance on the School Network's imposed organizational arrangements and its presumed support for innovation. The zealous attempt at building a professional bureaucracy through establishing the network and formalizing it organizational arrangements has produced a faculty that was highly dependent on the organization for all its practices and processes followed, even those linked to creativity. In the collapse of this structure, and the directive support it provided to shape their professional practices, the faculty were left lost between their organizationally induced professional practices, and their readiness to enact them independently. The ill formed conceptions and confused answers suggests that even after its dissolution, the School Network's impact on teachers has left them still highly dependent on upper management for guidance and approval.

In conclusion, interpreting the findings of this study through the data available to the researcher about the context of the dissolved School Network, has helped shed light on

the meaning of the findings that otherwise would have remained lacking in depth and obscure.

Implications for Practice

The findings from this study present intriguing opportunities for improving practice on the ground. Primarily, it informs educational institutions of the parameters that need to be set up in order to promote creativity within their halls. These parameters are defined as organizational arrangements that include having a vision that includes promoting creativity in the classroom, providing access to resources, and modifying school policies, procedures, and workloads to allow room for creativity for teachers. Creativity must be conceived as a product as much as a process, and to ensure the product one must set up the necessary conditions for the process to take place.

School leaders that aim to promote creativity can take heed of some of the findings in this study as well. Any organization that aims to promote creativity within their ranks must ensure that the adopted definition of creativity is clearly outlined as closely connected to the organizational, norms, values structural arrangements and leadership practices.

Pertaining to attributes of leadership that promote and hinder a climate conducive to creativity, leaders can shift their approach to management toward a more distributive style of leadership. Involving more players in the decision-making process, as well as empowering teachers to take initiatives could be a step in the right direction. This can be done by communicating certain professional norms that are repeatedly shown to promote creativity, such as acceptance of differences, encouragement of initiatives, and tolerance to risk. It would be well advised that leaders and educational managers reevaluate the articulation of the vision and ensure it communicates a desire for creativity clearly to staff.

Though school leaders effect a school climate indirectly through their interactions with heads of divisions and departments, it is nonetheless important to reinforce these attributes even with the middle management, as they have a trickle down effect.

Finally, educational leadership training programs can consider some of the findings when reevaluating their curricular program, especially as it pertains to leadership attributes and their mediating effect on organizational climate. The confusion demonstrated by teachers between leadership attributes and organizational arrangements, and between school climate and school structure, can inform education programs on how to better define and differentiate the two, possibly with concrete examples.

Recommendations For Further Research

A study on creativity, school climate, and school leadership in Lebanon has value in of itself for the single reason that no study on creativity in schools has been conducted here before. It opens new possibilities for future research in education in Lebanon, and will continue to add to the accumulated literature on creativity in education as a whole. Social research is a complex endeavor, and, to borrow from Clarke and O'Donoghue (2017), "no attempt at capturing a range of contextual factors can ever be exhaustive". This study is by no means exhaustive, and was constrained by several limitations. The following are a list of recommendations for further research into this particular topic, in suggested order.

Examining Schools with Low Creativity Index

This study featured two schools with a creative climate index that was almost identical. Future studies into leadership attributes, creative schools climates, and creativity

would benefit from exploring this topic from the perspective of a school with a low creative climate score, in order to shed light from the other end of the spectrum.

Examining Misconceptions of Creativity

It is the researcher's belief that, following the prevalent misconception of creativity in the findings, that further studies explore how common this misconception is among a diversity of schools and geographic regions. Any study into creativity necessarily must ask how participants understand creativity. Policy practices related to creativity would also benefit from being aware of stakeholders' limitations regarding the basic definition of creativity.

Research into Leadership Styles, School Climate, and Creativity

Studies into leadership attributes, school climate, and creativity would also grow the knowledge base by studying how different types of leadership mediate school climates for and against creativity. A look at schools with diverse leadership styles, including authoritarianism, transformative leadership, and laissez-faire leadership would help to better understand how leadership practices influence the school climate as well as a school climate conducive to creativity.

