The Vault

Open Theses and Dissertations

2017-12-21

# Principal Leadership Competencies and Collective Teacher Efficacy: An Interpretive Multi-Case Study

## Serediuk, Zoe Bernadette

Serediuk, Z.B. (2017). Principal leadership competencies and collective teacher efficacy: an interpretive multi-case study (Doctoral thesis, University of Calgary, Calgary, Canada). Retrieved from https://prism.ucalgary.ca.

http://hdl.handle.net/1880/106308

Downloaded from PRISM Repository, University of Calgary

#### UNIVERSITY OF CALGARY

Principal Leadership Competencies and Collective Teacher Efficacy: An Interpretive Multi-Case

Study

by

Zoe Serediuk

#### A THESIS

# SUBMITTED TO THE FACULTY OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF EDUCATION

GRADUATE PROGRAM IN EDUCATIONAL RESEARCH

CALGARY, ALBERTA

December 2017

© Zoe Serediuk 2017

#### Abstract

This qualitative interpretive multi-case study explores the relationship between principal leadership competencies and collective teacher efficacy. The case examined principals engaged in collective teacher efficacy in the bounded case of elementary schools. The primary research question was, "Is there a relationship between specific principal leadership competencies and collective teacher efficacy as demonstrated and understood by a select group of principals?" Focus groups and individual interviews were used to gather appropriate data. The case study was based upon the research-supported assumption that if school leaders created an environment where a strong sense of collective efficacy was present among teachers, it may lead to increased indicators of a staff that had a strong sense of collective efficacy (Goddard, 2000, 2001). From the data analysis, various themes emerged as having a positive impact on collective teacher efficacy: embodying visionary leadership, fostering effective relationships, leading a learning community, and providing instructional leadership. Indicators of such collective teacher efficacy were strong teacher practice, collaboration, conversation/language, and positive relationships. Results from this study provide new insights on how principals can effectively develop collective teacher efficacy as part of their school culture.

*Keywords*: collective teacher efficacy, principal leadership competencies, social cognitive theory

#### Acknowledgements

To my advisor, Dr. Kent Donlevy: Thank you for your guidance and patience throughout this process. You were always positive and encouraging, especially when I felt I was struggling. Your humour, kindness and support were very much appreciated.

To my committee members, Dr. Colleen Kawalilak and Dr. Peggy Patterson: Thank you for your constructive feedback and support to improve and inform my work along the way. It was a great honour to have the both of you on my committee.

To my husband and children: Thank you for all your support. David, I appreciated your willingness to help out where needed when I was unable to do my share. Benson and Zade, your humor and teasing when I was frustrated and overwhelmed always made me laugh and look at things differently. Macey, thank you for your understanding when I needed to work and we couldn't always play nor do something exciting.

To my parents, Lola and Roman: I appreciate the work ethic and perseverance that you have instilled in me. Dad, your constant checking in with me throughout my doctorate program was a true motivator for me. I appreciate deeply all the support you give me in everything I do.

Lastly, I want to extend a special thank you to Dr. Jim Paul for his support and wisdom throughout this process, as well as to Dr. Dianne Yee for being such a wonderful mentor to me in my professional and academic life.

## Table of Contents

Abstract	ii
Acknowledgements	iii
Table of Contents	
List of Tables	vi
List of Figures	vii
Chapter 1: Introduction	1
Research Focus	2
Context	3
Research Problem	5
Purpose	
Significance of the Research	6
Research Questions	9
Methodology	9
Participants	11
Data Collection and Analysis	12
Researcher Assumptions	12
Limitations and Delimitations	14
Definitions of Terms	16
Summary	17
Chapter 2: Literature Review	19
Theoretical Framework: Social Cognitive Theory	
Collective Teacher Efficacy	23
Understanding efficacy	23
Indicators of collective teacher efficacy	
Significance of Principal Leadership	
Principal leadership competencies	33
Principal leadership competencies and collective teacher efficacy	
Synthesis of the Literature	
Summary	
Chapter 3: Research Design	
Theoretical Framework	
Methodology	
Case study	50
Research setting	
Sample	53
Research process	
Data Collection Methods	
Data analysis	
Trustworthiness	63
Ethical Considerations	
Summary	
Chapter 4: Findings	
Primary Research Question Findings	
Defining principal leadership competencies	70

Defining collective teacher efficacy	79
Secondary Research Question 1 Findings	
Urban elementary principal focus group findings.	
Urban elementary principal interview findings	
Rural elementary principal interview findings.	
Amalgamation of data for indicators of collective teacher efficacy	
Factors impacting collective teacher efficacy	
Secondary Research Question 2 Findings	
Fostering effective relationships.	
Embodying visionary leadership	
Leading a learning community.	118
Providing instructional leadership.	125
Summary of findings for principal leadership competencies and collective teach	ner
efficacy	
Conclusion	
Chapter 5: Discussion and Conclusion	134
Summary of the Study	135
Discussion of Research Questions	138
Secondary Research Question 3	138
Secondary Research Question 4	139
Defining Principal Leadership Competencies	139
Defining Collective Teacher Efficacy	142
Indicators of collective teacher efficacy.	143
Factors impacting collective teacher efficacy	147
Principal Leadership Competencies and Collective Teacher Efficacy	148
Fostering effective relationships	149
Embodying visionary leadership	151
Leading a learning community	152
Providing instructional leadership	155
Principal Leadership Competencies and Collective Teacher Efficacy	157
Implications for Policy and Practice	
Recommendations for Future Research	159
Concluding Statement	160
References	162
Appendix A: Letter to Participants	173
Appendix B: Informed Consent for Research Participant	175
Appendix C: Protocol for Focus Group Discussion	180

# List of Tables

Table 1.	Principal Leadership Competencies and Collective Teacher Efficacy	.46
Table 2.	Comparison of Principal Leadership Competencies in Existing Literature and Alberta's Principal Leadership Competencies	.62
Table 3.	Themes Arising From the Definition of Principal Leadership Competencies—Cumulative	.71
Table 4.	Indicators of Collective Teacher Efficacy: Urban Elementary Principal Focus Groups	.83
Table 5.	Indicators of Collective Teacher Efficacy: Urban Individual Elementary Principal Interviews	.86
Table 6.	Indicators of Collective Teacher Efficacy: Rural Individual Elementary Principal Interviews	.89
Table 7.	Indicators of Collective Teacher Efficacy: Amalgamation	.92
Table 8.	Factors Influencing Collective Teacher Efficacy	.94

# List of Figures

Figure 1.	Composite of social cognitive theory. Source: Bandura, 1986	.22
Figure 2.	Indicators of collective teacher efficacy.	.31
Figure 3.	Amalgamation of principal leadership competencies definition: Urban elementary principal focus groups.	.74
Figure 4.	Amalgamation of principal leadership competencies definition: Urban elementary principals' individual interviews	.76
Figure 5.	Amalgamation of principal leadership competencies definition: Rural elementary principal interviews	.78
Figure 6.	Amalgamation of the frequency of themes in definition of collective teacher efficacy	.81
Figure 7.	Principal leadership competencies for collective teacher efficacy.	103
Figure 8.	Fostering effective relationships and collective teacher efficacy.	109
Figure 9.	Embodying visionary leadership and collective teacher efficacy	117
Figure 10.	Leading a learning community and collective teacher efficacy	125
Figure 11.	Providing instructional leadership and collective teacher efficacy	131
Figure 12.	Indicators of collective teacher efficacy.	144
Figure 13.	Factors impacting collective teacher efficacy.	148
Figure 14.	Fostering effective relationships in relation to social cognitive theory and indicators of collective teacher efficacy.	151
Figure 15.	Embodying visionary leadership	152
Figure 16.	Leading a learning community in relation to social cognitive theory and indicators of collective teacher efficacy.	155
Figure 17.	Providing instructional leadership in relation to social cognitive theory and indicators of collective teacher efficacy.	157
Figure 18.	Principal leadership competencies relating to social cognitive theory and collective teacher efficacy	158

#### **Chapter 1: Introduction**

Education is a living practice (Friesen & Jardine, 2009) that requires teachers, as professional educators, to constantly examine how to improve their teaching and learning and their assessment practices. As a school principal, I have the responsibility of ensuring continuous improvement in teachers' practice in order to address the learning needs of all students. I take this administrative and pedagogic responsibility seriously. As a school leader, I have spent a great deal of time considering how to develop a collective group of efficacious teachers who can overcome the challenges of public education and best meet the needs of all learners. According to Bandura (1997b), "Collective efficacy is concerned with the performance capability of a social system as a whole" (p. 469). Goddard (2001) framed this construct in a school context as the "perceptions of teachers in a school that the faculty as a whole can execute the courses of action necessary to have positive effects on students" (p. 467).

In their book *Professional Capital: Transforming Teaching in Every School*, Hargreaves and Fullan (2012) discussed the challenges of harnessing the "collective responsibility" (p. xv) of a group of teachers. The authors also addressed the significance of teachers both as individuals and as a collective whole in creating a "transformation of public education achieved by all teachers and leaders in every school" (Hargreaves & Fullan, 2012, p. xi). Senge, Cambron-McCabe, Lucas, Smith, and Dutton (2000) argued that human capital and social networks are valuable core properties of organizations (as opposed to the structure of the organizations), and that efficacy can be generated by the groups' social interactions. Fullan's (2014) work also aligned with this theory; he maintained that it is the power of the group that can change the group, not the individual. The author urged principals to use their time well by focusing on developing that group and thereby "creating a culture of efficacy" (Fullan, 2014, p. 55).

As a leader, the complexity of this rather evasive concept of efficacy has been of interest to me for quite some time. I have also reflected on whether it was possible to develop the phenomenon of collective teaching efficacy through the purposeful actions of principals. These reflections have motivated me to examine, in this multi-case study, the possible relationship between particular principal leadership competencies and indicators of collective teacher efficacy, as defined by Bandura (1997b).

This interpretive multi-case study involved participants who were principals in elementary schools in both rural and urban school districts in the province of Alberta, Canada. The sources of data collection were focus groups and individual interviews.

#### **Research Focus**

My work as a school principal in two diverse settings has provided me the opportunity to think more about the construct of collective teacher efficacy. My first principalship was in a school located in a high-poverty and economically disadvantaged community. The majority of teaching staff had fewer than five years of teaching experience. As a principal, I was faced with the task of supporting teachers in developing their hope, capacity, and understanding that all children can learn. Following this principalship, I assumed the position of principal at a school in a more economically affluent community. I am currently in my 13th year as a school principal in the same large urban school district.

Overall, students enrolled in the school's regular program and in the French immersion program have performed well on provincial achievement tests. During my time at this school the student population became increasingly complex in terms of learning needs and behaviour.

Unfortunately, teachers have been reluctant to change their teaching practices and do not seem to possess the skills to meet the needs of those students who present with various learning

challenges. Once again, my role has involved staff capacity building and developing a sense of collective efficacy among the teachers. This focus was intended as a way to improve teacher practice and to positively impact student achievement.

#### Context

Collective efficacy is defined as the degree "to which perceptions of efficacy, either high or low, are shared across teachers in a school building" (Tschannen-Moran & Woolfolk Hoy, 1998, p. 221). Part of the power and potential of the teacher collective stems from teachers' personal sense of collective efficacy and their beliefs that in the collective they may overcome challenges and take risks in a unified endeavour (Adams & Forsyth, 2006; Bandura, 1997a; Hipp, 1996).

Historically, research has centred on the development of collective teacher efficacy as a way of improving student achievement (Goddard, Hoy, & Woolfolk Hoy, 2000; Hoy, Smith, & Sweetland, 2003; Ross, Hogaboam-Gray, & Gray, 2004; Tschannen-Moran & Woolfolk Hoy, 1998). Recent research has examined what leaders may be able to do to facilitate the development of collective teacher efficacy (Hipp, 1996; Kurz & Knight, 2004; Leithwood, 2007; Mascall, Leithwood, Straus, & Sacks, 2008; Ross & Gray, 2006a; Ross et al., 2004). This research study was significant in that it examined the relationship between the specific principal leadership competencies of (a) fostering effective relationships, (b) embodying visionary leadership, (c) leading a learning community, and (d) providing instructional leadership and collective teacher efficacy.

In the research reviewed for this study, developing collective teacher efficacy was an important contributor to influencing positive, impactful, and sustainable learning and teaching improvement practice (City, Elmore, Fiarman, & Teitel, 2009; Louis, Febey, & Schroeder,

2005). According to Goddard et al. (2000), collective teacher efficacy beliefs shape the normative environment of a school which, in turn, influences teacher behaviour and affects student achievement. In other words, teachers believe and demonstrate that they can make a difference to their students' learning; students tend to respond more favourably to setbacks where collective teaching efficacy is operationally high. Goddard et al. (2000) speculated that a teacher with an average level of personal efficacy would increase his or her own personal efficacy upon joining a school where staff had a high sense of efficacy or where teaching staff were being led to improved individual and collective senses of efficacy.

As a corollary of this belief, an effective school possesses a high level of collective teacher efficacy—where teachers persist through difficulties (Goddard, 2000), are engaged in collaborative decision making (Goddard, 2002b; Leithwood & Jantzi, 2012; Ross et al., 2004), and are working towards a common vision for a school (Goddard, 2001; Hipp, 1996; Kurz & Knight, 2004; Leithwood, 2012; Mascall et al., 2008). In a school informed by this culture, teachers are also likely to have a high level of *professional capital*. Hargreaves and Fullan (2012) defined professional capital as holding collective responsibility, blending both evidence-based research and professional judgment, and working collaboratively with colleagues to support one another in a state of continuous learning. Teaching staff and principals working and learning in this culture would look critically at their teaching practice; they would take risks with their teaching practice in order to more effectively meet and attend to the evolving needs of learners; and they would positively contribute to increased student achievement (Robinson, 2010).

Principals of schools with a high level of collective teacher efficacy would then also be learning partners alongside the teachers (Robinson, 2010; Robinson, Lloyd, & Rowe, 2008).

They would use evidence-based practice to align resources and be engaged in collaborative

decision-making. This collective group would have the potential to empower the capacity of the teaching staff both individually and collectively through creating opportunities to build collective school efficacy. In addition, teaching staff and school leaders would both educate and engage the school, parental, and district communities to further enhance their sense of collective efficacy and their focus on their practice and student learning (Hipp, 1996).

As a principal of an elementary school myself, my commitment is to develop and to support a community with collective school efficacy as described above. Therefore, I was interested in understanding how my principal leadership competencies affected the development of strong collective efficacy in teachers.

#### Research Problem

The challenge for many school principals is to create effective and efficient pedagogic strategies to develop or refine the environment for a teaching staff who are willing to persist and meet educational goals in the face of the seemingly ever-present, challenging circumstances facing today's public schools. From my leadership experience, I have witnessed principals and teachers who are faced with many obstacles in their daily work, including restrictions of resources, students who are challenging, and restrictive policies. Despite these and other existing challenges, an abundance of research supports the opinion that the quality of the environment created by school leadership, as embodied in principals' leadership practices, is an important contributor to the development and maintenance of effective schools (City et al., 2009; Fullan, 2003; Hallinger & Heck; 1998; Hargreaves & Fink, 2006; Hargreaves & Shirley, 2009; Leithwood, 2012; Robinson, 2011). Principals need to have a clear understanding of the choices they make as leaders in their daily work and the potential impact that these choices have on empowering—or stifling—the learning and the teaching in their schools. To understand more

about the connections among students, teachers, and school success, it is essential that principals have the opportunity to understand more about the pedagogic relationships between their own beliefs and practices regarding school leadership and the impacts of that leadership on collective teacher efficacy. This study examined the impacts of some specific principal leadership competencies to understand whether these competencies directly developed, refined, and sustained collective teacher efficacy.

#### **Purpose**

The purpose of this study was to examine whether particular principal leadership competencies that aligned with Bandura's (1986) social cognitive theory were related to developing indicators of collective teacher efficacy among school staff. The research has the potential to deepen the understanding of school leaders in relation to the actions of principals involving specific competencies and how these competencies, if acted on, may develop, influence, and make sustainable collective teacher efficacy.

#### **Significance of the Research**

As the principal of a Kindergarten to Grade 6 school in a large urban school district, I am committed to developing my staff's sense of efficacy related to their own teaching knowledge and their ability to meet the academic and social needs of our learners. According to the existing literature, a core and important contributor to the design, development, implementation, and sustainability of effective schools is the quality of leadership there (Goddard, 2000, 2001). Effective principals excel in their ability to lead and to support their staff to work together with a strong sense of purpose and to believe in their capabilities to overcome obstacles and to reach educational goals (Bandura, 1993).

Principals need to support and encourage classroom teachers to believe that they have substantial influence to change, modify, or redesign learning for themselves and especially for their students (Hargreaves & Shirley, 2009). In the school where I work, our students arrive from a variety of socioeconomic backgrounds and with diverse learning experiences. A wide range of intellectual, emotional, and physical complexities and gifts is also represented in our student demographics. It is my responsibility, as a principal, to lead and support the teaching staff in creating instructional and environmental improvements to meet the diverse needs of these learners.

In the existing research, there were many indicators of collective teacher efficacy: persistence—the ability to tolerate pressure and overcome obstacles (Goddard et al., 2000), confidence (City et al., 2009), a sense of shared obligation (Wahlstrom & Louis, 2008), a willingness to change (Louis et al., 2005), and increased student achievement (Bandura, 1993; Goddard, 2000; Goddard et al., 2000). In order to examine how principals and educators can increase these indicators of collective teacher efficacy, I examined how school leaders—namely, principals with specific principal leadership competencies—could best support the development of collective teacher efficacy, and the empowerment of classroom teachers, as practitioners.

Whether principal leadership is examined through the lens of transformational, shared, distributive, collective, or instructional leadership models, certain practices are consistent with the demonstration of strong leadership and influence that these practices have on the collective efficacy of a teaching staff. Thus, I decided to focus on principal competencies as opposed to leadership models, as this focus would provide a better opportunity to examine some of the principal competencies that may or may not have led to the development of collective teacher efficacy. To date, limited research has examined specific leadership competencies and their

relationship to the enhancement of collective teacher efficacy (Hipp, 1996; Kurz & Knight, 2004; Leithwood, 2007; Mulford & Silins, 2003; Ross et al., 2004; Wahlstrom & Louis, 2008).

To ground my study, I used Goddard et al.'s (2000) definition of *collective teacher efficacy*: "The perception of teachers in a school that the efforts of faculty as a whole will have a positive effect on students" (p. 480). Collective teacher efficacy differs from individual teacher efficacy in that *collective* refers to expectations of the effectiveness of an engaged teaching staff to which one belongs. Teacher efficacy, on the other hand, refers to the expectations about one's own teaching ability (Ross et al., 2004). Although both have impact on student achievement, I chose to focus primarily on collective teacher efficacy because it best related to producing more prominent and sustainable change at the school level (Bandura, 1993; Goddard, 2000; Goddard et al., 2000), thus having the potential to impact student achievement across the school.

Goddard et al. (2000) argued that collective teacher efficacy influences student achievement by creating school models and actions that motivate *both* teacher and student persistence. Some existing research has supported the importance of having leaders consider how to best develop teacher collective efficacy in their schools (Goddard, 2000, 2001; Hipp, 1996; Leithwood, 2007). Louis et al. (2005) suggested that collective teacher efficacy is "directly linked to teacher willingness to change" (p. 198). In addition, the authors noted that teachers with a strong sense of collective teacher efficacy had a better understanding of what is meant by "professional control" and "responsibility" (Louis et al., 2005, p. 198). Wahlstrom, Louis, Leithwood, and Anderson (2010) indicated that to have efficacy "is to believe that you or you and your colleagues can act effectively and deal with difficulties as they arise" (p. 31). Therefore, efficacy may be seen as one of the key underlying factors in creating positive educational, institutional, and professional change.

Through the use of urban focus groups and urban and rural individual interviews, I uncovered evidence of indicators associated with a sense of collective teacher efficacy among participants in this study. The research was designed to contribute to the understanding of leadership—the competencies embodied, demonstrable, and realized in school principals—that positively impact the development of collective teacher efficacy. Through the development of a clearer understanding of the relationship between principal leadership competencies and collective teacher efficacy, it is possible that both school districts and school leaders can make more informed decisions on how to develop teacher efficacy.

#### **Research Questions**

My primary research question was: "Is there a relationship between specific principal leadership competencies and collective teacher efficacy as demonstrated and understood by a select group of principals?" I also had four secondary research questions:

- 1. What are the key indicators of collective teacher efficacy?
- 2. If there is an identifiable and evidentiary relationship between specific principal leadership competencies demonstrated and collective teacher efficacy demonstrated, what are the specific leadership competencies that have a positive correlation with collective teacher efficacy?
- 3. Does this research support the proposition that individual principal leadership competencies can positively impact collective teacher efficacy?
- 4. Does this study support or differ from the synthesis of current research?

#### Methodology

A qualitative research approach guided this study. Qualitative research allows the researcher to deeply examine a construct from the perspectives of the research participants—in

this case, school principals (Bloomberg & Volpe, 2008). It is my belief that, as humans, we socially construct our realities based on our experiences and reflections on those experiences. I hold the belief that we, as persons, develop meaning through reflecting on our own experiences, which leads to multiple understandings. I do not believe an objective social reality exists as such, unlike that envisaged in the physical sciences; rather, for me, social reality is composed of subjective perceptions and understandings. However, I do believe that different perceptions of the same construct can deepen our understanding. This type of theoretical underpinning is referred to as a *social constructivist/interpretivist* perspective. In it, knowledge is constructed based on how individuals interpret realities built on their experiences and the perceptions of others' experiences (Crotty, 2010).

In this framework, the study's intent, topic, and research questions were best suited for an interpretive multi-case study design as defined by Merriam (1998). A vast majority of the research on collective teacher efficacy has been conducted using quantitative methods such as surveys (Goddard, 2000, 2001; Ross & Gray, 2006a; Ross et al., 2004; Wahlstrom & Louis, 2008). It was my assumption that through using an interpretive multi-case study approach, this study could contribute to the current research on principal leadership and collective teacher efficacy by providing an in-depth analysis of the participants' experiences with the construct of collective teacher efficacy.

According to Merriam (1998), case study designs are applicable to a variety of data-collecting methods and analysis. For this study, I chose focus groups and interviews as the sole methods of collecting data from elementary principals. Focus groups were chosen as the preferred data collection strategy over surveys and interviews. It was my hope that by allowing participants to interact and have a conversation around a particular construct, their group

conversations would trigger new ideas and understandings, thus potentially expanding individual understandings beyond individual experiences (Krueger & Casey, 2009).

As this study dealt in the power of the collective, it was appropriate to approach the data collection phase of the study collaboratively and collectively, and hence focus group research was appropriate. Initially, I had designed this study to include six focus groups conducted with approximately six to eight participants in each group. There were to be three focus groups from an urban school division and three focus groups from a rural school division. However, it was very challenging to enlist the rural participants required for this study. Many potential participants in various school divisions in Alberta stated that because research in schools was normally and frequently done by the school district's own employees, school principals would be too busy to be available for other studies. I did manage to obtain consent to participate from a few rural school divisions, but I was unable to recruit enough elementary principals to form focus groups. At that point, with the approval from my supervisor and committee, I ceased seeking rural focus groups and decided to collect rural-principal data through individual interviews alone.

I was able to conduct urban focus groups as planned. However, in order to provide a balance of individual interviews, I undertook three urban-principal individual interviews as well as the three rural-principal individual interviews as part of the data collection. Although the data collection did not unfold as originally planned, I believe that I was able to gather sufficient data for the purposes of this study.

#### **Participants**

The types of sampling for this qualitative study were purposeful and network sampling (Merriam, 1998). Guided by Bloomberg and Volpe (2008), I employed criterion sampling as a

specific sampling strategy. The rationale behind criterion sampling was to establish particular criteria for participants who participated in this study. One criterion was to focus on the perceptions of elementary principals. The second criterion was that participants who were approached to participate in this study possessed some of the principal leadership competencies that emerged from the literature review, in the opinion of superintendents, directors, or colleagues: namely, relational trust, setting direction, collaborative decision making, and promoting and participating in teacher learning and development.

#### **Data Collection and Analysis**

The unit of analysis in this interpretive multi-case study was elementary principal participants. Data coding was used to discover themes and critical elements. Data were then synthesized to determine the extent to which the data informed the research questions. I used cross-case analysis to determine similarities and differences between the various urban focus groups and rural and urban interviews.

The criteria for interpreting the study's findings were centred on evident common themes emerging from the data. The findings were compared to existing research in similar areas and either confirmed or disputed the research. Rival explanations to findings in this study were also addressed. It is important to note that even though the ultimate goal for principals in developing collective teacher efficacy was to impact student achievement, this study did not address the relationship of the principal leadership and student achievement.

#### **Researcher Assumptions**

For the study, I made several assumptions regarding both principal leadership competencies and collective teacher efficacy. These assumptions were based on my own

experience of 20 years in the field of education and 18 years as an assistant principal and principal in a large urban school district. My assumptions were as follows:

- School leaders play a significant role in establishing a culture of professional learning and collaboration as a vehicle for school improvement (Fullan, 2003; Leithwood, 2007, Leithwood & Seashore, 2012 and Robinson, 2011).
- Most teachers see themselves as teachers and as learners. They see themselves as
  having the potential to make a pedagogically significant difference in the lives of the
  children they teach.
- 3. Through the development of collective efficacy as opposed to individual efficacy, teaching staffs would be better to engage in school improvement from a collective point of view as opposed to an individual point of view (Bandura, 1993;Goddard, 2002).
- 4. There is more power in a group than in an individual to impact school improvement (Fullan, 2014, Robinson, 2011).
- 5. Some leadership competencies related to relational trust, setting direction, collaborative decision making and promoting, and participating in teacher learning and development may have a positive impact on the development of collective teacher efficacy (Bryk & Schneider, 2002; Goddard, 2002; Goddard & Goddard, 2001; Leithwood, 2012; Robinson, 2011).
- Collective teaching efficacy is one of the foundations that leaders need to ensure is being developed with staffs in order to improve teacher practice (Goddard, Hoy & Woolfolk Hoy, 2004).

- 7. I assumed Bandura's (1986, 1993, 1997a, 1997b) social cognitive theory, wherein there is a relevant assumption that human beings are agentive, would be useful to the study; that is, people have the ability to exert influence over situations.
- 8. The use of focus groups and interviews would assist the researcher to delve more deeply into constructs such as collective teacher efficacy and principal leadership competencies than surveys (Creswell, 2012; Krueger & Casey, 2009; Morgan, 1996).
- 9. If principals possessed one or more of the competencies outlined in this study, in the opinion of their direct supervisors—namely, relational trust, setting direction, collaborative decision making, and participating and promoting teacher learning and development—they would be considered capable leaders (Bryk & Schneider, 2002; Goddard, 2002; Goddard & Goddard, 2001; Leithwood, 2012; Robinson, 2011).

#### **Limitations and Delimitations**

As stated previously, qualitative research can never be removed from the researcher's subjectivity (Bloomberg & Volpe, 2008; Creswell, 2012; Merriam, 1998; Miles, Huberman, & Saladana, 2014). The best way to acknowledge this issue of subjectivity for myself was to recognize my own biases and assumptions coming into the research. For example, one of the key limitations of this study was the potential bias that I brought to the work due to my own role as an elementary school principal in a large urban school district. My assumptions entering this research were that collective teacher efficacy was of value and could make a difference to student achievement, and was therefore worth considering as a significant component of school leadership.

Another limitation in qualitative research is that data analysis completed by the researcher has the potential to be affected by the researcher's subjectivity. The use of the method

of coding explained above helped mitigate this concern. Further, my supervisor viewed my raw data and by comparing it with my findings, provided a check on my interpretation of the data.

A further limitation to this study was that the research sample was restricted.

Participation in the study was limited to 27 elementary principals (24 urban and three rural) from only one Canadian province. Although generalizability was not an intended goal of this study, I did want to ensure that this work had the potential for transferability to future leadership and teaching practice (Bloomberg & Volpe, 2008; Creswell, 2012). By using fewer participants and engaging them in deeper, more descriptive data collection (Merriam, 1998), findings gained could be compared to previous research for similarities and differences. Similar findings would contribute to a stronger argument in regard to principals developing collective efficacy in their teaching staff. Any differences unveiled could lead to further questions in regard to this phenomenon and potential research opportunities.

The delimitations are factors that I chose to limit the boundaries for this study. For example, I decided to select only elementary school principals as participants, given that I believed that professional conversations would be deeper when the participants shared the common thread of being leaders in elementary schools. In addition, the use of focus groups and individual interviews as my method of data collection limited the number of participants to be included in the research as well as the number of questions that I could ask. However, I felt that by using focus groups and interviews, and asking open-ended questions, I would collect data that were more in-depth—that is, more experiential and explanatory—than survey data. The balance of collective data and individual participant data provided a good balance of data grounded in two realities: the social and individual. As the superintendents chose the principals and the principals talked about their own experiences, there may appear to be an "echo chamber effect" in that

dissenting voices on the usefulness of collective teacher efficacy would not be heard. By recognizing this delimitation, the study is not diminished in value as the field fully accepts the general and overall value of collective teacher efficacy. Lastly, I decided to restrict my research to principals' perspectives. Although teachers' views would be of value, I felt that due to time constraints it was necessary to limit the study to principals.

#### **Definitions of Terms**

The terms used throughout this study and their meanings are listed below.

Case study. An "intensive, holistic description and analysis of a bounded phenomenon" (Merriam, 1988, p. 21).

Collective efficacy. A group's shared belief about their capability to organize and accomplish certain actions to achieve a goal or a specific level of attainment (Bandura, 1997a).

Collective teacher efficacy. "The perception of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (Goddard, 2000, p. 477).

*Embodying visionary leadership*. "A school leader must involve the school community in creating and sustaining shared vision, mission, values, principals and goals" (The Association of Alberta Public Charter Schools [TAAPCS], 2012, p. 3).

Focus group. A group discussion focused on a single theme (Krueger & Casey, 2009).

Fostering effective relationships. "A school leader must build trust and foster positive working relationships in the school community on the basis of appropriate values and ethical foundations" (TAAPCS, 2012, p. 3).

Leading a learning community. "A school leader must nurture and sustain a school culture that values and supports learning" (TAAPCS, 2012, p. 4).

*Principal leadership competencies*. Leadership behaviours or traits that contribute positively to an individual's effectiveness as a leader.

Principal leadership traits, behaviours, or qualities. Used interchangeably to identify leadership competencies.

Providing instructional leadership. "A school leader must ensure that each student has access to quality teaching and the opportunity to engage in quality learning experiences" (TAAPCS, 2012, p. 4).

Qualitative research conceptual/theoretical framework. "A deep understanding of a social setting or activity viewed from the perspective of the research participants. This approach implies an emphasis on exploration, discovery, and description" (Bloomberg & Volpe, 2008, p. 7).

*Self-efficacy beliefs*. "People's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391).

Social cognitive theory. A framework for understanding, predicting, and changing human behaviour. The theory identifies human behaviour as an interaction of personal factors, behaviour, and the environment (Bandura, 1986, 1997a).

#### Summary

Chapter 1 provides an overview of research focus, context, research problem, purpose, significance of the proposed research, research questions, methodology, researcher's assumptions, limitations and delimitations, and definition of terms. Chapter 2 provides an extensive literature review examining current research in the areas of self-efficacy, collective efficacy, collective teacher efficacy, social cognitive theory, and the principal leadership competencies of relational trust, setting direction, collaborative decision making, and promoting

and providing instructional leadership. Chapter 3 details the theoretical framework that informs this research, methodology, data collection methods, and data analysis. Chapter 4 presents the data analysis and findings in this study. Chapter 5 includes a discussion of these findings in relation to existing research as well as implications for policy and practice along with recommendations for further research, and a concluding statement.

#### **Chapter 2: Literature Review**

The purpose of this interpretive multi-case study was to examine if particular principal leadership competencies that aligned with Bandura's social cognitive theory were related to developing indicators of collective teacher efficacy among school staff. To conduct this study, it was necessary to complete a review of existing literature.

This chapter examines the theoretical background and literature related to the study of principal leadership competencies and indicators of collective teacher efficacy. The literature review is presented in four broad sections: (a) theoretical framework, (b) collective teacher efficacy, (c) significance of principal leadership, and (d) principal leadership competencies.

#### **Theoretical Framework: Social Cognitive Theory**

Often, research in the field of collective efficacy is grounded in Bandura's (1986, 1993, 1997a) theoretical framework of social cognitive theory. According to this theory, individuals produce their own experiences, and shape the events of their lives based on their perceptions of their abilities. This theory suggests that ability is not fixed; one's ability or aptitude is a capability that is formed through cognitive, social, motivational, and behavioural skills to serve particular purposes in one's life. How people perceive their ability to do something impacts either positively or negatively on their cognitive functioning. Human agency is a basic assumption of social cognitive theory. The degree to which an individual or group feels efficacious is a fundamental driver of human agency. Thus, humans and groups make choices based on their levels of efficacy about a particular action, and the process of making these decisions is referred to as agency (Bandura, 1997a).

Bandura presented three forms of agency: personal, proxy, and collective. Collective agency is based on the understanding that we as individuals do not live in isolation and therefore

often need to rely on the collective to achieve desirable outcomes. Social cognitive theory holds the assumption that organizational agency is present (Bandura, 1993, 1997a) and organizations hold the ability to make choices in regard to their actions based on their perceptions of the collective capacity of the group: "Collective efficacy is concerned with the performance capability of a social system as a whole" (Bandura, 1997a, p. 469). Efficacy is also linked to motivation. For instance, individuals or groups who have a high level of efficacy tend to believe that through persistence they can achieve goals or actions that they have set out to accomplish (Goddard et al., 2000). Efficacy sources derive from a complex process involving four factors: mastery experiences, vicarious experiences, social persuasion, and affective state (Bandura, 1986, 1997a).

Mastery experiences have the most profound influence on individuals' and groups' sense of efficacy, both empirically and theoretically (Bandura, 1986; Goddard et al., 2000). Goddard (2001) claimed that two-thirds of the variation of collective teacher efficacy arises from past experiences of success or failure, the argument simply being that success tends to raise collective teacher efficacy and failures have the potential to decrease collective teacher efficacy. Goddard et al. (2000) confirmed the importance of strategic staff development in providing efficacy-building mastery experiences. Other researchers who have studied collective teacher efficacy have also verified the importance of Bandura's earlier works, especially in the area of mastery experiences. Leithwood (2012) discussed the leadership practice of "developing people" (p. 60)—that is, the practice of providing individual support, offering an intellectually stimulating work environment, and modelling suitable values and practices. Leithwood (2012) suggested that the aim of these leadership practices is to build capacity that in turn "leads to a sense of mastery"

(p. 60). As well, M. Wheatley (2008) affirmed the concept of mastery, stating that "anytime we succeed, no matter how small the success, we gain new energy and resolve" (p. 2).

Although mastery appears to be the most influential source of efficacy (Bandura, 1997b), other sources also have an impact on enriching collective teacher efficacy. Vicarious learning experiences (such as visits to model schools, videos, and observations in classrooms) and social persuasion (such as collaboration in professional learning communities, teacher as leaders) are all strategies that build collective efficacy in a school.

Ross et al. (2004) explored how leaders' behaviours can support these sources of collective efficacy. For example, school visits that include time for teachers to observe in classrooms around a particular practice such as guided reading comprise an example of vicarious learning experiences. Vicarious experience at the collective level means that the organization learns from other organizations. Another method of providing vicarious learning experiences is through having teachers collaborate (Leithwood, 2012); this can potentially create an environment of joint problem-solving and instructional experimentation. Through interaction with colleagues, teachers potentially can acquire stronger teaching strategies that enhance their effectiveness, resulting in increasing perceptions of their individual and collective success. Principals can identify exemplars of successful teaching teams in their own buildings and provide teachers with the opportunity to observe each other. This, in turn, would increase the opportunities to strengthen collective teacher experiences through vicarious experiences.

Social persuasion—staff members persuading other staff in areas of teamwork and practice—is another source of efficacy building: "The more cohesive the faculty, the more likely teachers can be persuaded" (Ross et al., 2004, p. 167). Greater cohesion can result in teachers

seeing examples of successful collaborations, which in turn can influence the collective efficacy and motivation of the group.

Principals also need to be aware of the affective state in their buildings (Ross et al., 2004). When staff members are discouraged by pressures from the district, excessive community expectation, budget cuts, or limited resources, a strong peer support system in a school is more likely to reduce the effect of negative emotions on collective teacher efficacy beliefs. An important role of a principal is to ensure the reduction of teacher stress by protecting teachers from negative stressors such as inappropriate parent demands. The four areas of social cognitive theory that positively influence collective teacher efficacy—mastery experiences, vicarious learning experiences, social persuasion, and affective state—are visually represented in Figure 1.

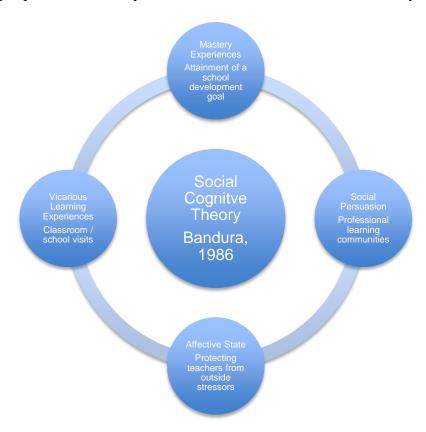


Figure 1. Composite of social cognitive theory. Source: Bandura, 1986.

In conclusion, social cognitive theory holds that a person holds the capability to perform an action (Bandura, 1986). For the purposes of this study, my research is grounded in Bandura's social cognitive theory. Based on this theory, I argue that the actions which a principal decides to take in the control of their school building have the possibility to influence a group's (i.e., the teaching staff's) beliefs about their collective efficacy. When a principal with the capabilities/competencies for such facilitation establishes and facilitates strong collective efficacy, a teaching staff is assisted in mediating and overcoming outside issues that are beyond their control (Goddard, 2000). The principal leadership competencies that are the centre of this study are aligned with social cognitive theory because the leadership actions principals take are in their control and have the potential for positive impact on collective teacher efficacy.

#### **Collective Teacher Efficacy**

Understanding efficacy. As described in the previous section, the understanding and definition of efficacy is derived from Bandura's (1986) cognitive social learning theory, which addresses motivation based on outcomes and feedback. I believe that the construct of efficacy is significant to principals in terms of understanding teachers' motivation or resistance to their work. In Bandura's (1986) definition, how people see themselves shapes how they feel, think, behave, and motivate themselves. Bandura (1986) defined self-efficacy as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391).

This same theory can also be applied collectively to the teaching staff as a whole. Collective teacher efficacy differs from individual teacher efficacy. It is not the sum of individuals' beliefs about their own individual sense of efficacy but the collective sense, its belief of the group's efficacy in achieving collective goals. It refers to expectations of the

effectiveness of the group to which one belongs, whereas teacher efficacy refers to the expectations about one's own teaching ability (Ross et al., 2004). Bandura (1997a) characterized this sense of collective efficacy as going beyond an individual's own strengths and abilities; instead, it becomes the "group's shared beliefs in its conjoint capabilities to organize and execute courses of action required to produce given levels of attainments" (p. 477). For Bandura (2000), individuals' shared beliefs of collective efficacy impact "the type of futures they seek to achieve through collective action" (p. 76). As a group, a strong sense of collective efficacy may be demonstrated through the amount of effort and persistence the group is willing to contribute to achieve goals, especially when faced with challenges and failures. Therefore, one could assume that having a teaching staff with a strong sense of collective efficacy would be a sought-after phenomenon by school principals.

Existing research does support the importance of the development of collective teacher efficacy in schools. For example, Hargreaves and Fullan (2012) argued that social capital was a source of developing collective teacher efficacy. These authors defined *social capital* as the network of relationships among teaching staff that increases individual's capacity as well as the group's capacity. They also claimed that *human capital*—that is, the skills that teachers bring to schools—could be improved through the development of social capital.

Additionally, according to Mawhinney, Hass, and Wood (2005), collective efficacy is very important in developing bonding social capital; for these authors, collective teacher efficacy and group development (establishing trusting professional relationships) preceded professional learning communities. Mulford (2008) also affirmed the claim that collective efficacy is part of bonding social capital, and precedes the work of professional learning communities. Mulford defined bonding social capital as "social capital that occurs among work colleagues in schools"

(2008, p. 28). Mulford and Silins (2003) acknowledged that "collective teacher efficacy is the important intervening variable between leadership and teacher work and then student outcomes" (p. 183). These authors argued that the collective efficacy of a staff and its ability to engage in organizational learning were required before change in instructional practice could occur.

It is interesting that both Robinson (2011) and City et al. (2009) refuted the Mulford and Silins findings. For both of these researchers, efficacy is developed through the ongoing work of the school; it is not required as a predecessor to change. It is my belief, based on practical experience, that collective teacher efficacy can be developed, as Robinson and City et al. claimed, by doing the daily work of the school. As a principal in my own school, I have found that both individual efficacy and collective efficacy continuously improved as we progress in the development of our teaching practice. I have come to this conclusion as I have observed teachers becoming more effective in their teaching, sharing, and supporting one another in their teaching practice and communicating confidently with parents in regard to the teaching and learning occurring in the classroom.

Whether collective efficacy is necessary or sufficient as a predecessor to change, and whether it can be developed through ongoing teachers' professional development of the school, remain to be questioned. This study did not address these issues. Rather, I sought to focus on how school principals could develop collective teacher efficacy at their schools. I found existing literature that reinforced the importance of group development and collective efficacy in improving teacher practice (City et al., 2009; Fullan, 2014; Hargreaves & Fullan, 2012; Mawhinney et al., 2005; Robinson, 2011). In the following section, I explore the indicators of collective teacher efficacy that emerged from the current research I examined for this study.

Indicators of collective teacher efficacy. Based on the literature, a number of indicators of collective teacher efficacy emerge in a school when collective teacher efficacy develops. The following is an overview of some of these indicators and their potential influence on a teacher practice and student achievement: persistence, confidence, shared obligation, willingness to change, and increased academic achievement.

Persistence. Goddard et al. (2000) argued that collective teacher efficacy influences student achievement by creating school models and actions that motivate persistence from teachers. Organizations that hold strong beliefs about group capabilities tend to be able to tolerate pressures and difficult situations and continue to function without negative consequences. These "organizations learn to rise to the challenge when confronted with disruptive forces" (Goddard, Hoy, & Woolfolk-Hoy, 2004, p. 6). School leaders need to be aware of the relationship between a strong sense of efficacy and the ability to persist when working with a teaching staff.

Confidence. An impressive amount of research links the relationship of high levels of collective teacher efficacy to increased collective teacher confidence. Hargreaves and Fullan (2012) suggested that individuals gain confidence by working collaboratively with others and having the "right kind of people and the right kind of interactions and relationships around them" (p. 4). The relationship between teachers' attitudes and behaviours can be critical when it comes to educational outcomes. Individual perceptions of a school's efficacy in engaging in initiatives can positively or negatively predict performance (City et al., 2009). As such, teachers who have a strong sense of efficacy also have confidence in their ability to implement an initiative and would generally be successful compared to a staff without the same level of confidence (City et al., 2009).

Bandura (1986) also suggested that efficacy and confidence were developed through the experience of success. Principals and school districts therefore need to be thoughtful when implementing new initiatives to ensure that teachers feel well supported, can attain expected outcomes, and experience a sense of success. Hargreaves and Fullan (2012) supported this notion, in stating that success in schools results, in part, from teachers knowing how to attain goals and perceive them as attainable; as a result, an increased sense of efficacy is created and confidence among staff is raised.

These research findings support the proposition that school principals should engender, support, and nurture a sense of collective teacher efficacy in their schools' teaching staff.