Gaps in Understanding of Organizational Structure and School Climate

Research into the scope of understanding of organizational theory and structure as well as how an organization arranges itself toward achieving its vision would go a ways toward mapping the knowledge gap into these concepts by educators, and possibly lead to informing education curricula on the topic.

Examining the Broader Lebanese School Context

The findings of this study are not readily generalizable to the broader population, but a good starting point would be to examine how they relate to other schools within the Lebanese education system. Do other Lebanese schools display similar trend toward stunted professionalism, misconceptions of creativity, confusions over leadership roles and organizational arrangements? What of these findings suggest an underlying cultural tendency? Studies looking into the role expectations of school leadership in Lebanon have already found that Lebanese school leaders tend to view their position as authoritarian with limited responsibility (Karami-Akkary, 2014). More needs to be done to understand how far this limited conception of role expectation extends in Lebanese educational administrations.

Larger Sample Sizes

Any further studies duplicating this one would also benefit from growing sample sizes, not just number of schools but also number of participating principals, teachers in focus groups, and number of focus groups in general. The larger the sampling of participants, the closer the results of the findings would be to generalizable knowledge that could inform practice.

Diversifying Types of Schools

Following along the same sequence of logic of larger sample sizes is a larger diversification of types of schools. This study included two nearly identical religious private schools in Beirut. Future studies into leadership attributes and creative school climate would improve the nascent findings in this study by including public as well as private schools, as well as drawing from the broad spectrum of religious and secular institutions from across rural and urban locations.

APPENDIX A

The adapted KEYS Teacher Survey

Demographic Questions:

Please indicate your total teaching experience
- 0-5 years
- 6-10 years
- 11-20 years
- 20 or more years

Please indicate how many years you have taught at this school
- 0-2 years
- 3-5 years
- 6-10 years
- 11-15 years
- 15-20 years
- 20 or more years

Subject you teach:
- Languages
- Science
- Socioeconomics
- History and Geography
- Civics
- Physical Education
- Other:_____

Grade(s) you teach:
- Pre-K
- Kindergarten
- Lower Elementary
- Upper Elementary
- Middle School
- High School

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

WORK ENVIRONMENT
Management Practices

Freedom: Deciding what work to do or how to do it; a sense of control over one's work
1. I feel little Pressure to meet someone else's specifications in how I do my work.
2. In my daily work environment, I feel a Sense of Control over my own work and my own ideas.

Challenging Work: A sense of having to work hard on challenging tasks and important projects
3. I feel that I am working on Important Projects.
4. The tasks in my work call out the Best in Me.
5. I feel Challenged by the Work I am currently doing.

Managerial Encouragement: A principal who serves as a good work model, sets goals appropriately, supports the work group, values individual contributions, and shows confidence in the work group
6. My principal's Expectations for my project(s) are Clear.
7. My principal Plans well.
8. My principal clearly Sets overall Goals for me.
9. My principal has good Interpersonal Skills.
10. My principal Values individual Contributions to project(s).
11. My principal is Open to new Ideas.
12. I get constructive Feedback about my work.

Organizational Motivation
School Encouragement: An organizational culture that encourages creativity through the fair, constructive judgment of ideas; reward and recognition for creative work; mechanisms for developing new ideas; an active flow of ideas; and a shared vision
13. People are encouraged to Solve Problems creatively in this school.
14. People are encouraged to Take Risks in this school.
15. Failure is Acceptable in this school, if the effort on the project was good.
16. Performance Evaluation in this school is Fair.
17. People are Recognized for Creative work in this school.
18. In this school, there is a lively and active Flow of Ideas.
19. Overall, the people in this school have a Shared Vision of where we are going and what we are trying to do.

Lack of School Impediments: An organizational culture that does not impede creativity through internal political problems, harsh criticism of new ideas, destructive internal competition, an avoidance of risk, and an overemphasis on the status quo.