Shared obligation. Through collaboration, teachers develop many qualities, one of them being a sense of a shared obligation to students, or what Fullan (2014) referred to as the "moral imperative" (p. 39). Wahlstrom and Louis (2008), in examining the relationship between collective teacher efficacy and principal leadership, found a collective sense of responsibility that they expressed as "teachers' belief that they not only have the capacity to influence student learning but the shared obligation to do so" (p. 466). This shared obligation is one of the indicators of collective efficacy. For Wahlstrom and Louis, collective efficacy was a significant factor in relation to school outcomes, although it did not present as the most important predictor. Encouragingly, they noted that they indicated that the relationship between collective efficacy and shared responsibility required further exploration.

Many researchers have argued that it is important for teachers to work interdependently (collaboratively and collectively) rather than as independent sole contractors (Bandura, 1997a; Fullan, 2014; Hargreaves & Fullan, 2012; Tschannen-Moran & Woolfolk Hoy, 1998). Fullan (2014) found that shifting teacher compliance from a top-down direction to a sense of

engagement can promote collective teacher efficacy. In addition, Hargreaves and Fullan (2012) maintained that teachers were generally more motivated and enthusiastic about teaching when pursuing actions with others. Hence, it seems reasonable to conclude that teachers working collaboratively in pursuit of developing a shared sense of purpose would create stronger teacher engagement and the development of a sense of teacher collective efficacy (Fullan, 2014).

Willingness to change. Clearly, research supports the importance for leaders to consider how to best develop teacher collective efficacy in their organizations. Doing so makes teachers more confident when facing challenges and more likely to be willing to look at their practice in a professionally critical manner (Goddard, 2000, 2001). Louis et al. (2005) claimed that collective teacher efficacy was "directly linked to teacher willingness to change" (p. 198). In addition, Louis et al. asserted that teachers with a strong sense of collective teacher efficacy tended to have a better understanding of the idea of professional control and responsibility. For Wahlstrom et al. (2010), efficacy means "to believe that you, or you and your colleagues, can act effectively and deal with difficulties as they arise" (p. 31). Therefore, for these authors efficacy is one of the underlying factors in creating positive change.

Leaders who foster positive change and work collaboratively with teachers in the day-today work of a school have the opportunity to build the foundation (collective efficacy and commitment) to begin to create positive impact on the classroom.

Increased academic achievement. Throughout the research, an indicator of collective teacher efficacy was increased student achievement, as measured by standardized tests. When leaders positively influence teachers' behaviours and establish strong collective efficacy attitudes, increased student achievement can be obtained (Ashton & Webb, 1986; Bandura, 1993; Goddard et al., 2000; Hoy et al., 2003; Leithwood, Patten, & Jantzi, 2010; Tschannen-Moran &

Barr, 2004). Collective teacher efficacy provides an evidence-based explanation of why some schools improve and others do not, thus serving as an important component of student achievement research. In Goddard, LoGerfo, and Hoy's (2004) study, the effects of collective teacher efficacy on student achievement were found to be stronger indicators of student achievement than the link between socioeconomic status and student achievement. In his study on collective teacher efficacy and its impact on student achievement, Goddard (2001) developed and administered a collective teacher efficacy instrument written to reflect a group orientation. He found the following:

Collective teacher efficacy may help to explain the differential effect that schools have on student achievement. Collective teacher efficacy, therefore, has the potential to contribute to our understanding of how schools differ in the attainment of their most important objective—the education of students.

(Goddard, 2001, p. 483)

Opposing the previous views was a study completed by Fancera and Bliss (2011) that discovered that collective teacher efficacy in New Jersey high schools actually did not mitigate the influence of socioeconomic status. The study's focus was on high schools, thus perhaps explaining the difference from other, similar studies done at the elementary level. However, the researchers did conclude that collective teacher efficacy had a strong influence on school achievement.

Teacher efficacy is not the only answer to improving student achievement, but it is definitely an important contributor to influencing positive and sustainable change. Indeed it may well be that a level of collective teacher efficacy in schools is a necessary—albeit not sufficient—condition to increase academic success for students. That is not yet known in a

causal or anecdotal fashion but would be an interesting research question as a follow-up to this study.

Goddard et al. (2000) asserted that because "collective efficacy beliefs shape the normative environment of a school, they have a strong influence over teacher behaviour and consequently, student achievement" (p. 497). In other words, where collective teaching efficacy is high, teachers believe they can make a difference to their students and tend to respond more favourably to setbacks. These authors speculated that teachers with average personal efficacy would increase their own personal efficacy if they joined a staff with a high sense of collective efficacy. This research then is reason enough for school principals to give the attention to the enhancement of collective teacher efficacy in their schools.

Summary of indicators. Collective teacher efficacy is a way of conceptualizing the environment of a school and its influence on both personal and organizational behaviour. High-performing schools are successful because they have an efficacious attitude and structures that have been put in place to assure that staff can work well together. The self-assurance with which people approach and manage difficult tasks determines whether they make good or poor use of their capabilities (Goddard, Hoy, & Woolfolk- Hoy, 2004). In addition, teachers' beliefs about their faculty's capability to educate students constitute a norm that influences the actions and achievements of schools. Indicators of collective teacher efficacy may manifest in a school. Figure 2 displays a visual summary of those indicators.

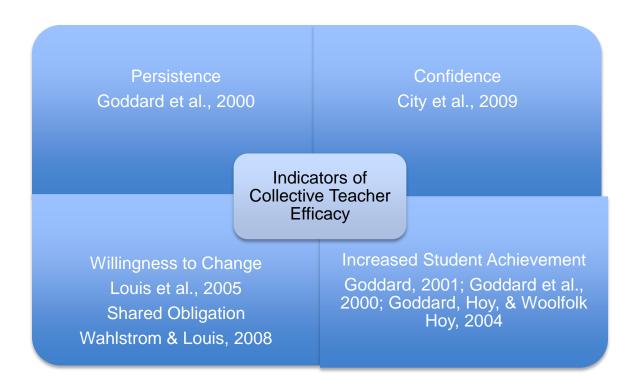


Figure 2. Indicators of collective teacher efficacy.

The literature review revealed that collective teacher efficacy seems to increase teacher confidence (City et al., 2009), which in turn impacts their ability to persist better through challenges (Goddard et al., 2000). Teachers who have a high sense of efficacy and confidence are also willing to improve and change their instructional practice (Louis et al., 2005) and develop a sense of a shared obligation (Wahlstrom & Louis, 2008) as a teaching staff to improve student achievement (Goddard, 2001).

It is imperative that particular structures are in place to promote the development of collective teacher efficacy. How well a school functions as a social system (i.e., in its interrelationships between individuals) is dependent on the staff's belief system and practices stemming from the professional development in instructional practice that builds the efficacy and capacity to create change and improvement (Hargreaves & Fullan, 2012).

# Significance of Principal Leadership

Existing research supports the significance of the role of the principal in establishing school culture and professional learning (Fullan, 2014; Hargreaves & Fullan, 2012; Leithwood, 2012; Robinson, 2011). I therefore felt it necessary to examine the relationship of principals' leadership competencies and collective teacher efficacy.

Canada's urban school principals today are faced with many obstacles in their daily work, such as restrictions on resources, and, in some cases, existing policies such as requirements for standardized testing that no longer best serve students and the diversity of needs in every classroom (Hargreaves & Shirley, 2012; Robinson, 2011). The challenge of leadership in schools is complex and multidimensional. School leadership comprises practices with a high impact on student learning and student well-being (Robinson, 2011). High-performing schools are those with strong instructional practices that result in improvement in student achievement (Leithwood, 2012). An abundance of research supports the idea that the quality of school leadership is an important contributor to the development and maintenance of such schools. Research also shows that effective principals excel in their ability to motivate their staff to work together with a strong sense of purpose and to believe in their capabilities to overcome obstacles and reach educational goals (Bandura, 1993; City et al.; Fullan, 2014; Fullan & Hargreaves, 2012; Leithwood, 2012).

Most research conceptualizes the relationship between leadership and student achievement as indirect (Hallinger & Heck, 1998; Leithwood, Louis, Anderson, & Wahlstrom, 2004). However, existing research supports the notion that the principalship has a direct impact on teachers, which in turn impacts students' success (Hallinger & Heck, 1998). An extensive review of the research literature conducted by Leithwood et al. (2004) concluded that principal

leadership is second only to classroom instruction in factors that influence student outcomes. The ability to maintain sustainability in a school in terms of effective teaching practices is also linked to principal leadership and is a key element to organizational growth and improvement (Hargreaves & Fink, 2006).

Current research makes it clear that a school principal has the ability and responsibility to have a positive impact on a school culture, which in turn can have a positive impact on both teachers and students (Leithwood, 2012; Robinson, 2011). It "takes a dedicated, highly competent teaching force working together for the betterment of schools to produce and sustain a vital public system; you cannot get teachers working like this without leaders at all levels guiding and supporting the process" (Fullan, 2003, p. 5).

Principal leadership competencies. This study focused on particular leadership competencies and their possible relationship to collective teacher efficacy. For the purposes of this study, the term *principal leadership competencies* refer to the leadership skills and behaviours that contribute to the successful performance of a school principal. As previously mentioned (in Chapter 1) this term is in contrast to what Robinson (2011) referred to as leading by adjective styles (e.g., instructional, transformational, or shared leadership). Labelling leadership by a name tends to be abstract and tells very little about specific behaviours and how to learn these behaviours (Robinson, 2011). One reason I chose to use the term *principal leadership competencies* was my own frustration in discovering a variety of meanings in current research for particular leadership models. Additionally, the term *competency* is aligned with philosophical terminology in the province in which the research took place. Alberta School Boards Association (2011) defined competencies as the "provincial requirements for the practice

of school leadership for which Alberta school leaders are accountable throughout their careers" (p. 3).

Alberta Education competencies discussed in this document include (a) fostering effective relationships, (b) embodying visionary leadership, (c) leading a learning community, (d) providing instructional leadership, (e) developing and facilitating leadership, (f) managing school operations and resources, and (g) understanding and responding to the larger societal context. The following section examines the relationship between particular principal leadership competencies and collective teacher efficacy.

Principal leadership competencies and collective teacher efficacy. Hipp (1996) explored the relationships between principals' leadership behaviours (or competencies) and efficacy. She identified a number of principals' competencies that could positively affect efficacy and the climate of the school, including modelling behaviour, inspiring group purpose, recognizing teacher efforts and accomplishments, providing personal and professional growth, promoting teacher empowerment and decision making, managing student behaviour, creating a positive climate for success, fostering teamwork and collaboration, encouraging innovation and continual growth, believing in staff and students, and inspiring caring and respectful relationships. Hipp argued that if such factors as professionalism, collaboration, and a positive climate existed, then they would strengthen teachers' sense of efficacy.

In a study of 809 teachers from public elementary, middle, and high schools throughout the United States by Blasé and Blasé (1999), teachers described the characteristics of their principals that influenced their sense of efficacy. Blasé and Blasé identified the following elements as having a positive impact on motivation and efficacy: use of inquiry and solicited advice from teachers, giving praise and providing appropriate professional development

opportunities, collaboration, coaching relationships among educators, supporting program redesign through resources, and feedback.

Again, reaffirming the previous findings, a study involving teachers in an elementary school in a large school district in Ontario examined the extent to which student achievement and school processes contributed to collective teacher efficacy (Ross et al., 2004). The study analyzed two dimensions of school processes, school cohesion, and support and ownership in school decisions. The findings indicated that school cohesion and support were as strong predictors of collective teacher efficacy as prior achievement, and teacher ownership in school processes was an even stronger predictor of collective efficacy than school cohesion. It is interesting that these findings are in opposition to Bandura's (1986, 1997a) earlier work, which claimed that mastery experiences had the strongest influence on collective teacher efficacy, and to Goddard's (2001) work, which claimed two-thirds of the variance in collective teacher efficacy was attributed by prior student achievement. The Ross et al. (2004) results were encouraging from a leadership perspective, once again reinforcing the significance of common visions as impacting change and student learning. Other findings from the Ross et al. study indicated that the school processes that had the largest impact on collective teacher efficacy were shared school goals, school-wide collaboration, plans that were aligned with school needs, and empowering school leadership.

The results from this study confirmed findings from Bandura (1993, 1997b), and Goddard (2001, 2002) that school processes related to mastery and vicarious experiences, social persuasion, and promoting positive affective states all contribute positively to collective teacher efficacy. More recent research (Leithwood, 2007) has also supported the importance of the emotional side or affective state for principals to develop when leading in their schools.

A smaller study of 79 schools investigated whether collective efficacy could be understood solely through Bandura's (1986) social cognitive theory. Adams and Forsyth (2006) argued against Goddard's (2000, 2001) and Bandura's work, in that those authors ignored the environmental and contextual variables that also come into play in the formation of collective teacher efficacy. For Adams and Forsyth, socioeconomics and prior school performance could impede the development of collective teacher efficacy. Although this idea does have some validity, it has also been proven in research that these factors can be overcome. Other contextual variables can work to develop collective teacher efficacy and improve student learning, overcoming existing challenges. As previously mentioned, collective efficacy is a more powerful indicator for student achievement than socioeconomic status (Goddard, 2000). School leaders need to be aware of the influences of contextual variables but still can effectively develop collective efficacy to influence practice and achievement and not use these factors as excuses.

There are actually many competencies that school leaders can execute to ensure a positive impact on collective teacher efficacy. Relational trust, setting direction, collaborative decision making, and promoting and participating in teacher learning and development are foci of the subsequent discussion. These competencies appeared consistently throughout the research as demonstrating a connection with collective teacher efficacy.

**Relational trust.** One key finding in the research in regard to the development of collective teacher efficacy was the construct of relationship and in particular the significance of relational trust. Bryk and Schneider (2002) defined *relational trust* as including personal regard, interpersonal respect, competence, and integrity. City et al. (2009) defined relational trust as "the highest form of organizational trust" (p. 163), developed through time when organizations provided an environment of mutual support in a school. That is, trust emerges over time as

people come to the realization that they can depend on one another to work similarly in challenging situations. In their four-year study, Bryk and Schneider argued that relational trust was a prominent factor of school improvement both in terms of changes that occurred in the school organization and the impact on student learning. The authors concluded that growth in trust was positively correlated with an increase in cooperation, social support, and commitment to school goals. Goddard, Tschannen-Moran, and Hoy (2001) also found similar connections between positive relationships and student achievement.

In the majority of the research reviewed, collective teacher efficacy appears to be tightly coupled with trust, particularly in teachers' perceptions of the level of competence of one another. Perceived capabilities of colleagues are a strong predictor of the level of trust found in an organization (Serva, Fuller, & Mayer, 2005). To obtain a high level of collective efficacy, teachers need to have trust in their colleagues' capabilities to carry out essential teaching practices. I believe that leaders need to provide an environment where high trust exists in order for teachers to feel comfortable enough to move towards the deprivatization of practice in order to grow professionally.

Robinson (2010) supported the important role of leaders' ability in building an environment of trust in their staff. For her, trust is built through daily collaboration in work to solve problems and improve practice. Bryk and Schneider (2002) also suggested this idea, stating their belief that schools build relational trust through the day-to-day interactions in a professional learning community. Individual teachers' actions demonstrate commitment to the work of the school and to other teachers, therefore contributing to the total sense of collective staff efficacy in addressing challenges and improving practice (Bryk & Schneider, 2002).

For Robinson (2011), effective leaders do not first develop relationships and then address difficult work challenges. Instead, both need to be done simultaneously so that the "relationships are strengthened through doing the hard, collective work of improving teaching and learning" (Robinson, 2011, p. 16). In opposition to Bryk and Schneider (2002) and Robinson (2011), Mulford and Silins's (2003) nested model for development and change attested to the idea that the personal/interpersonal right—collective teacher efficacy, collaborative culture, distributive leadership, and trust—needs to be established first. Once this right is in place, a school can focus on the educational/instructional right—shared mission, confidence in what the school is doing, and why the school is moving in that direction. Subsequently, leaders would then have the opportunity to move to the development/learning/change stage.

Based on the research reviewed, evidence supports the relationship between the principal leadership competency of relational trust and collective teacher efficacy as worthy of further examination. In addition, as argued by Robinson (2011), positive relationships with a strong sense of professional trust can emerge through the ongoing work of improving teacher practice by leaders who display strong competencies, set a clear vision and goals, and align professional learning with the needs of their staff. Through these processes trust among colleagues would develop, leading to a stronger sense of collective teacher efficacy (Bryk & Schneider, 2002; Robinson, 2011).

Not all experts in the field of education would agree with my belief that relational trust influences collective teacher efficacy. For example, for City et al. (2009), relational trust and efficacy are two separate leadership roles in the five main principles of their instructional rounds model. City et al. related the idea of organizational trust to collective learning, which then enhances collective teacher efficacy. However, other research has supported a direct connection

between relational trust and collective teacher efficacy (Bryk & Schneider, 2002; Robinson, 2011; Serva et al., 2005). The current study therefore assumes a direct relationship between relational trust and collective teacher efficacy.

Setting direction. Leithwood (2012) defined setting direction as encompassing "building a shared vision, fostering the acceptance of group goals, creating high-performance expectations, and communicating the direction" (p. 59). These practices are grounded in Fullan's (2003) construct of moral purpose. Research reviewed demonstrates a strong connection between a leader's ability to set direction and the emergence of increased collective teacher efficacy in a school (Goddard, 2000; Kurz & Knight, 2004; Mascall et al., 2008; Ross & Gray, 2006b).

In a three-year, mixed-methods study, Mascall et al. (2008) suggested that in schools that are fully aligned in direction, individual responses showed a higher level of teacher academic optimism including the teachers' beliefs in regard to trust, collective teacher efficacy, and academic emphasis. Kurz and Knight (2004) also found a positive, moderate relationship between goal consensus and collective teacher efficacy. As staff members become more cohesive in their beliefs and have common goals, the possibility of the group being persuaded to engage in a new initiative based on strong rationale is more likely to occur (Goddard, 2002b). This is consistent with Kurz and Knight's (2004) findings: "Goal consensus/vision, personal teaching efficacy and general teaching efficacy are all found to be significant predicators of collective teacher efficacy, with goal consensus/vision being the strongest predictor" (p. 123). Robinson (2011) also supported this finding: When leaders focus on establishing goals and expectations, they build efficacy in the process. In line with the importance of Bandura's mastery experiences, Robinson (2011) stated that "goal setting works when people are committed to goals that they believe they have the capacity to achieve" (p. 51). Efficacy can then be a

consequence when a leader collaboratively sets clear goals and expectations that are viewed as attainable. Prussia and Kinicki (1996) also found that collective efficacy was positively related to group goals.

Ross et al. (2004) found that school cohesion, including shared goals, was more predictive of collective teacher efficacy than prior student academic achievement. In a more recent study of 205 elementary schools, Ross and Gray (2006a) found that transformational leadership—including commitment to school vision, professional community, and community partnerships—contributed to the development of collective teacher efficacy. These authors discovered that schools with higher levels of collective efficacy were far more likely to have staffs motivated to go beyond themselves and to buy into organizational goals for the benefit of the organization.

In sum, the literature review revealed that collective teacher efficacy and setting organizational direction have both proven to have positive effects on schools (Goddard, 2000; Leithwood, 2012; Mascall et al., 2008). Also evident in the research was a strong presence of the impact of goal consensus on collective teacher efficacy (Kurz & Knight, 2004; Robinson, 2011; Ross et al., 2004). Based on these findings in existing research, I concluded there was sufficient evidence regarding the principal leadership competency of setting direction as a consideration in the construction of collective teacher efficacy in a school.

Collaborative decision-making. For the purposes of this study, collaborative decision making is defined as teachers' participation in school-wide decisions such as school direction, classroom organization, and allocation of resources. Many terms in current research imply similar concepts, such as collective leadership (Leithwood & Jantzi, 2012), shared leadership (Wahlstrom & Louis, 2008), distributed leadership (Spillane, Halverson, & Diamond, 2004), and

shared decision making. Whatever definition or form of leadership is used, giving teachers the opportunity to influence school-based decisions such as school focus, allocation of resources, or school organization can have positive effects on many factors including collective teacher efficacy (Newmann, Rutter, & Smith, 1989).

Involving teachers in decision making has the potential to make a significant difference in terms of teacher commitment to staff initiatives that can lead to improved student achievement (Wahlstrom et al., 2010). Collaborative decision making can be an antecedent to the development of collective teacher efficacy by empowering teachers, building confidence in the capabilities of the group, and encouraging common goals. In regard to principal leadership influence on teacher efficacy, Hipp (1996) found that shared decision making was a key component positively connected to both relational trust and efficacy in a school. Respondents to the current study reported that through their participation in the decision-making process they felt that the leadership in the school trusted them to possess the capabilities to make decisions in relation to student learning.

In past studies, the construct of collective teacher efficacy and collaborative decision making was continuously explored. Goddard (2002a) suggested that teachers who have an opportunity to influence significant school decisions come to more strongly believe in the conjoint capability of their fellow staff members. That is, when teachers have opportunities to collectively influence instructional decisions relevant to their work, staff is empowered, and organizational agency contributed to. As defined by Goddard (2002a), *organizational agency* involves acting purposefully in pursuit of educational goals and believing that the group or organization can produce desired effects. Organizational agency is tightly linked to the construct of collective efficacy. When teachers see things as outside their control, they are more likely to

have a lower sense of collective efficacy, making it difficult for leaders to initiate innovative change to improve student achievement in their schools. Ross et al. (2004) reinforced Goddard's (2000a) findings that collective teacher efficacy was positively influenced by the amount of influence that teachers had on decisions in the school. It is important that teachers are given opportunities to make decisions on issues that they actually have control of and can improve. Therefore, principals who make a conscientious effort to engage teachers through collaboration and involving them in decisions may be able to positively impact the collective efficacy of their staff. Ware and Kitsantas (2007) study involving 26,257 teachers and 6,711 principals examined teacher commitment to the profession. It demonstrated a strong relationship between teachers' opportunities to influence decision making and collective teacher efficacy, as well as their level of commitment to the profession (Ware & Kitsantas, 2007).

Leithwood and Jantzi's (2012) term *collective leadership* is similar to collective decision making. It refers to the amount of influence staff members have on decisions. Their study of 2,570 teachers in 90 schools demonstrated that collective leadership had a stronger influence on student achievement than individual leadership as well as having an indirect link to teacher motivation. Although the study was not directly correlated with collective teacher efficacy it does once again support the significance of involving teachers in the process of decision making. Mulford and Silins (2003) viewed staff's collective efficacy and their ability as essential for organizational learning and for increasing student achievement.

As the day-to-day work of principals always affects teaching staff, whether positively or negatively, it is essential that they engage in leadership competencies that will have a positive impact on teachers. The leadership competency of collaborative decision making through creating a sense of shared responsibility and promoting collaboration with and among staff

emerged as a competency that would benefit from a more in-depth analysis of its relationship to collective teacher efficacy.

Promoting and participating in teacher learning and development. For Robinson et al. (2008), providing instructional leadership meant promoting and participating in teacher learning and development. This idea derived from one of Robinson's (2010) five leadership dimensions (see also Robinson et al., 2008). In this competency, a school leader encourages and participates with teachers in both formal and informal professional development to improve instructional practice (Robinson et al., 2008). This competency has the potential to make a significant impact on the growth of collective efficacy given that it connects to three of Bandura's (1986) components influencing collective efficacy: mastery experiences, social persuasion, and vicarious learning experiences.

Both Goddard (2000) and Bandura (1986) agreed that mastery experiences show the most significance in developing the collective efficacy of a group. Consequently, school leaders need to be thoughtful in the professional development activities that they design that can help build mastery experiences in instructional practice for teachers. An example of this could be putting in place a particular literacy or mathematics program that will have a positive impact on student achievement.

Leithwood's (2012) work on the core practices of leaders discussed the significance of what he referred to as "developing people" (p. 60). He emphasized the importance of capacity building, not only through support and developing the necessary knowledge and skills to achieve school goals, but also through developing the mind frames of staff to persist and apply what they have learned to new situations. Leithwood (2012) substantiated Bandura's (1986) work about the

significance of mastery experiences by stating that as leaders build capacity in their staff, success is achieved through improved student achievement, efficacy, and motivation.

The literature supports the importance of leaders developing teachers through collaborative learning environments; this in turn increases a staff's sense of collective efficacy. Wahlstrom and Louis (2008) boldly stated that as educational reforms are a significant factor in changing the nature of education, a teacher's sense of efficacy can be a significant factor in whether these reforms are successful or not. Similarly, Hargreaves and Fullan (2012) also attested to the importance of developing professional capital through professional learning opportunities; this practice contributes to a teacher's ability to make quality decisions in terms of student learning. The ability for teachers to feel confident in the decisions they make contributes to their feelings of efficacy both as individuals and as a group. For Wahlstrom and Louis (2008) efficacy can be a factor that shapes teachers' willingness to take on new ideas and be comfortable enough to share their current practices with colleagues. As a result, it was clear that an investigation into the possible relationship between the principal leadership competency of promoting and participating in teacher learning and development and collective teacher efficacy was worthwhile.

#### **Synthesis of the Literature**

In summary, as the goal of educational organizations is to improve student learning through innovation and strong pedagogy, there is value in examining factors that can contribute to organizational agency. In most of the research reviewed, collective teacher efficacy emerged as an important quality in schools, one that is worth further examination (Bandura, 2000; Goddard, 2000, 2001, Goddard, Hoy, & Woolfolk Hoy, 2004; Hipp, 1996; Schechter & Tschannen-Moran, 2006).

Leithwood (2007) discussed the significance of the principal leadership practices that can influence teacher emotions. He labelled collective teacher efficacy and trust as being "soft" leadership components but essential for a school. Collective efficacy was considered to be one of the seven teacher emotions that can have a significant influence on school improvement.

Leithwood (2007), in his meta-analysis of organizational conditions that influence teacher emotions, included the following: clear, explicit, shared goals for judging performance; positive school atmosphere; and participating in decision making and school improvement plans that align with teacher's views of needs in the school and regular performance feedback from leaders or colleagues. The Ross and Gray (2006a) study of transformational leadership, teacher commitment to organizational values, and the effects of collective teacher efficacy recommended that future researchers examine particular leadership dimensions having the potential to have a positive effect on staff members' agency beliefs and sense of collective efficacy.

The current interpretive multi-case study contributed to research by providing an in-depth analysis of four particular leadership competencies—relational trust, setting direction, collaborative decision making, and promoting and participating in teacher learning and development—gleaned from the research and their possible relationships to collective teacher efficacy. This study was unique in that it gathered from previous research conducted on collective teacher efficacy and examined this construct from a leadership perspective and specific principal leadership competencies that have the possibility to positively influence the development of collective efficacy in a Canadian context.

Table 1 is a synthesis of the research reviewed for this study.

Table 1

Principal Leadership Competencies and Collective Teacher Efficacy

Competency	Supporting literature	Indicators of collective teacher efficacy	Social cognitive theory
Setting direction	Goddard (2000, 2002); Goddard & Goddard (2001); Kurz & Knight (2004); Mascall et al. (2008); Prussia & Kinicki (1996); Robinson (2011); Ross et al. (2004)	Teaching staff is better able to handle pressure and difficult situations (Goddard et al., 2000; Goddard, Hoy, & Woolfolk Hoy, 2004)	Social persuasion, mastery experiences
Relational trust	Bryk & Schneider (2002); Mulford & Silins (2003); Serva et al. (2005)	Teachers are more confident in facing challenges and more willing to look at their practice critically (Goddard, 2000, 2001)	Affective state, social persuasion
Collaborative decision making	Goddard, Hoy et al. (2004); Hipp (1996); Newmann et al. (1989); Ross et al. (2004)	Teaching staff has a sense of a shared obligation (Wahlstrom & Louis, 2008)	Vicarious learning, social persuasion
Promoting and participating in teacher learning and development	City et al. (2009); Leithwood (2012); Marzano (2007); Robinson (2011); Robinson et al. (2008)	Teaching staff has a willingness to change and have a sense of professional control (Louis et al., 2005; Wahlstrom et al., 2010)	Mastery experiences, vicarious learning

# **Summary**

In this chapter, I have provided a critical review of the literature grounding this study. Key literature streams reviewed included collective teacher efficacy, significance of principal leadership, principal leadership competencies, theoretical frameworks, and synthesis of the literature. In Chapter 3, I discuss the theoretical framework, methodology, data collection and analysis methods, trustworthiness, and ethical considerations.

## **Chapter 3: Research Design**

The purpose of this study was to examine whether principal leadership competencies that align with Bandura's social cognitive theory were related to developing indicators of collective teacher efficacy in school staff. This research has the potential to deepen the understanding of school leaders in relation to the actions of principals involving specific competencies and how these competencies if acted on may develop, influence, and make sustainable collective teacher efficacy. In seeking to understand this phenomenon, the study addressed five research questions. The primary research question was, "Is there a relationship between specific principal leadership competencies and collective teacher efficacy as demonstrated and understood by a select group of principals?" Four additional subquestions were as follows:

- 1. What are the key indicators of collective teacher efficacy?
- 2. If there is an identifiable and evidentiary relationship between specific principal leadership competencies demonstrated and collective teacher efficacy demonstrated, what are the specific leadership competencies that have a positive correlation with collective teacher efficacy?
- 3. Does this research support the proposition that individual principal leadership competencies can positively impact collective teacher efficacy?
- 4. Does this study support or differ from the synthesis of current research?

Through my review of existing research and my own findings, I decided to limit this study to four key leadership competencies as provided by in *Professional Practice Competencies* for School Leaders in Alberta (Alberta School Boards Association, 2011): (a) fostering effective relationships, (b) embodying visionary leadership, (c) leading a learning community, and (d) providing instructional leadership. It seemed that these competencies had a positive impact on

collective teacher efficacy. Principal leadership competencies not included in this study were: (a) developing and facilitating leadership, (b) managing school operations, and (c) resources and understanding and responding to the larger societal context.

This chapter describes the study's research methodology and speaks to the study's epistemological underpinnings, theoretical framework, method of data analysis, processes to ensure the trustworthiness of its' findings, and ethical considerations in carrying out the study.

My epistemological position for this study is constructivism, wherein social reality is constructed; that is, where people construct understandings of their social reality in their social world (Crotty, 2010). In effect, they construct knowledge based on how they interpret the realities of their and others' experiences (Crotty, 2010). For Creswell (2012), social constructivists were researchers who believed in multiple realities and in the co-construction of reality by researcher and participant. I approached my research from this perspective.

### **Theoretical Framework**

A theoretical framework is a structure that may comprise a question, purpose, research questions, methodology, methods, and modes of analysis. It is a nuanced understanding of a question related to a phenomenon based upon the available research about that phenomenon which evidences a possible theory related to the phenomenon. A framework assists the reader in making sense of the question that the research is addressing (Creswell, 2012).

My approach emphasized examination, description, and discovery in the participants' lived experiences in their schools (Bloomberg & Volpe, 2008): "Qualitative researchers are interested in understanding the meaning people have constructed" (Merriam, 1998, p. 6). The participants in this study constructed their understandings of their reality in the social world of their school community, in concert with the epistemological assumption of the study.

This study examined the problem of how school principals could best develop efficacious teaching staffs that were confident and persistent in their instructional practice, and believed that as a staff they could make a difference in their students. I looked at principal leadership competencies, defined as leadership behaviours or traits that contribute positively to an individual's effectiveness as a leader, and collective teacher efficacy, defined as "the perception of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (Goddard, 2000, p. 477). The primary purpose of the study was to examine whether particular principal leadership competencies aligning with Bandura's social cognitive theory could indicate collective teacher efficacy in a school staff. Data were gathered from urban and rural elementary principals—their own leadership stories and professional opinions—to determine whether participants believed a relationship existed between the two phenomena. Lastly, the data gathered in the field were then compared to the evidence found in the existing literature.

# Methodology

This study was guided by qualitative methodology—a research approach that seeks an understanding of a social setting or activity from the perspectives of the research participants (Bloomberg & Volpe, 2008; Creswell, 2012). Its lack has been noted in research on teacher efficacy conducted to date. Goddard, Hoy, and Woolfolk Hoy (2004), Tschannen-Moran and Woolfolk Hoy (1998), K. F. Wheatley (2005), and Klassen, Tze, Betts, and Gordon (2011) have called for more qualitative research that emphasized an interpretive focus to better understand teacher efficacy. In support of this call, the Klassen et al. (2011) meta-analysis of teacher efficacy research argued for more diverse methodologies and, in particular, more qualitative and longitudinal studies. This has resulted in an increase in qualitative and mixed-methods studies. In

qualitative research, the researcher explores a problem and in doing so develops in-depth understandings of a central social phenomenon by collecting data from a small number of participants (Creswell, 2012). As the researcher, I had the opportunity of co-constructing what I believed were the participants' views of their social reality.

In conclusion, a qualitative approach seemed best suited to my study. Using this approach, I examined the understandings of participants, who were current principals in schools, about both the need for and the nature of the relationship between principal leadership competencies and collective teacher efficacy.

Case study. Within the framework of a qualitative approach, this research's most suitable design was a case study. The case study research methodology is a detailed description and analysis of a particular phenomenon within particular boundaries (Creswell, 2012; Merriam, 1998; Stake, 1995). It is a "single entity, a unit around which there are boundaries" (Merriam, 2009, p. 40), "an in-depth exploration of a bounded system (e.g., activity, event, process, or individuals) based on extensive data collection" (Creswell, 2012, p. 465). *Bounded* means that, for the purposes of research, the system is separated from others in terms of time, space, or physical boundaries (Creswell, 2012).) A case study is concentrated on the provision of a rich and thick description of a case (Flyvberg, 2011). This description contributes to the contextual understanding and hence the social depth of the work or study at hand. Case studies thus examine a social construct or social phenomenon in a particular—bounded—context (Yin, 2009). The bounded space in this study was school principals working in urban and rural elementary schools in the province of Alberta.

Stake (1995) argued that "we [as researchers] do not study a case primarily to understand other cases. Our first obligation is to understand this one case" (p. 4), as a case "is a specific,

complex, functioning thing" (p. 2). Tschannen-Moran and Woolfolk Hoy (1998) stated that the case study and qualitative approaches in educational research allowed the researcher to deepen their understanding, for example of teachers' efficacy beliefs. Merriam (1998) indicated qualitative case studies were an effective methodology for understanding and interpreting educational issues: "Insights gleaned from case studies can directly influence policy, practice, and future research" (p. 19).

I chose case study methodology for a variety of reasons. First, the methodology aligned well with my primary and secondary research questions. Second, although case studies do not establish causation, they can indicate a possible relationships between two phenomena. Methods such as focus groups and interviews can provide richer information than simple survey research, which was an alternative methodology that I considered. To elaborate, several understandings may be drawn about a topic in the social setting of focus group interviews, and from the personal perceptions and understandings of individual interviews). The case study allows the researcher the opportunity to refine understandings around a specific construct (i.e., an idea or theory), which was the objective of this research study (Stake, 1995). As well, this approach allowed me to compare my findings from a specific, bounded case of urban and rural elementary principals with those of existing research.

Stake (1995) provided two types of case studies, intrinsic (an intrinsic interest) or instrumental (a need for understanding): We "get insight into the question by studying a particular case" (p. 3). This research study was structured around Merriam's (1998) work, which was based in turn upon Stake's earlier theories of case studies. Merriam (1998) defined an *interpretive case study* as one that allows for the "development of a concept or to illustrate, support or challenge theoretical assumptions" (p. 38). This fitted well with my research design,

as I had already developed some possible principal leadership competencies that could be related to the development of collective teacher efficacy. The interpretive multi-case study orientation best allowed me the opportunity to understand my research question through the meanings that principals assigned to it. This permitted me to analyze, interpret, and theorize about their reflections, stories, and comments in order to develop my own theory about the possible relationship between principal leadership competencies and collective teacher efficacy.

In summary, using the interpretive multi-case study methodology, I investigated the relationship between a select group of principal leadership competencies and collective teacher efficacy as defined by Bandura (1997a) in the context of rural and urban schools and school districts in the province of Alberta. The units of analysis for the study were elementary school principals. The data gathered were examined for similarities and differences, using constant comparison in seeking for common themes and anomalies.

Research setting. Klassen et al. (2011) declared the need for more research to be done internationally, as collective teacher efficacy may look different depending on the context. My study addressed the issue by specifically providing a Canadian perspective. The provincial context for my study was currently undergoing policy changes as a result of province-wide educational consultations. My study was timely, as both the Alberta government and the Alberta Teachers' Association were investigating methods to increase teacher efficacy. This was documented in the Alberta government and Alberta Teachers' Association's (2013) *Framework Agreement*, section 2, under Teacher Workload. It was recommended that each school jurisdiction do an internal review to review tasks or policies that could "be eliminated or modified to reduce teacher workload and improve teacher efficacy" (Alberta Teachers' Association's, 2013, p. 2).

Sample. The research sample consisted of 27 elementary principals, 24 from an urban school board and three from rural school boards. Focus Group 1 consisted of four females and four males whose experience as principals ranged from three months to eleven years. Six females and one male participated in Focus Group 2 with experience from one and a half years to thirteen years. Focus Group 3 included four female principals and two male principals whose experience spanned from one to thirteen years. All three urban interview participants were female with experience varying from six to ten years. There were two male participants and one female participating in the rural interviews. Their experience as principals ranged from three to ten years. In total there were 18 females and 9 males who participated in this study with experience ranging from three months to thirteen years.

Either superintendents or directors recommended 25 out of the 27 principals. All the urban candidates were recommended by their area directors. One rural principal was recommended by a superintendent and the other two rural principals were recommended by a University of Calgary professor. The recruitment letter to superintendents and directors asked them to identify elementary school principals in their jurisdiction who exhibited one or more of the following principal leadership competencies drawn from the literature: relational trust, setting direction, collaborative decision making and participating, and promoting teacher learning and development. The assumption was that if leaders possessed some or all of these competencies, they would be capable leaders. This method of selection did have the risk of limiting participants based on the opinions of supervisors.

The number of participants was confined to 27. I believe that this number of participants—many in urban focus groups—allowed me to facilitate a dynamic synergistic group and stimulate discussion (Krueger & Casey, 2009). The reasoning for including both urban and

rural elementary principals as participants was to allow the data to be compared for similarities and differences across different contexts. Urban Focus Group 1 consisted of eight participants, Urban Focus Group 2 seven participants, and Urban Focus Group 3 six participants. Individual interviews were conducted with three rural elementary principals and with three urban elementary principals who did not participate in the urban focus groups.

Research process. Purposeful sampling was used for this multi-case study. This type of sampling allows the researcher to access a select sample—in this case, elementary urban and rural principals—to gain significant insight into a given topic. Criteria chosen for a study need to reflect the purpose of the study in order to obtain quality information (Merriam, 1998). The first criterion used in this study was the selection of elementary principals from urban and rural settings. The second criterion was based on the opinion of the principals' direct supervisors, that those principals possessed one or more of the principal leadership competencies outlined in the recruitment letter. This was important element as it was my hope to recruit effective principals who would be able to speak to the development of collective teacher efficacy in their schools. All urban focus group participants and urban interview participants were recruited by recommendations of area directors in the urban board where the research was conducted. The three urban interview participants were asked if they were interested in doing an individual interview given that they were unable to attend on the dates scheduled for the urban focus groups.

Given that recruiting rural elementary principals proved to be a challenging task, criterion and network sampling were both used. Rural Principal 3 was recruited based on criteria sampling through a recommendation from his superintendent. Rural Principals 1 and 2 were both recruited through network sampling (Merriam, 1998) by a recommendation from a University of Calgary

professor who believed that they would be appropriate candidates to participate in this study. I wanted to ensure that I created clear boundaries for this research by limiting it to urban and rural elementary principals. I made the assumption that the professional conversations would be deeper when the participants shared the common thread of being principals in the context of elementary schools. The use of both urban and rural perspectives was thought to contribute to a range of perspectives to better understand whether a relationship existed between particular leadership competencies and collective teacher efficacy.

Once a group of elementary principals had been recommended by a superintendent, I emailed the potential elementary school participants to determine if they were interested in participating in the study (see Appendix A). This was a preliminary contact and no commitment was sought—merely interest in participation in the study. Following this, a letter of consent was sent to interested participants via email (see Appendix B). I requested that participants email a scanned copy of the consent prior to the focus group meeting or an interview. Email was the preferred method of communication as it was efficient and saved a great deal of time for both the participants and me.

#### **Data Collection Methods**

The only data gathering methods used in this study were focus groups and individual interviews. Initially, the data gathering was supposed to include three urban focus groups and three rural focus groups. As previously mentioned, the reality was that I could not get enough rural participants to form focus groups. One challenge of this study was recruiting rural participants in general. Most rural school districts informed me that many of their principals were often approached to do research, so that the school district had to limit access to principals for research purposes to members of their own school district. I did get permission from two

rural school district superintendents, but again, recruiting enough rural participants to form appropriate focus groups to engage in rich dialogue remained an obstacle. It was at this point that I consulted with my supervisor as well as my supervisory committee and instead created three rural individual interviews and, for balance, three urban individual interviews. This proved to be an effective method of gathering data to the point of saturation.

Here I provide an explanation of the value of focus groups in relation to this particular study as well as the advantage of also being able to conduct urban and rural individual interviews. A focus group is a discussion by research participants targeting a specific theme or idea and is an effective method for analyzing perceptions as well as gathering ideas and input from the participants (Bloomberg & Volpe, 2008; Krueger & Casey, 2009). The goal of focus groups is to create a candid dialogue (see Appendix C) among participants that addresses, in depth, a particular topic that is devised by the researcher (Krueger & Casey, 2009; Morgan, 1996). The assumption of a focus group is that if the researcher can establish an environment that encourages a range of opinions, the discussions can lead to a clearer view of the issues and reveal other information that a researcher might not have uncovered in the literature review. The manner in which the research questions were structured allowed them to be addressed in an open dialogue drawing from the participants' own professional experiences and their perceptions of collective teacher efficacy, principal leadership competencies, and their relationship. Focus groups naturally lend themselves to attaining more insight into a topic (Krueger & Casey, 2009). The manner in which I structured the research questions allowed for an open dialogue wherein participants could relate their own professional experiences and their perceptions of collective teacher efficacy, principal leadership competencies, and the relationship between these.

Through reviewing the literature comparing focus groups and one-on-one interviews, I concluded once again that focus groups would be the most effective method to address my research questions. Indeed, I was interested in a collective phenomenon and thus a collective methodology for collecting data (namely, focus group research) seemed ideally suited for this purpose. According to Fern (1982), focus groups produce only 60 to 70 percent of the ideas produced by individual interviews. However, Morgan and Krueger (1993) argued that the advantage of the focus group over an individual interview was that it allows participants the opportunity to question and explain themselves to each other, thus possibly providing data on the extent of consensus and diversity among the participants. Observing the degree of agreement and disagreement among participants is a benefit of focus groups that I would not get if I conducted individual interviews (Morgan & Krueger, 1993).

One of the most significant rationalizations for my choice of focus groups and interviews was that both provided coherence between the methodology and the research question. Based on my research into collective teacher efficacy and knowledge-building communities (Scardamalia & Bereiter, 2006), I wanted to structure my research in a manner that enhanced both of these concepts. Focus groups were a more collaborative approach than methods such as surveys and interviews. Group discussions, executed well, lend themselves to descriptive views and knowledge-building conversations that can bring out subtleties and nuances of what the participants are thinking (Krueger & Casey, 2009). Moreover, through the co-construction of an understanding of a social reality by participants (Scardamalia & Bereiter, 2006) and assigning the participants an opportunity for rich dialogue, the approach itself in aligning with the research topic has the potential to increase the participants' sense of efficacy. Individual interviews proved to be of value; as well, participants covered less breadth compared to focus groups but

provided detailed examples of specific constructs that were beneficial to this study. The combination of using focus groups plus interviews resulted in rich comprehensive data for this research.