20. There is Destructive Competition within this school.*
21. People are Critical of New Ideas in this school.*
22. People are concerned about Negative Criticism of their work in this school.*
23. People in this school Do Not feel Pressure to produce anything acceptable, even if quality is lacking.*
24. Top management is not Willing to Take Risks in this school.*
25. There is strong Emphasis in this school on Doing Things the Way We Have Always Done Them.*
26. This school is Strictly Controlled by upper management.*

Resources

Sufficient Resources: Access to appropriate resources, including funds, materials, facilities, and information

27. I am able to easily get the Materials I need to do my work.

Realistic Workload Pressure: Absence of extreme time pressures, unrealistic expectations for productivity, and distractions from creative work

28. I have too Much Work to do in too little time.*
29. I do not have Sufficient Time to do my project(s).*
30. There are too many Distractions from project work in this school.*
31. There are unrealistic Expectations for what people can achieve in this school.*
32. I feel a sense of Time Pressure in my work.*

OUTCOMES

Outcomes

Creativity: A creative school or unit, where a great deal of creativity is called for and where people believe they actually produce creative work

33. My Area of this school is Creative.
34. Overall, my current work environment is conducive to My Own Creativity.
35. I believe that I am currently very Creative in my work.

APPENDIX B

School Principal Interview Guide

- Can you tell me a little bit about your professional background as teacher and as administrator?
    - Were you a teacher/educator? How long did you teach? What grades?
    - How long have you been working in administration/management?
    - What are your professional qualifications for the position?

- Can you tell me about yourself as a school leader?
    - How long have you been working at the current school?
    - What is your role responsibilities in your current school?
    - Tell me about your philosophy, or vision, on educational leadership. What are the principles that guide you as you lead a school and shape its climate?

- How would you describe your Leadership practices?
    - What emphasis would you place on the following factors: freedom; challenging work; creativity; autonomy.
    - Can you describe how you display or enact motivation and encouragement in your school as a leader? What to you is a manifestation of a leader showing encouragement, support and motivation?

- What is your understanding/conception/definition of the following:
    - Creativity and its manifestation in the classroom as enacted by both students and teachers?
    - A climate conducive to creativity in the classroom?

- How would you describe your school in term of climate conducive to creativity in the classroom– how does it feel?

- What attributes of school leadership promote or hinder a climate conducive to creativity as perceived by principals and teachers?
    - In your opinion, what are the essential qualities a principal should have to effectively shape a school climate that encourages creativity?

- What practices of school leadership promote or hinder a climate conducive to creativity as perceived by principals and teachers?
    - How does it look like to you when a principal seeks to encourage creativity?
        - What actions/ decisions a leader should take in order to encourage creativity? Can you relate to me in an example what a principal intentionally did while trying to foster creativity among staff or students in his/her school?

- How do attributes and practices of school leadership promote or hinder a climate conducive to creativity as perceived by principals and teachers?
    - Can you give an example of how you have sought to reinforce or strengthen practices that promote creativity among your staff or students?
        - 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 coaching and encouragement and how you went about it? What about a student?
    - What importance do you place on resources in your ability to foster creativity in your school?
        - Tell me an example of how you secured resources for a creative project. Have you ever had a situation where you were unable to secure resources?

- What organizational arrangements are needed to facilitate the enactment of a climate conducive to creativity?
    - What characteristics of a school's organizational arrangements do you think are most important?
        - How do you monitor if your actions are having an effect? What do you look for/listen for?
    - What goals should a leader have in relation to promoting creativity in the school?
        - How should a leader communicate those goals with other stakeholders in the school?
    - What are some organizational procedures that you would like to put in place to promote a climate that is conducive to creativity?

- Is there anything else you'd like to share with me?

APPENDIX C

Teacher Focus Group Questions

- How would you describe your school's climate?
    - Why do you say that? What leads you to describe it in such a way?

- What management practices directly affect your work climate? In what way do they do that?
- Can you tell me a little bit about how your school leadership/principal plays a role in your school's climate?
- Tell me about resources in your school. How are resources acquired? How are the needed resources determined? How easy is it to get access to resources?
- What importance does your principal place on resources for fostering creativity in your school?
    - Can you give me an example of a time when he/she has facilitated resource acquisition for a creative project?

- What attributes of school leadership promote or hinder a climate conducive to creativity?
    - In your opinion, what are the essential qualities a principal should have to effectively shape a school climate?