Creswell (2012) described a focus group as typically comprising groups of four to six participants. The researcher's role is to facilitate a small number of questions to elicit responses from all the participants in the group. I used a more fixed research design (Morgan, 1996) in order to have consistency among the three urban focus groups and interviews in terms of the questions asked. Krueger and Casey (2009) indicated that a similar group discussion conducted more than once allows the researcher to identify trends and patterns in perceptions. Another benefit of designing a specific set of interview questions for all urban focus groups and urban and rural interviews was that it allowed me to identify group-to-group similarities and differences (Knodel, 1993).

The same questions were developed for both the urban focus groups and the urban and rural interviews and were formed in an open-ended manner, allowing principal participants to answer in a manner that was conducive to their ideas. Interviews need to be planned with some form of structure, but also in such a way as to allow for flexibility (Vaughn, Schumm, & Sinagub, 1996; see the interview protocol in Appendix C).

I chose to do three urban focus groups, consisting of elementary principals from a large urban district in Alberta: eight participants in Urban Focus Group 1, seven participants in Urban Focus Group 2, and six participants in Urban Focus Group 3. I purposely chose to get six to eight participants in each group to allow each participant a suitable amount of time in the 90 minutes to discuss his or her understandings and experiences. Another justification was that at that point data becomes saturated and no new information is gleaned (Morgan, 1996).

Once I realized that I would not be able to recruit approximately 21 participants for three rural focus groups, I decided to conduct individual interviews instead, in order to gain a rural perspective. I also wanted to continue to balance perspectives in terms of the data collection and analysis; therefore, I conducted three urban interviews of urban elementary principals who did not participate in the urban focus groups. I believe this provided a better range of perspectives than just doing urban elementary principal focus groups. This did present a challenge when comparing the data between urban and rural principals as the numbers representing a rural perspective were lower. Despite this, the findings did reveal consistencies between all principals participating in this study as well as being comparable to the existing research.

Data analysis. The objective of data analysis is to make sense of the data, reduce the volume of information, identify significant patterns, construct a framework from the data obtained, and then compare it to the synthesis of the literature. Following Merriam's (1998) advice, I embarked on analysis at the beginning of the data collection stage, working on collection and analysis simultaneously to avoid becoming inundated with data, forgetting, or becoming unfocused and repetitious. I used my theoretical framework as a guide to this work. I valued the input of the participants and their practical knowledge of their leadership in a school. The data gathered through the discussions of the urban focus groups and urban and rural individual principal interviews were used to develop conceptual categories and to create my own theory in regard to the relationship between principal leadership competencies and collective teacher efficacy.

Throughout these processes, I attempted to be as objective as possible. Nonetheless, I recognize that as researchers we can never be truly objective and what we conclude can only be developed from our own reflective interpretations of our experiences (Miles et al., 2014). We

will always be influenced by our own personal values, attitudes, and beliefs; this is unavoidable when embarking on the field of qualitative research. My biggest challenge was conducting research with the urban focus groups and interviews. This was due to my familiarity with the school district in which the participants worked. I had to make a conscientious effort not to make any assumptions about references that were made in their stories, comparing them to my own experiences with similar topics. I did make a constant effort to not bring my own biases into their stories and experiences. This was challenging, but because I was fully aware that my own experiences could impact my interpretation of the data, I hoped that this awareness would bring more objectivity to my analysis.

I embarked on three major stages of data analysis, as identified by Miles et al. (2014): data condensation, data display, and drawing and verifying conclusions. This process did not take place in a linear manner. Instead, it was a cyclical, iterative practice, aligned with Miles et al.'s theory of the process of qualitative data analysis. In addition, this extensive step-by-step process served as my research audit trail.

During Stage 1 of data condensation, I examined the data to determine what pieces were relevant to the research questions and what pieces could be eliminated. I began this procedure by coding and categorizing themes that emerged from the data. Saldana (2013) defined a code as a word or phrase that is the summary or essence of the data generated by the participant. As researchers are often inundated with data, coding allows for data to be condensed, leaving the researchers with prompts that assist in the reflection process and the development of common themes, otherwise referred to as *pattern codes* (Miles et al., 2014). I used broad themes in this stage such as relationships, vision, resources, collaboration, and instructional leadership to name a few.

I broke the process of coding into two cycles: first-cycle and second-cycle coding (Saldana, 2013). First-cycle coding allowed me to assign meaning to data chunks. I began the process by transcribing the urban focus group interviews and the rural and urban individual interviews. I used in vivo coding (use of words or phrases from the participant's own language); provisional coding (researcher-generated codes); and evaluation coding (judgments about merit and worth). These forms of coding seemed most appropriate for the theoretical model that I had generated for this study. I had some preconceived, deductive ideas that I was looking for, such as specific principal leadership competencies and themes on collective teacher efficacy, but I also coded new, inductive ideas that evolved from the participants' contributions. In this first round of coding I created some generalized categories about principal leadership competencies, collective teacher efficacy, indicators, and factors influencing collective teacher efficacy for each of the urban focus groups and individual interviews. I became more detailed as I went along in my analysis, and began to group themes under broader categories. For example, under *relationship* I created subthemes including *knowing your people, trust*, and *caring*.

Second-cycle coding or pattern coding (Miles et al., 2014) is a strategy of grouping first-cycle codes into smaller numbers of themes or constructs. Second-cycle coding allows researchers to begin to develop a picture of the data, and can be the groundwork for cross-case analysis. During this cycle of coding, I developed more detailed levels of coding for each of the constructs developed in the first round of coding for each urban focus group and urban and rural individual interview. One of the links that became apparent during this stage was the connection to Alberta Education's (TAAPCS, 2012) document, *Professional Leadership Competencies for School Leaders in Alberta*.

Following this, I analyzed the data first for each of the three urban focus groups as well as each of the urban and rural interviews, using Alberta Education's principal leadership competencies, as these competencies aligned with the principals' examples and indicators of these competencies. I also observed that the initial competencies that I identified from the literature review and which I used as criteria to select elementary principals to participate in my research was related to the competencies articulated by Alberta Education. Alberta Education's leadership competencies included not only similar descriptors under each competency, as I had discovered in my literature review, but also other descriptors that were related to my own findings. At this point I began to group my own findings using the *Professional Practice Competencies for School Leaders* described by Alberta Education. Table 2 is a visual representation of the relationship between the principal leadership competencies identified in the literature review and the *Professional Practice Competencies*.

Table 2

Comparison of Principal Leadership Competencies in Existing Literature and Alberta's 
Principal Leadership Competencies

Existing research	Descriptors: Professional Practice Competencies Alberta Education
Relational trust: Bryk & Schneider (2002); Mulford & Silins (2003); Serva et al. (2005)	Fostering effective relationships
Setting direction: Goddard (2000, 2002); Goddard & Goddard (2001); Kurz & Knight (2004); Mascall et al. (2008); Prussia & Kinicki (1996); Robinson (2011); Ross et al. (2004)	Embodying visionary leadership
Collaborative decision making: Goddard et al. (2001); Hipp (1996); Newmann et al. (1989); Ross et al. (2004)	Leading a learning community

(2011); Robinson et al. (2008)

I then proceeded to group the data first as urban focus groups, urban interviews, and rural interviews. My findings are generally presented in this order throughout Chapter 4. I also prepared one cumulative document for the three urban focus groups, the three urban interviews, and the three rural interviews.

The next step was to create a chart depicting an accumulation of the themes into urban focus groups, urban interviews, and rural interviews in order to analyze similarities and differences. These displays assisted me in better understanding what was occurring, in possible verification of data, as well as in analysis and drawing conclusions (Miles et al., 2014). Miles et al. (2014) also emphasized the importance of being able to display data in a way that a reader could understand and process the information. To maintain equity of data, one point was given to each theme mentioned during the individual interviews or urban focus group discussions.

Therefore, the highest numerical value a theme could receive was nine in the overall data.

The final step in the process of data analysis was drawing and verifying conclusions based on the findings in the data. I kept a detailed, colour-coded for each separate interview, page numbers of where these themes occurred, and quotations to support my interpretation of the emerging themes.

**Trustworthiness**. In qualitative research, trustworthiness involves the researcher's ability to follow a well-thought-out process and to demonstrate evidence that the analysis is a true representation of the situation and the participants (Bloomberg & Volpe, 2008). Hence, an effective strategy is to complete a member's check (Bloomberg & Volpe, 2008) to verify that the

raw data have been properly documented. As part of the process, it was important to consult with a mentor in the research field. In my case, my supervisor at the university was my mentor.

I established credibility for the data by developing three urban focus groups as well as three urban and three rural individual interviews. This allowed me to compare and contrast findings from the various sources creating a stronger argument based on the findings and recommendations for future studies.

Lastly, my own experience of 20 years in education as a teacher, assistant principal, and principal allowed me to come to this work with a strong knowledge base of such constructs as principal leadership competencies and effective practice in the classroom, and an understanding of issues and challenges that are part of the work of a principal. My experience as a school principal also presented a challenge for me in conducting this research. Immersed deeply in the work of a school principal, I created my own limitations and biases that may have hindered my ability to always conduct the research in an objective manner. I endeavoured to be aware of my own opinions, biases, and beliefs while conducting this research, but unfortunately researchers' own biases, values, and assumptions often exist without their full awareness. This is a factor that I view as a limitation to this study.

#### **Ethical Considerations**

In any type of research, ethical issues relating to protecting participants must be at the forefront of the research design (Bloomberg & Volpe; 2008, Merriam, 1998; Miles et al., 2014). As a researcher, it was my responsibility to ensure I informed and protected the participants. Certain rights of participants need to be adhered to (Creswell, 2012). For example, they need to understand the following: the purpose and aims of the study; how results will be used; and how their lives could potentially be impacted by any social consequences (Creswell, 2012; Miles et

al., 2014). The research process for this study required voluntary participation and was based on the understanding that participants were fully informed of the study's purpose. They had the opportunity to refuse participation or to withdraw at any time up to the data analysis stage. I attempted to protect participant anonymity but made it clear that this could not be guaranteed because of the collaborative nature of participation, where information was shared with others beyond the researcher in a group setting. However, participants were reminded about the importance of anonymity and confidentiality at the beginning of each focus group.

Although this study would be considered low in risk for harming participants, the central issues still lay in protecting participants in relation to how information was gathered, managed, and made public. Therefore, as previously mentioned, informed consent was of the utmost importance. Written consent to voluntarily proceed with the study was received from each participant prior to his or her participation. Participants were asked to participate at a time and location that were convenient for them. As well, I was committed to keeping the names of school districts and schools or other identifying information confidential in order to avoid any potential professional risks for participants. In addition, cautionary measures were taken to ensure the security and confidentiality of the transcripts that were used during data analysis. My supervisor at the University of Calgary, a professional, contracted transcriber, and I had access to the data. In addition, I used member checks (Miles et al., 2014) as part of the process once the data had been transcribed. That is, participants had the opportunity to verify or extend their thoughts in terms of the data summary and could also request that portions or all of what they contributed were deleted. The participants who did respond to the member check did not communicate a desire to add to or change any of the existing data.

It was my personal bias that the benefits of participating in this study far outweighed any potential risks. Most education professionals appreciate an opportunity to speak openly about their practice and current educational issues. The study was an opportunity to share their thinking with people that they might not necessarily encounter in their day-to-day work (Miles et al., 2014). In addition, participating in a knowledge-building community in the discussions about principal leadership competencies and collective teacher efficacy may have called certain individuals to action. An opportunity to gain insight, offer critique, and possibly change their own practice is valued by most professionals in the field of education. Still, even with these considerations, participants were allowed to withdraw at any time up to the final data analysis, which began in April 2015. No participants withdrew from this study.

## **Summary**

In this chapter I have provided a detailed description of the research design for this proposed study, including its epistemological underpinnings, theoretical framework, methodology, data analysis, trustworthiness, and ethical considerations. In the next chapter, I present the findings from this research.

## **Chapter 4: Findings**

This study's purpose was to examine whether particular principal leadership competencies that align with Bandura's social cognitive theory had a relationship with developing indicators of collective teacher efficacy in a school staff. This research has the potential to deepen the understanding of school leaders in relation to the actions of principals involving specific competencies and how these competencies, if acted on, may develop, influence, and make sustainable collective teacher efficacy.

In this chapter, I present findings in the form of a narrative discussion "in which authors summarize, in detail, the findings of their data analysis" (Creswell, 2012, p. 254) related to the primary research question: Is there a relationship between specific principal leadership competencies and collective teacher efficacy as demonstrated and understood by a select group of principals? The findings are organized by the first two secondary research questions presented in Chapter 1, which are as follows (the third and fourth secondary research questions are discussed in Chapter 5):

- 1. What are the key indicators of collective teacher efficacy?
- 2. If there is an identifiable and evidentiary relationship between specific principal leadership competencies demonstrated and collective teacher efficacy demonstrated, what are the specific leadership competencies that have a positive correlation with collective teacher efficacy?

This chapter conveys the significant findings acquired from each of the questions. From these three questions, six key findings emerged from this study:

1. In general, elementary principals (two urban focus groups, two urban principals, and two rural principals) defined principal leadership competencies by referencing

- Professional Practice Competencies for School Leaders in Alberta (TAAPCS, 2012).
- 2. Principals defined collective teacher efficacy as being related to a group with a shared responsibility and common purpose, which was to improve student learning.
- 3. Significant indicators of collective teacher efficacy were identified as strong teacher practice, collaboration/teams, common understanding and cohesive practice, conversation/language, and positive relationships.
- 4. Significant factors having either a positive or negative impact on collective teacher efficacy were teachers' mindsets and their professional relationships; human factors (e.g., mental health, divorce, and negative past experiences); student complexity meaning socioeconomic status, learning or behavioural needs; and community influences.
- Principals identified competencies having the most significant impact on contributing to collective teacher efficacy as: embodying visionary leadership, fostering effective relationships, leading a learning community, and providing instructional leadership.
- 6. All urban and rural principals (27 participants) indicated felt there was a relationship between principal leadership competencies and collective teacher efficacy.

A discussion of the findings, together with supportive details, charts, and explanations follows. It includes separate findings for the urban elementary principal focus groups, urban elementary principal interviews, and rural elementary principal interviews, as well as a summary of all the findings for each research question. In addition, the principal leadership competencies are organized using Alberta Education's (TAAPCS, 2012) *Professional Leadership* 

Competencies for School Leaders in Alberta, as these competencies became apparent in the data analysis phase as the most appropriate. The key findings are summarized at the conclusion of this chapter.

## **Primary Research Question Findings**

The primary research question asked, "Is there a relationship between specific principal leadership competencies and collective teacher efficacy as demonstrated and understood by a select group of principals?" The urban elementary principals in the three focus groups and the three urban and three rural elementary principals individually interviewed saw a relationship between specific principal leadership competencies and collective teacher efficacy. The four principal leadership competencies identified by the 27 elementary principals participating in the urban focus groups, the three urban elementary principals (who did not participate in the focus groups), and the three elementary rural principals were (a) fostering effective relationships, (b) embodying visionary leadership, (c) leading a learning community, and (d) providing instructional leadership. I begin this discussion by sharing how the participants, both urban and rural, defined principal leadership competencies, as it is important for the reader to understand this particular group of principals' interpretations of principal leadership competencies. Likewise, I also present the findings on how the elementary principal participants in the urban focus groups as well as the urban and rural principals interviewed described their understanding of collective teacher efficacy.

I then proceed to discuss Secondary Research Question 1: What are the key indicators of collective teacher efficacy? This also includes a brief discussion of factors that principals perceived as impacting collective teacher efficacy, either positively or negatively. Following this I provide findings for Secondary Research Question 2: If there is an identifiable and evidentiary

relationship demonstrated between specific principal leadership competencies and collective teacher efficacy, what are the specific leadership competencies that have a positive correlation with collective teacher efficacy?

All findings are presented in the following order: urban elementary principal focus groups, urban elementary principal interviews, and rural elementary principal interviews, and if relevant a comparison of rural and urban findings. The chapter concludes with a synthesis of the overall data, where I also revisit the primary research question—Is there a relationship between specific principal leadership competencies and collective teacher efficacy as demonstrated and understood by this select group of principals?—by providing a synthesis of the findings of this study.

Defining principal leadership competencies. As stated in Chapter 1, principal leadership competencies include a broad range of behaviours or traits that contribute positively a principal's effectiveness as a leader. *The Professional Practice Competencies for School Leaders in Alberta* (TAAPCS, 2012) named the following seven competencies for school leaders: (a) fostering effective relationships, (b) embodying visionary leadership, (c) leading a learning community, (d) providing instructional leadership, (e) developing and facilitating leadership, (f) managing school operations, and (g) understanding and responding to the larger societal context. As stated in previous chapters, these competencies are not ranked in a particular order but are considered to be interrelated and are intended to "reflect the local context" (TAAPCS, 2012, p. 1) of each school and school district.

Overall, urban and rural elementary principals, whether interviewed in focus groups or individual interviews, tended to use Alberta Education's seven competencies as their reference when defining principal leadership competencies. Table 3 depicts the views of two urban

elementary focus groups and two urban and rural elementary principals, all of whom used Alberta Education's definition. In addition to the formal document, three urban elementary principals interviewed, one rural elementary principal interviewed, and one urban elementary focus group also defined competencies as the knowledge and skills that principals display on a daily basis. The themes of interrelated competencies, instructional leadership, and relationships also appeared throughout the data. Table 3 represents the themes that emerged from the amalgamation of the findings to this question. The X represents where a particular theme was referred to while answering the question of defining principal leadership competencies. The total refers to the amount of times a theme appeared in the data. The highest number that could be obtained was nine.

Table 3

Themes Arising From the Definition of Principal Leadership Competencies—Cumulative

Competencies	Focus Group 1	Focus Group 2	Focus Group 3	Urban Prin. 1	Urban Prin. 2	Urban Prin. 3	Rural Prin. 1	Rural Prin. 2	Rural Prin. 3	Total
Alberta competencies		X	X	X	X		X	X		6
Knowledge and skills			X	X	X	X		X		5
Instructional leadership		X	X				X	X		4
Interrelated		X	X			X		X		4
Relationships	X						X	X		3
Actions	X		X							2
Servant leadership									X	1

The following section is a brief analysis of the findings found for the urban elementary principal focus groups as well as the urban and rural elementary principal interviews

Urban elementary principal focus group findings. Two out of the three urban focus groups defined principal leadership competencies in relation to the *Professional Practice*Competencies for School Leaders in Alberta (see Figure 3). One participant in Urban Focus

Group 3 shared his perspective of defining principal competencies, stating: "It's seven competencies and they look at the different ways that a principal is effective and runs the building" (Urban Focus Group 3). An additional participant in the group identified the definition of principal leadership competencies as "defines our position and is a broad map to focus on" (Urban Focus Group 3).

Urban Focus Group 1 was the only group that did not make a direct reference to Alberta Education's definition of leadership competencies; instead, they defined leadership competencies in relation to actions taken by a principal. Principals in this group discussed competencies as "the things we do as opposed to the things we know or how we put what we know into action . . . actionable things that we do that are absolutely critical to our leadership" (Urban Focus Group 1).

The theme of actions was also present in Urban Focus Group 3's discussion. As the conversation evolved, the idea of actions by a principal also became present. "I think it's trying to respond to those things that we deal with on a day-to-day basis" (Urban Focus Group 3).

Instructional leadership (a principal's ability to focus on the teaching and learning in a school) also emerged as part of the definition of principal leadership competencies in two of the three focus groups. During an Urban Focus Group 2 discussion, one of the new principals contributed his thoughts around the significance of instructional leadership:

I think it's like day 423, and I'm not allowed to play the "newbie" card. [Group laughs.] So I am counting the days because I go past 365. But you know, I guess I

came to the work around the competency of instructional leadership; that's kind of been why I come to any of the work, period, and in my reflections, on my time my tenure thus far as a principal. When you look at the seven competencies, one might think that they were equally weighted, if you will. There seems to be ebb and flow with regards to the importance of those depending on the time of the year. I marvel at, sometimes, at the things that seem to be the important competencies that you, that maybe do not really enhance the instructional leadership role. Like right now we are really head over heels in terms of management of resources pieces and always trying to ground those issues in instructional leadership. (Urban Focus Group 2)

Figure 3 visually represents the amalgamation of the findings for how urban elementary principals in the three urban focus groups defined principal leadership competencies. Principals' actions (what they do on a daily basis) and Alberta Education's (TAAPCS, 2012) Professional Practice Competencies were referred to in two of the three urban focus groups. In addition, the interrelationship of competencies and instructional leadership (involvement in teaching and learning) emerged consistently in two out of three urban focus groups.

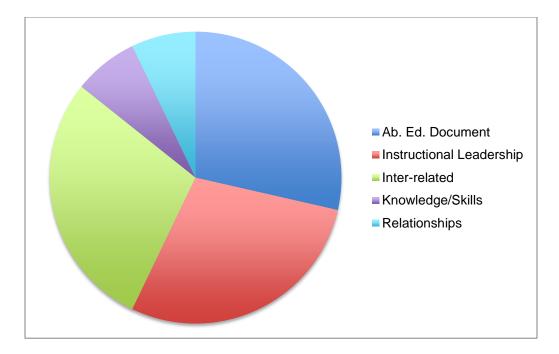


Figure 3. Amalgamation of principal leadership competencies definition: Urban elementary principal focus groups.

Urban elementary principal interview findings. The urban elementary interview findings represented two particular ways of defining principal leadership competencies: the Alberta Education document and the skills (knowledge and attributes) principals bring to their role (see Figure 4). Two of the three urban principals referenced Professional Practice Competencies for School Leaders in Alberta (TAAPCS, 2012) as an integral part of how they defined leadership competencies. One urban principal responded to the question in this way: "The seven professional competencies as they are defined in Professional Practice Competencies, they basically illustrate all those competencies and skills and practices" (Urban Principal 1). She continued to share the following example of how she used the competencies in her daily work.

It is a great framework to refer to on what needs to be in place to be an effective leader. . . . It is what we are accountable as leader that sets the bar, and that is what we need to be bringing to the table as leaders. So self-assessing, reflecting in

those. Building our own bank of skill set, and that helped frame my ongoing leadership and my ongoing professional leadership. (Urban Principal 1)

Another elementary urban principal referenced the document but did not feel that this was the only way to define leadership competencies. She shared these thoughts: "So I guess when I think of the competencies, I'm thinking more of the attributes and skills that you bring to the job" (Urban Principal 2). She went on to elaborate on how she personally defined principal leadership competencies as the "academic pieces as well as the social and people skills and the things that you bring with you to enhance that role and that relationship with others" (Urban Principal 2).

As the discussions proceeded in the other two urban interviews, principals also expressed how they saw principal leadership competencies as comprising the knowledge and skills that a principal brings to their work:

All leaders need to have the knowledge and skills that are based on current research, and we bring our varied experiences that are necessary for effective practice to support student achievement and success and to help our teachers become competent in their practice and also based in current research. We need to be knowledgeable and (have) creditability in that area so that our teachers can have the same skill set when they go into the classroom. (Urban Principal 1)

Figure 4 visually represents the overall findings in relation to the definition of principal leadership competencies drawn from the urban elementary principals' individual interviews.

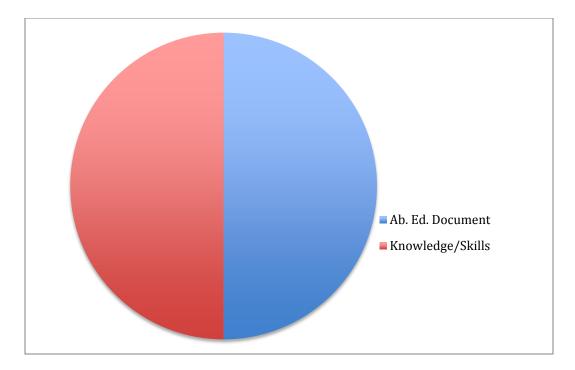


Figure 4. Amalgamation of principal leadership competencies definition: Urban elementary principals' individual interviews.

Rural elementary principal interview findings. Rural interview findings were comparable to the urban interview findings in that two out of the three principals referenced Alberta Education's document (TAAPCS, 2012) mentioned above when asked to provide a definition of principal leadership competencies. Rural Principal 1 reflected on the question this way: "There are several competencies as we look at them. I think there are six or seven different types of competencies."

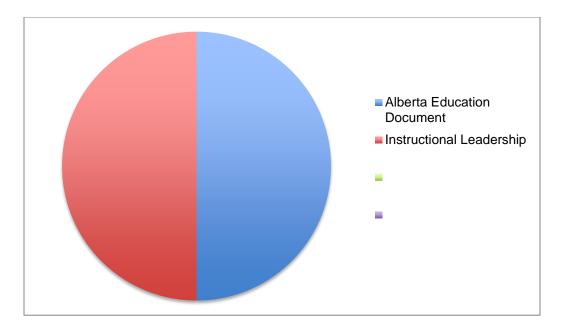
When asked the same question, Rural Principal 3 was the only participant who defined principal leadership competencies through the lens of servant leadership: "I believe, you know servant leadership, my personal style is believe by doing" (Rural Principal 3). The emergence of instructional leadership as an integral piece in defining principal leadership competencies was present in two of the three rural-principal interviews. This differed from the urban-principal

interviews where the focus was on the knowledge and skills that principals bring to their work in defining principal leadership competencies.

The following excerpt from the interview of Rural Principal 2 represents a strong example of the emphasis on instructional leadership as defining principal leadership competencies.

So, I think in terms of competencies of our administrative practices, they're not just guidelines but essential understandings of what you need to be doing. And so they are not prescriptive as a skill set, but they are a core set of ideals around how you should be enacting those different competency areas. We talked about balance a minute ago, . . . that we need to make sure we are attending to all of those competencies because the easiest ones to avoid or not attend to are often the most important. So you can get caught up in the tyranny of the unimportant, the management aspect of things you need to manage. However, at the same time, you need to be attending to your teacher practice and that growth mindset. (Rural Principal 2)

Figure 5 is a visual amalgamation representing the findings in the rural elementary principal interviews for the definition of principal leadership competencies. *Professional Practice Competencies for School Leaders in Alberta* (TAAPCS, 2012) was cited in two of the three rural interviews, and instructional leadership as a defining component of principal leadership competencies was included in two of the three rural interviews.



*Figure 5*. Amalgamation of principal leadership competencies definition: Rural elementary principal interviews.

Summary of findings for the defining principal leadership competencies. As stated previously, most elementary principals (six out of the nine groups) in this study identified principal leadership competencies as relating to Alberta Education's (TAAPCS, 2012) document mentioned above. It is interesting that even when principals did not directly refer to the document, their themes (e.g., professional relationships, instructional leadership, knowledge and skills and interrelationship of competencies) exist in it. In particular, ideas of instructional leadership (focus on teaching and learning) and professional relationships, which were specifically referred to as competencies by principals participating in this study, aligned with the Alberta Education document, which names fostering effective relationships and providing instructional leadership as specific principal leadership competencies. In addition, one urban elementary principal focus group, two urban elementary principals, and two rural elementary principals individually interviewed discussed the knowledge and skills that a principal brings to their role as defining principal leadership competencies. Two urban focus groups and two rural

principals interviewed shared their perspectives on how the competencies were interrelated and principals often take action on more than one competency at a time in their work. This related directly to the Alberta Education document which competencies are presented as "an interrelated set of knowledge, skills and attributes that is drawn upon and applied to a particular context for successful performance" (TAAPCS, 2012, p. 2).

My conclusion is that these findings are closely connected to the Alberta Education document, possibly because the research was done in the province of Alberta. Every school principal in the province is accountable to the Minister of Education and evaluated by a supervisor who could be a director or superintendent based on Alberta Education's (2009) *The Principal Quality Practice Guideline: Promoting Successful School Leadership in Alberta*, which includes the seven competencies outlined in this study. Naturally, school principals are familiar with the documents and the language and definitions used in these resources.

Defining collective teacher efficacy. The principals defined "collective" as a group and "teacher efficacy" as representing a sense of belief that, as teachers, they can make a difference to students (see Figure 6). Elementary principals who participated in this study also defined collective teacher efficacy as having a common purpose and a sense of shared responsibility as a group. In order to capture these findings, I have included direct quotations from principals in the urban elementary focus groups as well as the urban and rural individual elementary principal interviews. In general, both urban (both in focus groups and in interviews) and rural principals responded similarly in their definition of collective teacher efficacy. However, it was noted that the urban elementary principals (two urban focus groups and two urban interviews) referred to collective teacher efficacy as including having a common purpose. Only one rural principal mentioned the significance of having a common purpose in his definition.

A member of Urban Focus Group 2 defined efficacy as "believing what you are doing is right." Urban Focus Group 1 responded with a sense that teachers collectively felt they could make a difference to students; in their definition, the "belief that a group, whether it's a whole school group or a grade group, that their actions will make a positive difference". Another participant in this focus group built on this idea: "They can change the trajectory of the students whether it be social-emotional, behavioural, or improvement in achievement" (Urban Focus Group 1).

Similar themes emerged from the urban-principal interviews when principals were asked how they would define collective teacher efficacy. Their definitions included the idea of a group with a common purpose working towards the advancement of student learning. Urban Principal 1 shared these thoughts: "A large mass of teachers in a school for the betterment of student learning." Urban Principal 3 defined collective teacher efficacy as "people all moving in the same direction with a similar sense of purpose and expectations."

Similar themes occurred in interviews with the rural elementary principals as well. Rural Principal 2 summarized collective teacher efficacy as follows:

So, [in terms of] collective teacher efficacy, so we talked a moment ago about a mindset. I think that is the first place. For one, the word *collective* indicates that it is about a group or a team, and that is my belief, and I would argue that it is the single most important thing that everyone needs to feel that they are part of the team. So that the efficacy part of that is that we get better together. (Rural Principal 2)

Rural Principal 3 demonstrated a comparable view when he concluded "efficacious really comes from the belief that you have a role to play, that you can make an impact, and that you do have the skills or can get the skills to get that impact."

Figure 6 summarizes the findings for the definition of collective teacher efficacy. The definition derived from this study included the themes of a collective group, common purpose, shared responsibility, and improved student learning.

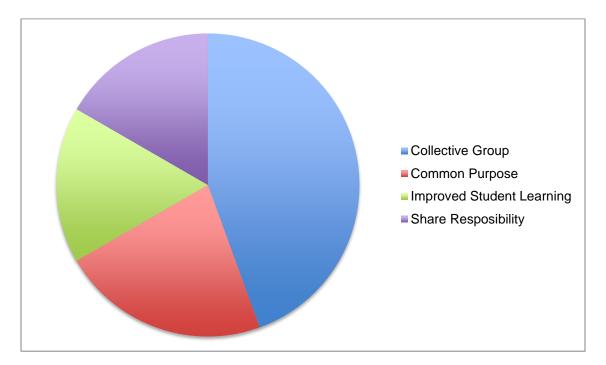


Figure 6. Amalgamation of the frequency of themes in definition of collective teacher efficacy.

After the urban and rural principals shared their thoughts, I gave Goddard's (2000) definition of collective teacher efficacy. The purpose of this was to ensure that all principals had a clear definition of collective teacher efficacy before responding to the next questions.

Summary of definitions of principal leadership competencies and collective teacher efficacy. Overall, the principals in this study were aligned in their perspectives on definitions of principal leadership competencies and collective teacher efficacy; this was also aligned with the research in Chapter 2. The following shows how principals saw a relationship between particular

principal leadership competencies (fostering effective relationships, embodying visionary leadership, leading a learning community, and providing instructional leadership) as positive contributors to the development of collective teacher efficacy.

## **Secondary Research Question 1 Findings**

This secondary research question asked, "What are the key indicators of collective teacher efficacy?" For the purposes of this study, urban and rural elementary principals were asked to identify indicators of collective teacher efficacy. In total, 26 indicators were ascertained in the data analysis. The following sections break down the data from the urban focus groups and the urban and rural interviews, with excerpts from principals embedding examples of these indicators in their stories. Following this, a visual amalgamation of the data and a summary of the findings are provided.

Urban elementary principal focus group findings. The indicators of collective teacher efficacy revealed in the urban focus groups were strong teacher practice, teacher commitment, professional conversations and language, positive enculturation, risk taking, and collaboration and strong teams. These indicators were evident in all three urban focus group discussions. Positive relationships, persistence and overcoming obstacles, trust, common understanding and cohesive practice, and a sense that you can make a difference were evident in two of the three urban focus group dialogues. Below is a visual representation of the indicators and the frequency in which each indicator occurred in the data. The highest number that could be achieved was a three, meaning that the indicator was referenced in all three urban focus groups (see Table 4).

Table 4

Indicators of Collective Teacher Efficacy: Urban Elementary Principal Focus Groups

Indicator	Frequency
Strong teacher practice	3
Teacher commitment	3
Professional conversations/language	3
Positive enculturation	3
Risk taking	3
Collaboration and strong teams	3
Positive relationships	2
Persistence/overcoming obstacles	2
Trust	2
Common understanding and cohesive practice	2
Feel can make a difference	2
Increased student engagement	1
Teacher confidence	1
Professional capital	1
Teacher sense of belonging	1
Teacher initiative	1

Elementary principals in the urban focus group discussions indicated that strong teacher practice evidenced collective teacher efficacy in a school (see Table 4). Strong teacher practice was identified in all three urban focus group discussions, along with indicators of teacher commitment: professional conversations and language, positive enculturation, risk taking, and collaboration and strong teams. The subsequent section includes evidence of some of these indicators.

A principal in Urban Focus Group 1 explained to the group how the indicator of *continuous improvement* is lived in her school. For her, continuous improvement was about moving each teacher to a higher level no matter where their starting point is:

So you've got your master teachers, your good teachers, the teachers you want to hold up as role models and bringing everyone up to that level of higher efficacy. So it becomes turning a master teacher into a magically masterful teacher, an excellent teacher into a master teacher, a good teacher into an excellent teacher, and a marginal teacher either coaching them out and saying, "Look, this doesn't work for you, and it certainly doesn't work for the children," or bringing them up to at least competent enough. (Urban Focus Group 1)

A sense of commitment from teachers was also seen as an indicator of collective teacher efficacy. In the data analysis, this was identified as meaning personal commitment, commitment to the profession, and commitment to colleagues. The following is a persuasive example of how one principal perceived the relationship between a sense of efficacy and commitment:

That sense of commitment to me is really foundational. . . . When I think just to the place of efficacy, . . . I believe this is the right thing to do; I'm committed to making this happen. I'm committed to the conditions in which that would flourish and from their moving forward, . . . getting away from "I'm not doing this because someone told me to do this. I believe this, and I am doing this, and I am taking this action because I believe it's the right thing to do." It could be about, you know, efficacy around . . . student success, it could be about efficacy around teacher professional development, it could be efficacy around the climate and culture in which we want to work, but coming with that commitment to do that

work and that commitment to create those conditions to do that work. (Urban Focus Group 2)

The next example captured *positive enculturation*. One principal in Urban Focus Group 1 who was new to the school shared how he transitioned into a new school by following the lead from his staff:

Just don't wreck it, and listen to what they have to offer, and see where they think the change needs to be. And they've honestly taught me a lot, and one of the things that they were keen on, and I don't think I've seen in staff really keen on this before, was examining data, and they were thrilled to do it. (Urban Focus Group 1)

A staff's ability to *take risks* was also articulated in the urban focus groups as an indicator of efficacy. Risk taking could be seen as sharing or presenting with colleagues, trying new teaching strategies or the willingness to take something new on. One principal explained how a group of teachers approached him on wanting to start a project called "Little Green Thumb" (Focus Group 3): "They [the teachers] figured out it was something they could [go] with and they went ahead with it. And they said, 'Can we do this?'"

In summary, the following indicators were most prominent in the urban focus group discussions: strong teacher practice, teacher commitment, professional conversation and language, positive enculturation, risk taking, and collaboration and strong teams. Other indicators that were discussed in two of the three urban focus groups were trust, positive relationships, persistence and overcoming obstacles, common understanding and cohesive practice, and a sense that you can make a difference. The indicators of professional capital,

teacher initiative, and increased student engagement were identified only in the urban focus group discussions and not in either the urban or rural individual interviews.

**Urban elementary principal interview findings**. Table 5 presents the findings for the indicators of collective teacher efficacy that was gleaned from the urban elementary principal interviews. Strong teacher practice and common understanding and cohesive practice were indicators that were referred to in all three urban interviews. In addition, positive relationships, trust, collaboration and strong teams, along with professional conversations and language were referenced in two of the three urban interviews.

Table 5

Indicators of Collective Teacher Efficacy: Urban Individual Elementary Principal Interviews

Indicator	Frequency
Strong practice	3
Common understanding and cohesive practice	3
Positive relationships	2
Trust	2
Collaboration/strong teams	2
Professional conversations/language	2
Persistence/overcoming obstacles	1
Risk taking	1
Positive enculturation	1
Positive culture	1
Rigour	1
Increased student achievement	1
Strong leadership	1
Sense of pride	1
Feel they can make a difference	1

Similar to participants in the urban focus groups, participants in the urban individual interviews believed the indicator of strong teacher practice was as an indication of collective teacher efficacy existing in a school. (The most highly identified indicators emerging from the urban-principal interviews were strong teacher practice as well as common understanding and cohesive practice.) Strong teacher practice was seen by all as an indicator of staff having the efficacy to continually improve and demonstrate the ability to critically reflect on their teaching practice. Urban Principal 1 noted that her staff was "getting to the place now where they are saying, 'What should I be letting go of, what don't I need to do? And what have I always done that really doesn't fit anymore?" (Urban Principal 1). For Urban Principal 3, a teacher's continuous improvement not only demonstrated strong teaching practice but also that teacher's need to continually strive to get better: "Efficacy is being able to function successfully with the information you got while integrating new information."

As leaders of a school, principals and their administrative team have the primary responsibility of ensuring a common understanding of the vision of the school. It is through a common understanding that principals develop a cohesive teachers' practice in the school. Here is one principal's perspective on the indicator of efficacy as a common understanding:

It's that you have a mass of teachers moving in that direction. So it is using best practice to implement tasks; in our case, that students will be intellectually engaged that will increase academic achievement. So that is our mandate, that is our plan, is the ability of me to have an impact on collective teacher efficacy. So it is my ability as a leader to have the impact on the mass. To impact the teacher population and move in the right direction. (Urban Principal 1)

Urban Principal 2 expressed this as well, when asked what she viewed as indicators of collective teacher efficacy: "There is a nice balance, the cohesion among teams. They work really hard to ensure our kids have the same access to specific outcomes and assessments" (Urban Principal 2). Urban Principal 3's sentiments were similar in discussing the link between developing a common understanding and collective teacher efficacy: "And so bringing that common understanding, and that's what brings the efficacy piece in for me, is that common understanding of how we are going to do this together" (Urban Principal 3).

In summary, positive relationships, trust, collaboration and strong teams, and professional conversations and language were referenced by two of the three urban principals interviewed as important indicators of collective teacher efficacy. The indicators of rigour, strong leadership, and pride were present solely in the urban interviews.

Rural elementary principal interview findings. Once again, strong teacher practice was the most recurring response which rural principals assigned as an indicator of collective teacher efficacy. The other indicator that was referenced by all three rural principals was collaboration and strong teams (see Table 6).

Table 6

Indicators of Collective Teacher Efficacy: Rural Individual Elementary Principal Interviews

Indicator	Frequency
Strong teacher practice	3
Collaboration and strong teams	3
Common understanding and cohesive practice	2
Professional conversations/language	2
Student-centred focus	2
Positive relationships	2
Increased student achievement	2
Teacher sense of belonging	1
Positive culture	1
Teacher commitment	1
Open-minded	1
Risk-taking	1
Teacher confidence	1
Focus on learning	1
Critical thinking	1
Shared leadership	1

In every interview, the significance of collaboration and effective teams was expressed as a strong indicator of collective teacher efficacy. Rural Principal 1 shared his experiences with entering a school and observing teacher's interactions with one another, which he believed related to their feelings of efficacy:

How does it look when you walk into a school? How does it feel? How do you see teachers interacting with one another? Are they actually sharing or are they too busy? Are they working in isolation? Are they collaborating? So when you

come into a school and you see a lot of isolated pockets, a lot of teachers working in segregation, that is not a great thing because you are not sharing. You are not being collaborative. They are not sharing knowledge.

Rural Principal 2 elaborated on her initial thought around the meaning of efficacy, which she defined as "we get better together. . . . We learn from one another, and no one is the holder of all the information and that we uncover and discover together." Rural Principal 3 discussed that his number one indicators of efficacy and the desire to collaborate were first being willing to share their ideas with others and feeling the support of others to do so:

Probably the biggest indicator of that is the sharing of ideas. If you have an idea that you feel is worth sharing, and you can walk into your staffroom and teachers are talking and supporting one another, then that means they have the idea that they have ideas worth sharing, that they have strategies that they are confident in, that they have used with students and are sharing with one another. I think that is a very, very good indicator of an efficacious teacher.

Other indicators that emerged as important indicators of collective teacher efficacy were professional conversations and language, student-centred focus, positive relationships, and increased student achievement. Indicators that were articulated in the rural interviews but not in either the urban interviews or focus groups were shared leadership, open minded, and focus on learning and critical thinking. The subsequent section examines the amalgamation of the data analysis on the indicators of collective teacher efficacy for this study.

Amalgamation of data for indicators of collective teacher efficacy. As noted above, the most significant indicator that emerged from this study in determining indicators of collective teacher efficacy was strong teacher practice. When discussing this indicator, principals discussed

research-based practice, innovation, and desire for continuous improvement as factors that lead to strong practice and a more efficacious teaching staff.

Other significant indicators that were revealed in the findings were collaboration and strong teams, common understanding and cohesive practice, professional conversations and language, positive relationships, positive enculturation, teacher commitment, risk taking, trust, and increased student achievement. These indicators are discussed in more detail in the following chapter, where the findings are compared to the current research.

Lastly, indicators that appeared less frequently but were still of some significance were persistence and overcoming obstacles, teacher sense of belonging, teacher confidence, student-centred focus, positive school culture, and teachers feeling that they can make a difference to students.

When comparing all three sets of data, there was no significant difference among indicators that were ranked with high (three points) to moderate (two points) frequency among the three groups. The one observation to note was the commonality of one Urban Focus Group as well as one urban principal and one rural principal who were all from schools that had more of a complex and diverse population; their indicators of collective teacher efficacy included feeling they could make a difference to students and overcoming challenges such as student achievement.

Table 7 summarizes the indicators and the frequency in which they appeared in the data analysis.

Table 7

Indicators of Collective Teacher Efficacy: Amalgamation

Indicator	Frequency
Strong teacher practice	9
Collaboration/strong teams	8
Common understanding and cohesive practice	8
Professional conversations/language	7
Positive relationships	6
Positive enculturation	4
Teacher commitment	4
Risk-taking	4
Trust	4
Increased student achievement	3
Persistence/overcoming obstacles	3
Feel they can make a difference	3
Teacher confidence	2
Student centred	2
Teacher sense of belonging	2
Positive culture	2
Student engagement	2
Professional capital	1
Teacher initiative	1
Rigour	1
Strong leadership	1
Open-minded	1
Focus on learning	1
Critical thinking	1
Shared leadership	1
Sense of pride	1

Factors impacting collective teacher efficacy. In the overall findings, 25 factors were identified as impacting collective teacher efficacy, whether positively or negatively. Of the 25, five came out more prominently than others. I considered any factor that emerged with a frequency of four or more to be of significance. To maintain equity of data, one point was given to each factor mentioned during the individual interviews or urban focus group discussions. Therefore, the highest numerical value a factor could receive was nine.