- What practices of school leadership promote or hinder a climate conducive to creativity as perceived by principals and teachers?
    - How does your principal go about coaching/mentoring teachers and/or students?
        - Can you give me a specific example of a teacher who needed encouragement and how your principal went about it? What about a student?
- What is your understanding/conception/definition of the following:
    - Creativity and its manifestation in the classroom as enacted by both students and teachers?
    - A climate conducive to creativity in the classroom?
    - How would you describe your principal's goals regarding creativity in your school?
    - Can you tell me of an example where your principal intentionally tried to foster creativity in your school?

- How do attributes and practices of school leadership promote or hinder a climate conducive to creativity?
    - How has the principal's attributes or practices influenced your creativity in the school? Your students' creativity?

- What organizational arrangements are needed to facilitate the enactment of a climate conducive to creativity?

- What characteristics of your school's organizational arrangements/management do you think are most important for fostering a climate conducive to creativity?
- What school goals do you relate to promoting creativity in the school?
- What are some organizational procedures that you feel could promote a climate that is conducive to creativity?

- Is there anything else you'd like to share with me?

APPENDIX D

Complete Results of the adapted KEYS Creative Climate Survey

Domains	School A	School B
Freedom	**2.53 (.74)**	**2.43 (.70)**
(pressspec)[I feel little Pressure to meet someone else's specifications in how I do my work.]	1.85 (.52)	1.80 (.37)
(control)[In my daily work environment, I feel a Sense of Control over my own work and my own ideas.	3.20 (.95)	3.06 (1.04)
Challenging Work	**3.08 (.87)**	**2.90 (.64)**
(impproj)[I feel that I am working on Important Projects.	3.11 (.87)	2.73 (.64)
bestinme)[The tasks in my work call out the Best in Me.	3.20 (.80)	3.12 (.60)
challenged)[I feel Challenged by the Work I am currently doing.	2.93 (.94)	2.84 (.67)
Managerial Encouragement	**3.35 (.73)**	**3.42 (.50)**
expect)[My principal's Expectations for my project(s) are Clear.	3.39 (.65)	3.41 (.45)
plans)[My principal Plans well	3.41 (.65)	3.47 (.41)
setgoals)[My principal clearly Sets overall Goals for me	3.02 (.85)	3.24 (.63)
interpersonal)[My principal has good Interpersonal Skills	3.56 (.63)	3.43 (.53)
indcontr)[My principal Values individual Contributions to project(s).	3.31 (.79)	3.45 (.53)
open)[My principal is Open to new Ideas	3.61 (.70)	3.49 (.37)
feedback)[I get constructive Feedback about my work	3.15 (.83)	3.45 (.57)

Organizational Motivation	**2.87 (.82)**	**3.02 (.58)**
solvecreative)[People are encouraged to Solve Problems creatively in this school.	3.00 (.77)	3.12 (.60)
takerisks)[People are encouraged to Take Risks in this school.	2.43 (.97)	2.53(.58)
failaccept)[Failure is Acceptable in this school, if the effort on the project was good.	2.81(.75)	2.71(.69)
evalfair)[Performance Evaluation in this school is Fair.	2.74 (.89)	3.02(.63)
recognized)[People are Recognized for Creative work in this school	3.07 (.81)	3.31(.50)
flowofideas)[In this school, there is a lively and active Flow of Ideas	3.02 (.73)	3.16(.54)
sharedvision)[Overall, the people in this school have a Shared Vision of where we are going and what we are trying to do.	3.00 (.84)	3.27 (.52)
School Impediments	**3.06 (.74)**	**2.99 (.64)**
destructivecomp)[There is Destructive Competition within this school.	3.52 (.63)	3.37 (.64)
critical)[People are Critical of New Ideas in this school	3.17 (.60)	3.06 (.67)
negcrit)[People are concerned about Negative Criticism of their work in this school	2.74 (.84)	2.86 (.49)
nopressure)[People in this school Do Not feel Pressure to	3.33 (.64)	3.06 (.59)