The most frequent factor referred to as impacting collective teacher efficacy was the mindset of teachers (nine points), defined in this study as how a person sees his or her ability or a situation as fixed, or if there is a possibility of change, a definition based on the work of Dweck (2006). Mindset emerged in every urban focus group as well as in all the urban and rural interviews. The second most frequent factor mentioned was relationships, meaning how people interacted with one another (six points), which was discussed in two urban elementary principal focus groups, one urban elementary principal interview, and two rural elementary principal interviews. Other common factors that emerged in the findings were community influence (pressure or support from parents), student complexity (socioeconomics, single-parent homes and learning or behaviour challenges), and human factors (personal challenges such as divorce, finances, or mental health). Table 8 summarizes factors impacting collective teacher efficacy that were identified by both urban and rural principals.

Table 8

Factors Influencing Collective Teacher Efficacy

Factors	Urban focus groups	Urban interviews	Rural interviews	Frequency	
Mindsets	3	3	3	9	
Relationships	2	1	3	6	
Human factors	1	1	2	4	
Student complexity	1	1	2	4	
Community influences	2		2	4	
Time		2	1	3	
Physical space		2	1	3	
Fractured teams		3		3	
Resources and budget	1	1	1	3	
Isolation vs. collaboration		2		2	
Workload		1	1	2	
Communication		2		2	
Experience/capabilities	1		1	2	
System demands		1	1	2	
Distractions	2			2	
School organization	1		1	2	
Principal leadership			2	2	
Staff morale			2	2	
Teacher practice	1		1		
Competition		1		1	
Student achievement			1	1	
Pedagogical beliefs		1		1	
Vision		1		1	
ATA union			1	1	
Teacher empowerment			1	1	

In urban elementary principal focus groups, urban elementary principal interviews, and rural elementary principal interviews, other factors emerged more strongly from group to group. These factors may also be included in the examples below.

Urban elementary principal focus group findings. Teachers' mindsets emerged as a prominent finding in factors that impacted collective teacher efficacy. Subthemes of teacher mindset included negativity, rigidity, resistance, lack of individual efficacy, and insecurity. These were all seen to have a negative impact on collective teacher efficacy. A principal in Urban Focus Group 1 expressed her frustration of trying to change a teacher who lacked the ability to believe in her own capabilities. The principal said to the group,

She didn't have self-efficacy. So how is it that she could contribute to our collective efficacy and have I created dependency in her? . . . [She went on to debate if she set too many expectations for staff.] So where is the balance of dependency versus efficacy?" (Urban Focus Group 1)

The themes of rigidity, resistance, and negativity were apparent in all the findings for this study and the urban focus groups were not an exception to this. Perhaps the strongest example of this is from a principal in Urban Focus Group 2 while discussing "habits of mind and mindset":

First thing is habits of mind and mindset. "I've always had it this way." And we are creatures of habit. [Group laughs] . . . So I kind of put it out there, "Here is the bigger vision where we need to go." . . . And then there was the predictability, a couple of people who were really actually quite strong and really didn't let this go, but I am still trying to shift their hearts and minds with responses around "well, oh." (Urban Focus Group 2)

Continuing the discussion, another principal contributed his thoughts affirming mindset as a significant factor: "So I think some of the things that pull back from that teacher efficacy, when you [another focus group member] were saying habits [of mind], I was thinking rigid. The people who are like, 'I've done it, done it. Why are you making me change?" (Urban Focus Group 2).

The impact of relationships, whether positive or negative, was seen by two of the three focus groups as a factor impacting collective teacher efficacy. An example of this was a discussion with Urban Focus Group 3 on the significance of relationships:

- Male 2: So, if we have staff members cutting each other down, that hurts down and it destroys relationships . . .
- Male 1: And then trust is gone. The trust is broken, and then getting it back because everybody is so defensive, and then after that walking on thin ice.

  That becomes a difficult situation to deal with . . .
- As soon as it's "my show," that's the beginning of the end, and then at times [the teachers] get distracted by the optics instead of the learning. . . . And I keep trying to tell teachers, like, it takes the eye off what you're doing, and it weakens us. It weakens us. (Urban Focus Group 3)

The impact on collective teacher efficacy of community factors such as "parental perceptions of what you should be doing" (Urban Focus Group 2) was discussed by two of the three urban focus groups. Difficulties with parents can potentially impact teachers in a negative manner, especially if teachers are continuously being questioned on their practice or their impact on a student. Urban Focus Group 3 gave a strong example of how this could negatively impact individual teacher efficacy as well as group efficacy:

And so, when teachers are having to deal with parents that are like that and administrators, as I've been finding out, it becomes a very difficult thing where mom is saying that she's feeling like her teachers aren't trying their hardest to meet the child's needs when it's absolutely not true, and that they [the parents] haven't been communicating well. . . . "You don't care. You don't care about my kid." And that's what this mama is saying to your teachers. "You're not doing enough. You're the problem." And so they [the teachers] come out there. That's what happens, they see self-doubt. . . . "Maybe she's right." (Urban Focus Group 3)

Although student complexity came out overall as one of the higher scoring factors, only Urban Focus Group 3 discussed this topic, whose impact they saw as negatively impacting collective efficacy. One principal pointed out how changing demographics had impacted his school:

They're [teachers] getting more and more complex kids in the classroom. And figuring out from a teacher's perception how to deal with those small, complex learners and to try to differentiate so they got entry points and all that stuff—that's becoming more and more difficult and more and more time-consuming. (Urban Focus Group 3)

For the purposes of this study, human factors were considered to be issues from people's personal lives that might impact the collective teacher efficacy of the group and the engagement with which they embraced the work of the school. Human factors were addressed in one out of the three urban focus groups. Specifically, one principal shared a story of two teachers who were initially a strong team but due to changes in their lives affected the relationship negatively:

These two women who had a magical thing last year and this year through some life changes because one got married and is now pregnant and the other one is getting married. So they've got all those life stressors in their personal lives and all of a sudden there is a war. . . . You get hit by that, and so it just stops everything because the tension in the building goes up, and so until that's been addressed, you have to stop everything and deal with that. (Urban Focus Group 1)

*Urban elementary principal interview findings.* Mindset and fractured teams were discussed in all three individual interviews with urban elementary principals. Relationships and student complexity were discussed in one interview and community influences were not referenced in any of the urban elementary principal interviews.

In the urban interviews, mindset was viewed as having a negative impact in terms of resistance; all three interviews felt the impact of resistance on an entire staff. Urban Principal 1 shared her struggles with having a new staff member who recently joined her staff from junior high and his resistance to embrace an elementary philosophy. Similarly, the other urban principals shared their stories of the challenges of dealing with resistant staff. Urban Principal 2 shared the obstacle of working with teachers to separate the person from the practice, in order to better move teachers forward in their pedagogy. "Some people struggle with the whole coaching role; other people come in and see that as a supportive piece rather than an evaluative piece" (Urban Principal 2). Urban Principal 3 discussed resistance in the context of an experienced teacher who was resistant to learn more about formative assessment: "And even yesterday, I had a teacher who said, 'Well, I have been a teacher for a long time, so I don't know why I have to keep talking formative assessment:" (Urban Principal 3). She shared further in her interview how she addresses negativity on her staff:

So, I think that is a big piece too, it is a lot about finding those people that are [negative] because sometimes you just get a grumble on the landscape, and you think, "Where is that coming from?" . . . You know, it takes you a bit, so it is a lot about always being present. You know, and I insert myself, if I walk into a room and the conversation goes dead, . . . "What was that all about?" [She asks the teachers.] I don't just let things slide by. (Urban Principal 3)

Fractured teams were another common theme between the three principals and the impact on the collective efficacy of a staff. A clear example of this was in the interview with Urban Principal 1:

I also find if a team becomes fragmented, and they are not cohesive, and I find that is a bit of an indicator that maybe things are not as strong as you might want to believe they are or where things may be falling apart a little bit. . . . Because the power of a team is incredible, and if they are working as a unit, working as a whole and to the same ends, then I feel there is more momentum there. (Urban Principal 1)

Urban Principal 2 shared similar sentiments in terms of the effectiveness of teaching teams: "You can't force a team. So if you don't have a team that gels, that is a real struggle."

Lastly, Urban Principal 3 expressed her frustration in developing the benefits of teaming with her staff. She shared the following:

We have a lot of teachers that don't really know how to team or who have never teamed. . . . And I am not necessarily talking about sharing a classroom, but I am talking about different teachers working on different projects. You can choose inquiry projects and work together. But if you never talked about what is co-

teaching, what is shared teaching. How does that work? How do we split responsibilities? (Urban Principal 3)

Rural elementary principal interview findings. Once again, mindset emerged as the most prominent factor impacting collective teacher efficacy. Together with relationships, it was discussed in all three rural interviews. Two of three rural principals discussed community influences, student complexity, and human factors. Exemplars from the rural findings are presented in the following discussion.

Teachers' mindset, both individually and collectively, was seen as having a significant impact on collective teacher efficacy. Rural Principal 1 discussed the obstacles of mindsets when working with staff on the school vision: "So those are obstacles of changing mindsets and obstacles of collaboration, which is huge." Later on, he shared a story of changing a teacher's mindset and improving a sense of efficacy by looking at students who presented with difficulties in a different manner. He discussed changing the "mindset" of teachers from wanting to fix them to seeing strengths in their students (Rural Principal 1). Rural Principal 2 told his journey of moving a staff that was complacent to one that was motivated, to ensure that all students learned to the best of their ability. He shared his frustration of coming to a staff that felt "what will be will be in terms of literacy and his journey to change that mindset" (Rural Principal 2). He affirmed this position thus: "It wasn't very comfortable for me to have to point that out, but I mean, if that is where we started, here, that yes we are efficacious, and we have to be efficacious, and we have to be agents of change" (Rural Principal 2).

In the rural findings, relationships were also considered an important factor in influencing collective teacher efficacy, specifically in terms of the presence or lack of presence of trust:

You have to have that relationship to bring about [efficacy]. If efficacy isn't there, and that self-belief of efficacy isn't there, then you have to have relationships that will be a key component of what you will rely on to bring about that sense of efficacy. . . . You want to make sure your teachers do trust you. Trust that you are looking out for their best interest and the best interests of kids. (Rural Principal 3)

Perhaps one of the strongest examples of efficacy being impacted by student complexities and student achievement was from Rural Principal 3. He shared his experiences in a school community in northern Alberta. As mentioned earlier in this chapter, this school was struggling academically and was one of the lowest performing schools in Alberta:

Teachers felt very stressed about bringing about results. There were so many factors there that were affecting achievement results. Attendance was a huge factor, homework was a factor, and, you know, things like that. No matter what, the teachers worked hard. You could take that teacher and put them in a school in Calgary, and they would be a great teacher. And probably students would have great results, but no matter. The results aren't there, and there are variables that you can't necessarily control, and the result is that teachers wear that. You know, if you are stressed because results are not coming along and that you are beating your head against the wall. It is hard to feel efficacious, right? (Rural Principal 3)

Lastly, two of the three rural principals discussed community influences as a factor that has the possibility of impacting collective teacher efficacy. Rural Principal 2 discussed the importance of teachers to be able to communicate effectively with parents in order to gain parental support. She believed "a successful community runs through your teachers" (Rural Principal 2). In other words, if teachers are able to communicate effectively about student

learning and the vision of the school, then "parents are onside like crazy" (Rural Principal 2) and this contributes to the overall efficacy of the staff.

Summary of findings for factors impacting collective teacher efficacy. In sum, factors impacting collective teacher efficacy revealed that teachers' mindset (either positive or negative) had the most impact on collective teacher efficacy, followed by relationships (either positive or negative). Other factors that emerged from the findings were student complexity, human factors, and community influences. In all, 25 factors viewed as impacting collective teacher efficacy were identified in the data analysis. It was interesting that even though overall in this study principals believed there to be a strong relationship between principal leadership competencies and collective teacher efficacy, there were only two rural elementary principals who actually identified principal leadership as a factor that could impact collective teacher efficacy. One thought on this may be that even though principal leadership was not specifically identified as an factor, other factors identified such as relationships and teachers' mindset could be seen as indirectly relating to the principal leadership competencies such as fostering effective relationships or leading a learning community.

# **Secondary Research Question 2 Findings**

This secondary research question asked, "If there is an identifiable and evidentiary relationship between specific principal leadership competencies demonstrated and collective teacher efficacy demonstrated, what are the specific leadership competencies that have a positive correlation with collective teacher efficacy?" The findings in this study confirmed that this select group of elementary principals from urban and rural settings affirmed an identifiable and evidentiary relationship between specific principal leadership competencies and collective teacher efficacy. Urban and rural principals all identified the following leadership competencies

as potentially having a positive impact on collective teacher efficacy: (a) fostering effective relationships, (b) embodying visionary leadership, (c) leading a learning community, and (d) providing instructional leadership. Clearly, principals in this study felt that the aforementioned principal leadership competencies had a positive impact on collective teacher efficacy. Figure 7 encapsulates the findings.

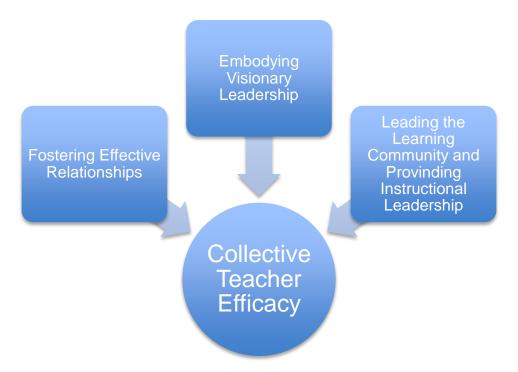


Figure 7. Principal leadership competencies for collective teacher efficacy.

For principals in this study, fostering effective relationships included establishing professional trust, being supportive as an administrator, valuing teachers' voice, and having effective communication skills. They saw embodying visionary leadership as including common goals and understanding as well as clear alignment and the use of data to establish goals; these were significant in their impact on collective teacher efficacy. A principal who led the learning community was seen as involving teachers in decisions, creating opportunities to share responsibilities, establishing effective professional learning communities, encouraging collaboration among teachers, and creating a positive school culture. Lastly, principals also felt

that providing instructional leadership contributed to teachers' sense of collective efficacy by designing quality professional development, modelling for teachers, encouraging teachers to share their practice, and celebrating success.

The findings arising from the urban elementary principal focus groups are presented first here, followed by results from the urban and rural elementary principal interviews. The specific principal leadership competencies are not presented in any particular order of importance because the analysis did not indicate that any one competency dominated another. One reason for this relates back to the previous findings on how principals defined principal leadership competencies—for many principals, the competences were interrelated and did not exist in isolation from one another.

# Fostering effective relationships.

Urban elementary principal focus groups findings. All three urban focus groups discussed the importance of trust in establishing strong relationships and improving collective teacher efficacy. Urban Focus Group 1 discussed the significance of making themselves vulnerable as well as establishing learning environments for teachers to feel safe in as contributing to whole group efficacy. Principals discussed the work of professional learning communities as an example:

Respondent 4: I think that efficacy is also about the trust and respect that we provide to the profession is to say, you are a professional. I trust you to do your job.

Please know when you are stumbling or whatever you need, come and talk to me, and I will find you the support.

Respondent 3: Some of my least vocal and just want to get out of here people have actually contributed. In fact, the very first time two of my [teachers], an

introvert and one that just wants to get out, provided positive contributions to that discussion in a way that I had never seen either of them do. So, what is it that I need to do differently so that creating that atmosphere where we can have those collegial conversations where people contribute, where people are open to being somewhat vulnerable?

Respondent 1: Well it's even about us being vulnerable because, you know, we don't all have the answers. And you know what, sometimes we're sad and sometimes things happen that upset us and hurt us, and I think they need to recognize that, too. And that is huge in, you know, taking the steps, having a voice, all of those aspects of it, because they look to us for so much, and if we are inhuman or a stone, then I don't trust stones particularly much—kind of cold, actually. (Urban Focus Group 1)

During Urban Focus Group 3's discussion the significance of professional trust when establishing relationships also surfaced:

And for me teacher efficacy is saying, "I believe you can do this work. I believe you can work with your colleagues." What you need from me, which is usually administrative trivia, more widgets, more gadgets. That is teacher efficacy to me. . . . Let [the teachers] do the work. (Urban Focus Group 3)

It became apparent during the urban focus groups that knowing one's staff and addressing their individual needs was effective not only in developing teaching practice but also in building strong relationships that contributed to the overall efficacy of the group. One principal reflected on his work: "I always say, 'How can I be part of the moving the baseline

individual to achieve the common good?' Well, what that might mean for each one of you, may look very different, but it's always about moving the overall bar" (Urban Focus Group 2).

*Urban elementary principal interview findings*. Similarly, during the urban interviews building effective relationships appeared in the findings in all three interviews as an important skill for a principal to have in order to contribute to the overall collective efficacy. Urban Principal 3 saw that building relationships was essential to her work as a principal. She passionately responded when asked if she saw any particular competencies that might impact collective teacher efficacy:

Relationships! Relationships! I think that is the number one. When I think of people I have worked with over the years that were more difficult in terms of being successful with kids, or developing programs—I have worked in literacy support, and I have worked in curriculum support, and so on—most of those people were people who had difficulty building relationships anyway. (Urban Principal 3)

She added: "Out of all the competencies, I think it is the most important and the hardest one to learn" (Urban Principal 3).

For Urban Principal 2, relationships were also significant components of building collective efficacy. In addition, the pedagogical side of leadership included leading a learning community; and instructional leadership was also pivotal:

I think they all have an impact. Honestly, I think so. We are using the term in our leadership, the term pedagogical leadership. I think that probably that and the relationship piece are probably the biggest ones. I think people are more likely to

work and learn when they have a belief in your direction but also in your experience and the ability to walk the talk. (Urban Principal 2)

Rural elementary principal interview findings. Data from the rural-principal interviews also coincided with those from the urban findings associated with relationship building and collective teacher efficacy. Once again, in the rural interviews all three principals felt that fostering effective relationships had a positive impact on collective teacher efficacy. It was clearly articulated that relationships developed doing the pedagogical work of the school, which went beyond surface relationships.

Rural Principal 1 stressed the importance of nurturing a culture of excellence through relationship building and doing the work:

So how do we keep nurturing a culture of excellence? That is what we do? So we say, "What did you do, how did that work? What do you need?" And being open for them. It is a culture of relationship building. The door is always open; ask me for anything you need, and we will talk about it. Sometimes yes, sometimes no, but you can ask. But basically, having those open learning conversations is really key on a regular basis. (Rural Principal 1)

Rural Principal 2 summarized her own experiences with two colleagues about their impact as principals:

For me, the whole work is around people, and so it is not about resourcing and managing people. It is understanding people and knowing and being that relationship person. But it is not just good enough to be the nice guy. You know, to have that relationship. The rest doesn't matter if you can't lead the learning community. Right? So . . . school culture, and then the instructional

leadership. . . . I know a colleague that is really, like, emulates all those things about leading a learning community and, you know, is a great instructional leader. They do their walk-throughs, they have this, and they make sure the teachers have [what they need], but they miss the people element, that relationship piece. I think that is first and foremost. You can't have relationships just on its own because I have another colleague who is super . . . like a great story-teller, great people connector, but you know, twenty minutes later there is no substance; there is no sense of vision or purpose. (Rural Principal 2)

In conclusion, principals who fostered effective relationships in their schools were found to have a positive impact on collective teacher efficacy. Themes that emerged from these findings regarding fostering effective relationships were the importance of professional trust, being supportive, valuing teacher voice, and effective communication. Indicators that urban and rural principals both identified earlier as demonstrating the existence of collective teacher efficacy, specifically as they related to the competency of fostering effective relationships, were positive relationships, professional trust, collaboration, and a sense of belonging. Figure 8 is a synopsis of these findings.

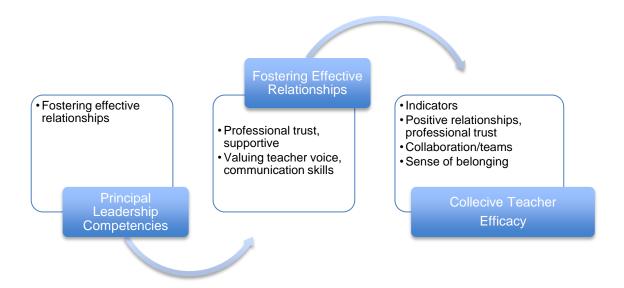


Figure 8. Fostering effective relationships and collective teacher efficacy.

The next section reports on findings related to embodying visionary leadership and collective teacher efficacy.

**Embodying visionary leadership.** The significance of having a clear vision and its impact on collective teacher efficacy was apparent from the study's findings. In general, principals believed that communicating clear goals allowed staff to understand the work, to feel like they were working towards a common goal, and to see the impact of their successes—hence enhancing the feeling of collective efficacy with the group.

Urban elementary principal focus group findings. All three urban focus groups mentioned the importance of a staff having a clear understanding of the vision and goals of the school. It was evident that this was achieved in many different ways. Teachers' efficacy was positively impacted when principals communicated their expectations effectively and supported teachers in implementing the school's vision. The structure that drove the vision of the school and grounded the work of the teachers was seen as the school development plan; this was

mentioned numerous times in the discussions. The theme of using data or data driven was also highlighted in the findings.