produce anything acceptable, even if quality is lacking.		
norisktaking)[Top management is not Willing to Take Risks in this school	3.22 (.66)	3.12 (.52)
doingthingsthesame)[There is strong Emphasis in this school on Doing Things the Way We Have Always Done Them	2.91 (.91)	2.92 (.61)
strictcontrol)[This school is Strictly Controlled by upper management	2.50 (.92)	2.57 (.94)
Resources	**2.85 (.93)**	**2.90 (.42)**
Materials)[I am able to easily get the Materials I need to do my work.	2.85 (.93)	2.90 (.42)
Workload Pressure	**2.92 (.74)**	**2.85 (.62)**
toomuchwork)[I have too Much Work to do in too little time	2.50 (.76)	2.57 (.69)
notime)[I do not have Sufficient Time to do my project(s).	2.83 (.81)	2.90 (.66)
distractions)[There are too many Distractions from project work in this school.	3.20 (.65)	2.92 (.44)
unrealisticexpect)[There are unrealistic Expectations for what people can achieve in this school.	3.43 (.71)	3.18 (.60)
timepressure)[I feel a sense of Time Pressure in my work.	2.63 (.78)	2.67 (.71)
Creativity	**2.90 (.82)**	**2.88 (.62)**
schoolcreative)[My Area of this school is Creative	3.06 (.73)	2.88 (.56)

conducive)[Overall, my current work environment is conducive to My Own Creativity.	2.83 (.88)	2.82 (.60)
iamcreative)[I believe that I am currently very Creative in my work	2.81 (.86)	2.96 (.69)
Total Average	**2.94 (.80)**	**2.92 (.59)**

Appendix E

SAMPLES OF CATEGORIZING DATA UNDER THEMES

Sample 1

Refining Raw Codes for Research Question 2 from Focus Group A of School A

Research Question	**Raw Codes**	**Refined Codes**
RQ1: **What are teachers' and school leaders' conception of the following:** • Creativity and its manifestation in the classroom as enacted by both students and teachers? • a climate conducive to creativity in the classroom?	• **Z**: things that let students acquire the object with a lot of ease, in a different way not the formative one • **P**: transferring your knowledge in a unique way • **E:** the creativity of the teacher, for me is, going beyond the traditional, going beyond the board, going beyond the paper and pencil, going beyond everything which is known to everyone. Transferring the knowledge in a way that is not traditional, yes that is not usual, that boosts the acquisition of the competency. For the students the creativity is thinking outside the box, critical thinking. • **E**: creating is being able to use all this knowledge you're learning to provide something new • **P**: Exactly, synthesis, Bloom's taxonomy • **Z**: it is choosing of the correct and the exact way in which you explain the objective • **T**: when we believe his ideas also acceptable • **E**: it is a climate that accepts everything • **P**: encourages everyone to think outside the box, that believes that	**Definition of creativity** • going beyond the traditional • easing acquisition of lesson • thinking outside the box • synthesis in bloom's taxonomy • choosing the correct way to teach ?? • a unique contribution to the learning environment **Climate conducive to creativity** • going beyond the traditional (*what does this mean?*) • a climate that accepts everything • encouragement to think outside box *Notes*: -definition of creativity weak

	everyone is unique in a way, and that every person has their own opinion, and we have to respect • **E**: Every contribution to the learning environment is an appreciated contribution • **E**: There is a relation between the climate outside the classroom and the climate inside the classroom. If the relation between the management, the macro and the micro management, with the teachers, encourages creativity, then the teacher will encourage creativity in the classroom • **Z**: It's not something like imagination, No it's just something like the right way to explain things not more than that.	

Sample 2

Comparing Factors That Hinder Creative Climate

School A	**School B**
Principal A	Principal B
-Ignoring the learning process	-One man show
-Judgmental	-Lack of passion
-One-man show	-rigid thinking
-Being outcome oriented	
-impulsiveness??	
Focus Group A	Focus Group B
-destructive criticism	-intolerant of risk

-unapproachable/absent leadership	-negative feedback
-increases workload pressure	-judgmental
-intolerant to mistakes	-overloads teachers
-lack of vision	-tight schedule
-tight schedule	

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