In one conversation in the Urban Focus Group 2, principals discussed the idea of clear goals, perseverance, and the importance of data. The conversation began when a participant discussed the ability of a principal to persevere with staff to make certain a vision was enacted, providing continuity in the school building: "I think one is perseverance, perseverance, perseverance, and kind of 'stick-with-it-ness' that this is the focus, and we are going to see it through" (Urban Focus Group 2). She continued, "You still need to be pretty relentless in your pursuit of a goal, and you have to tie that on with specific things that actually doing with people around instruction" (Urban Focus Group 2). The conversation continued when another participant contributed the following:

Respondent 7: Then you have that common level of what literacy, reading, writing, or whatever it is and there is a reason for it because whatever, whatever data you have come to and I think that's the area system has helped us a lot in keeping it small, keep it what's needed, what's the data. You know that common goal becomes very much the common goal, pushing it because the data is there. And then like for us it's literacy and it has been for a long time, and it's a very big concern for the teachers and has been forever and so everything we do is pointed in that direction. But the teacher buy-in and belief is there because of the data and the common goal. The common goal makes the difference. (Urban Focus Group 2)

Urban Focus Group 1 presented similarities in its discussion around the idea of evidencebased data: "So I think one of the competencies that could contribute to teaching efficacy would be the gathering and presentation of data to determine what could be your priorities" (Urban Focus Group 1). In addition, another principal shared his or her? perspective on the importance of synthesizing information in order to maintain the focus of the vision:

And so if I'm not focused on numeracy then they're not, there's the odd one who got back as their specialty but as a staff if I'm not focused on and driving literacy, if I'm not focused on and driving TEF [The Teaching Effectiveness Framework], if I'm not focused on a lot of that other stuff and able to synthesize and weave it together for them they're not going to do that because they're busy. So that I think some of the balancing and synthesizing of the data of the research, it falls on to the principal's lap and they are the holder of that as the leaders. (Urban Focus Group 1)

A participant in Urban Focus Group 3 responded in a similar manner when asked if there were particular competencies that impacted collective teacher efficacy. Again, the conversation evolved around goal setting based on data and a collective responsibility to engage in the learning of all students. Collective responsibility is one of the indicators of collective teacher efficacy identified in the findings:

Setting goals based upon data that we can gather and then coming up with some strategies and ways to try to reach those goals and the measures that you're going to have along the way. And collectively, I can't remember who mentioned it, it's not just my classroom anymore, it's not just about those kids in there, here's all these learners in our building and it's our responsibility to help all of them.

(Urban Focus Group 3).

In summary, findings emerging from the urban elementary principal focus groups confirmed that a principal's clear vision and goals for a school assisted teachers collectively to feel more efficacious; they felt there was a focus and purpose to their work with students.

*Urban elementary principal interview findings.* In two of the three urban interviews, embodying a vision was discussed as a leadership competency that contributed to collective teacher efficacy. Vision was important, as it had the potential to influence all the other competencies:

That is a vision piece that no matter where you go, no matter what the umbrella work is in, this is the way we do our work. And so for me that is huge because that colours all of the other ones. (Urban Principal 3)

Urban Principal 3 said that having vision was necessary, for teachers to know what they needed to do in order to be successful. This principal explained how she enacted her vision of peace education, a specific program that promoted respect and positive problem-solving, through working at her school:

I think one of the most important ones that we need to be aware of is building vision because I think if you haven't got a vision where you are going. It is hard to do the work to get there. That is just what I live and breathe and I had to learn how to do that. But it is something I felt philosophically. (Urban Principal 3)

The interview with Urban Principal 1 revealed communication as a valuable tool in enacting a vision:

I think though being really clear around the vision and the three-year plan and our school development is foundational. If you have a strong message around that, you have made it clear working on it every day and keep that conversation going.

(Urban Principal 1)

So, it is staying strong sending the message and maintaining that rigour but also being compassionate, empathetic, and understanding of times of the year when you need to back off a little bit. It is knowing your staff and being able to strategically you know, move forward. (Urban Principal 1)

Findings reported in the urban principals' interviews tended to coincide with those from the urban focus groups. Both groups discussed the importance of having a focused vision, communicating it, and supporting teachers when executing it.

The findings for the rural-principal interviews, discussed next, shared a commonality of these same themes in regard to the impact of vision on collective teacher efficacy.

Rural elementary principal interview findings. Embodying visionary leadership was prominent as a competency in the rural data findings as well. All three principals interviewed indicated that having a vision was a competency that was connected to collective teacher efficacy. One finding that appeared more in the rural data than in the urban was the importance of involving the community when developing a vision for the school.

Rural Principal 1 shared his experiences around vision and why he felt that having a vision positively impacted teachers. He shared a similar view to the previous principal in Urban Focus Group 1 regarding the importance of synthesizing the work for teachers, to contribute to the efficacy of teachers:

Have a very focused vision, this is what it means, and this is what I need to do to get it going. I think teachers really like that. One of the conversations that I had was what teachers really didn't like was that one more thing where they didn't

understand where it fits or how to fit into their curriculum. And it stresses them out, but if you actually focus and you tie it altogether. They are seeing it totally relating to the TEF, or our vision. Then they are more adept to move foreword and take those changes. One of the things that have happened is Galileo and there is a lot of hesitation, yep that is just one more thing. But through slowly introducing it and slowly talking about it and bringing it back to the teaching effectiveness framework, then the teachers are like this is my bible. I don't even plan a lesson without it. Before it was curricular outcome based and now it is how does it relate to the TEF, how do you bring experts in. So they are looking through the lens of TEF, which is student engagement and so much more. (Rural Principal 1)

A factor affecting collective teacher efficacy discussed further below is support from the parent community, or lack of it. Rural Principal 1 argued for the importance of involving the parent community in understanding the vision, so that the teachers' work would be supported by most of the parent population—hence, impacting in a positive manner the collective teacher efficacy of the school:

So as educators, sometimes we make decisions on the latest research and that is what I like decisions being made on. The research that we are getting . . . the latest studies. You know we are working with the universities. However, a lot of our parents in our community don't see those connections. They are not looking at it like us; they are looking at it from their own experiences in school. When I was in school we used to do things this way. Why is my child coming home and why

this is happening? So not only are we educating the students, we need to educate the community as well in regard to what is the latest research. (Rural Principal 1)

Rural Principal 3 shared his story of being a principal in a small, complex community with a primarily First Nations, Metis, and Inuit (FMNI) population. He said the staff had a low feeling of efficacy when it came to influencing student achievement and attendance. He recognized that current teaching practices were not meeting the needs of the students. He started on the journey of imparting a new vision for the school around experiential learning. Here is an excerpt from his story and the work he engaged in:

There was experiential learning where we partnered with the Yukon; they do a lot of land-based learning. So part of it was that we had to choose a path we wanted to go down. And we had to get the students on board and they were involved in the consultation processes as well as the elders in the community. Then we chose a path and then specifically we said this is the path we are going to take. We will offer you support and professional development to become kind of you know more aware of experiential learning. So we are certainly going to support but there is a way we want. Essentially, we are transforming the school into almost a charter school so the school is going to be about doing some things as learning from the land, from the local environment things like that. We offered the teachers certainly the time and money for professional development to become more aware of the approach. And then again, some teachers would prefer traditional classrooms so slowly they faded away. We were sure we were very up front about the hiring in the first place. When we lost one of those teachers who preferred a more traditional approach, we hired with full transparency. You are

coming to an isolated community in northern Alberta and this is the way we do things and what not. I found that there are certain teachers where that is their thing. Through that we have a group of like-minded people working together.

(Rural Principal 1)

This principal has now moved on to another school but was still in contact with the current principal. Even though results are not as strong as what they would like, there has been significant improvement: "We are trying to impact student learning first and foremost; in this case it had. They [teachers and students] are heading in the right direction now" (Rural Principal 3).

Lastly, findings from Rural Principal 2 also encompassed similar beliefs around vision and its connection to collective teacher efficacy. Themes that emerged from this interview relating to vision were alignment, prioritizing goals, and common language and understanding. This particular principal felt that relationships alone would not impact collective teacher efficacy; relationships needed to be anchored in a vision and purposeful work. She discussed the importance of aligning the work and, similar to Rural Principal 1, how when the work was aligned it did not feel like one more thing to do, to teachers. She also implied that vision was central to the other competencies as in the Urban Principal 3's interview:

So, if you are able to align and do that successfully, you can be successful in the instructional leadership because you know all the great things that are out there that are representative of best practice and that is the culture building. Aligning all those pieces so it doesn't feel like another project or it doesn't feel like another initiative. (Rural Principal 2)

This principal also emphasized the importance of making school goals manageable for teachers and having staff developing a common understanding:

That your goals are manageable and I not only mean manageable but that they are aligned to what your staff's TPGP [Teacher Professional Growth Plan] is and that everything, everyone *is* talking the same common language, that same understanding. (Rural Principal 2)

In conclusion, the findings of this study confirmed the importance of embodying visionary leadership as a competency. It was seen to positively impact the development of collective teacher efficacy. Data supported common goals, common understandings, the importance of alignment, and creating a focus that is manageable—these were all factors that set teachers up for success in their practice, promoting the feelings of efficacy in a staff. Figure 9 captures the findings for this competency.

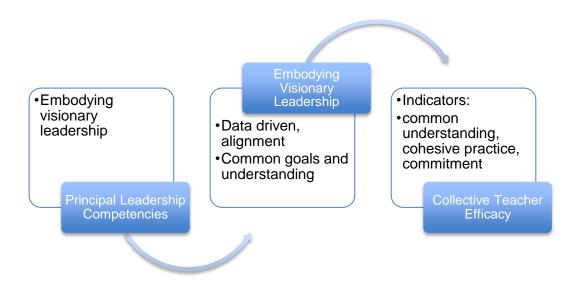


Figure 9. Embodying visionary leadership and collective teacher efficacy.

In the next section I report the findings on the principal leadership competency of leading a learning community.

Leading a learning community. Leading a learning community encompasses a principal's ability to establish a school culture that embraces and supports learning. The principals in this study perceived this competency as a factor in developing collective teacher efficacy. The indicators that emerged most prominently in the principals' stories and conversations were as follows:

- Engages the school community to promote the success and development of all students as a shared responsibility;
- 2. Promotes and models life-long learning for students, teachers, and other staff;
- 3. Promotes and facilitates meaningful, collaborative professional learning for teachers and other staff; and
- 4. Fosters a culture of high expectations for students, teachers, and other staff.

  I begin with findings presented from the urban focus groups, and follow that with findings from the urban and rural principal interviews.

Urban elementary principal focus groups findings. Key components that were present in the findings for leading a learning community were the importance of collaborative decision making and having a sense of a shared responsibility for the students and learning generally in the school. In Urban Focus Group 1, principals gave many examples of how they involved their staff in the decision-making process. They ranged from the management of the daily goings-on in the school, such as staff meetings, to more complex decisions such as the focus of the school development plan: "So as a team we've agreed collectively that we will do staff meetings on Tuesdays after school and Fridays will be left for planning and getting organized" (Urban Focus

Group 1, p. 8, lines 277–279). A new, male principal in the Urban Focus Group 1 had come on board to lead an all-female staff. Below is the approach he took in involving the staff in the creation of the goals for the school development plan:

But we're looking at the data, they told me, "We are a literacy school first." I said, "Okay, we'll see what the data says." Well the data said numeracy was the issue. And I left it in their hands and they went away and they kept struggling with it. They kept saying, "We're a literacy school but our math scores are horrendous." So what does that tell you? And so they said, "Well, we don't want to stop the literacy." And I said, "We're never going to stop working on literacy." And so we do have a numeracy focus and I have to say that, how they've taken that on and it's been absolutely amazing. (Urban Focus Group 1)

Another example of a principal leading the learning community by encouraging staff involvement with the school development plan was presented in conversations in Urban Focus Group 2. One principal in the group illustrated his journey evolving from a conversation he had with two teachers at the end of the school year. The teachers suggested Ritchhart, Church, and Morrison's (2011) book, *Making Thinking Visible*, to support the instructional goal of assessment and feedback documented in the school development plan. The principal read the book and agreed with the teachers that it would be helpful resource for the staff:

What we did was we used it sort of our foundation for our school development plan and what we do around that is now teachers are trying the different routines, they are coming, they're sharing their routines and it doesn't matter what grade you're in the routines work, you modify them a little bit for your grade level.

(Urban Focus Group 2)

He continued to share the impact on the staff and the level of commitment and enthusiasm he observed with his teachers:

They are living and breathing that school development plan even when they are done right, or they're thinking ahead already, too. "Hey, for next year, we think this would enhance the school and the culture and the learning in the school." So they've dovetailed really nicely, and there is buy-in because they've had a piece of that buy-in. It's not us saying, you know, "This is what we're doing, so you're just going to follow along with me." (Urban Focus Group 2)

Findings in the urban focus groups supported the notion that professional learning communities were central components of a principal leading a learning community. The impact of professional learning communities was seen as more effective when teachers felt their voices were valued and they were a part of the decision-making process:

So I could track their progress I implemented a very structured PLC process in terms of presenting, analyzing data and the adjustment cycle and what not. But that process has been new for them but they have taken it on and when you look at the end of, I think we were asking before, how do you know when you know? Yeah, so at the end of Cycle 1 presentations, the presentations that they put forward were so data driven and decisions were based on data. Decisions were based on the collective understanding of where our students were. Sharing work, all those things that you kind of hope for. And they weren't necessarily always the right decisions, some of them were very sort of basic decisions that the made but they were going through the process and learning. I haven't really heard any complaints in that regard. (Urban Focus Group 1)

In summary, the powerful impact of involving staff in the decision-making process especially with the school development plan was prominent in all three focus groups. One principal put it simply:

When you're talking about teacher efficacy, I always go to my teachers. I always go to them and say, "What do we need to do?" I don't know. I'm not in your classroom. I'm not it. You don't look at me and say, "What should we do?" I might have an idea but it's not about me. (Urban Focus Group 3)

The findings from the urban-principal interviews are presented in the next section of leading a learning community.

*Urban elementary principal interview findings*. Similar themes to the urban focus groups emerged in the urban-principal interviews. Along with collaborative decision making, creating a shared sense of responsibility was seen as a result of collaborating as professionals in professional learning groups around student learning.

The ability of principals to facilitate their staff in working together in a professional manner was a key to developing a sense of collective teacher efficacy. Urban Principal 1 discussed how this was done on a daily basis in her school:

I find, through PLCs and teacher conversations around kids' work, how are they coming to their understandings in this area. We, we work in grade teams here and we work very closely in grade teams. So they generally are in the same place in their curriculums and program of studies and working on the same outcomes. The conversation is very common language in terms of that. (Urban Principal 1)

The same principal saw that working in a collaborative manner with staff was important:

And again, being part of the group and being part of the process, it is not me and then, it is us. . . . You know we are in this together and we all want what is best for students. Every day that is our message and this is what we are working towards. (Urban Principal 1)

Urban Principal 3 also affirmed the significance of collaboration: "That collective piece is about how can we do the best work we can together" (Urban Principal 2). She added: "It is about how can we be successful together" (Urban Principal 2).

Shared responsibility was referenced by Urban Principal 2: "There is a nice balance, the cohesion among teams, they work really hard to ensure our kids have the same access to specific outcomes and assessments." Urban Principal 2 also stressed the importance of honouring the work of all staff members:

And I think the other evidence too, yes, we have some teachers who are going to specific sessions or learning leader sessions but we just don't take their work forward, it is the collective work. One more way to build cohesion.

In a final statement from her interview, Urban Principal 2 summarized the relationship between leadership and collective teacher efficacy: "Honestly, I just think we are all colleagues and when principals are teachers and when teachers are also involved in those leadership decisions and it truly is a team approach it is huge for school collective efficacy."

Rural elementary principal interview findings. Similarly, rural findings also supported the importance leading a learning community when it came to developing efficacy, which included the indicators of collaboration, collective decision making, and culture. Rural Principal 1 discussed the importance of purposely designing opportunities that promoted teacher collaboration:

Well, one for sure that I talked about before leading the learning community is huge. It is one that is easy to say to lead it but how are you going to do it. That is why I talked about being strategic in your planning.

Later in the conversation, he shared his concern about teachers working in isolation, and again stressed the importance of collaboration: "It is better to have teachers collaborating and talking about the TEF, having partnerships and being able to reflect as opposed to working in isolation" (Rural Principal 1).

By comparison, Rural Principal 3 discussed the importance of establishing a culture of collaboration in her example of defining the difference between collegiality and congeniality:

I always come back to our staff getting along in a collaborative way. You know what collegially I don't care if we like each other. Congenially we talk about that language. Collegially you are going to work together but to truly collaborate is about putting all those personal things aside and character flaws and whatever and focus on what matters and that is the learning.

As in the urban data findings, collective decision-making was also highlighted in the discussions with the rural principals. Rural Principal 1 discussed the process he used for engaging staff in the development of their vision for the school. He used Google Docs to support this work and ensured that "everyone had a voice and everyone was heard" (Rural Principal 1). Below is his reflection on the process he used:

It is just a document we are not quite there yet. I sent it out to teachers for any feedback so there was always a lot of feedback from our staff, from our parents before we actually make a final decision. I think it is huge because before it used

to be ok here is a decision that is already made and the feedback that I used to get was very counter productive. (Rural Principal 1)

Lastly, Rural Principal 3 reflected on his role as a leader of a learning community and the relationship to efficacy. In this reflection, he also shared the values of the school district, which connected to his role in establishing a positive culture:

I see as a principal that that is kind of my role, to promote the idea of efficacy but also to make sure the teachers are efficacious and that is one of the roles of the principal certainly. We know teachers need to believe they can be efficacious before they actually are. I mean we need to promote many things among principals but that certainly is a major, major effect of what I see my job being on a daily basis. One of our board beliefs in hiring principals that can hire and inspire staff. Or hiring key staff or inspiring or whatever it is. There is a focus on efficacious in the division. In terms of, they believe that our greatest resource are teachers and in teacher's assistants right. So that is where we are going to bring about change. So that is a divisional policy. That is why I happen to fit in nicely here. (Rural Principal 3)

Summary of leading a learning community. The findings for this principal leadership competency highlighted the importance of establishing a collaborative culture, involving staff in the decision-making process, and encouraging a sense of shared responsibility among all stakeholders. Particularly in the urban data analysis, the importance of doing this work through professional learning communities was emphasized. Principals in this study saw a relationship between leading a learning community and collective teacher efficacy. Figure 10 is an

amalgamation of the findings for leading a learning community and the impact on collective teacher efficacy.

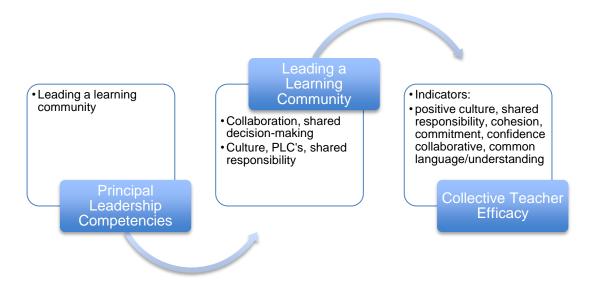


Figure 10. Leading a learning community and collective teacher efficacy.

The next section reports findings on the leadership competency of providing instructional leadership.

Providing instructional leadership. The role of a principal in providing instructional leadership is to improve teacher practice and have a positive outcome on student achievement. The principals in this study found that instructional leadership promoted collective efficacy. The examples from the findings illustrated the importance of making learning visible in a school, mentoring and supporting teachers in their learning, and providing appropriate professional development. I begin the following discussion with findings presented from the urban focus groups, followed by those from urban and rural principal interviews.

*Urban elementary principal focus group findings.* Data from the urban focus groups revealed the importance of teachers having a learning focus at the forefront of their work, and principals needing to assist in ensuring that teachers have the proper resources and supports in

place in order to be successful. Evidence of this work was visible in a story from a principal in Urban Focus Group 1, who was new to the school that year:

And I think that focus on the learning in the school is a big one. I know in coming in to my school, as I said I'm so new, but I noticed that because I've had a lot of people there for quite a while and especially in an area like this you can lose the learning piece, you think about all of that, oh I need to care for these kids and that sort of thing. But what happens is that the learning gets lost. (Urban Focus Group 1)

He went on to talk about the need to meet the students' social-emotional and intellectual needs in order to support them best in their learning:

How do we make sure that we're fitting all of these pieces together so that we're not just caring for these kids but the best way to care for these kids is to give them a good education so that they have a way to build past limitations that are placed on them by society. (Urban Focus Group 1)

Another principal in Urban Focus Group 1 contributed the following observation when reflecting on the importance of adhering to a learning focus and the positive impact that it can have on teachers: "I'm thinking about efficacy from the point of view of making learning visible in a school. And so when you walk into that building you know what's going on because there's pedagogical documentation" (Urban Focus Group 1).

The principal explained in depth the professional development that the school had done with the University of Calgary, and the impact that this work had on the teaching in her school building: "But it is also sparking everything else around the building and I don't know if the

spark is starting with the work that's happening in Kindergarten and working out or 5 and 6 and trickling down" (Urban Focus Group 1).

The theme of the importance of a learning focus continued to be part of the discussion in Urban Focus Group 2, where once again principals shared examples of how they engaged staff through a learning focus:

Respondent 5: I'm working really hard, on trying to inspire a kind of culture of thinking and curiosity and they kind of model that and experience that we do and the articles that we read or the books that we look at, one really engages the brain in curiosity. I think we are really trying to start people's own fires when they look at the work, why kids are doing what they are doing and questioning. (Urban Focus Group 2)

The importance of celebrating successes for teachers was visible in the findings as well. A principal in Urban Focus Group 2 shared with the group how she did this through showing the community (teachers, parents, and students) "transparent evidence of high-level student work with curriculum explanations" (Urban Focus Group 2). She went on to describe how this was celebrated and her perceived impact this had on the staff:

And then we celebrated. Like I talk a lot of pictures and a lot of videos so what we're doing moving forward and you can see how the bar is raising with the writing and the work and it's public and it's important to celebrate too because I found that it is really giving people a boost. (Urban Focus Group 2)

Along with celebrating successes, the importance of supporting the pedagogical development of teachers was also highlighted throughout the focus group discussions. One principal in Urban Focus Group 3 stated: "I think the work that the teachers do in the trenches in

the most important one, what's going on in the school. And so to try to provide supports we can to help them that's what I'm all about" (Urban Focus Group 3). The principal continued to give an example or covering teachers' classes in order for them to attend a professional development opportunity.

Urban elementary principal interview findings. In responding to the question about the principal leadership competencies that they believed had an impact on collective teacher efficacy, two of the three urban principals referenced the competency of providing instructional leadership as a contributing factor; they considered it to be one of the main four competencies. Urban Principal 3 described the impact as follows:

You know the instructional leadership is me being aware of what is going on in terms of research, understanding and digging deep to understand what is going on.

Bringing teachers together and opening up opportunities for them. Encouraging them in their own professional development and so on.

Instructional leadership was discussed the least amount in the urban-principal interviews; it was more intertwined with other competencies when referred to as one of the top competencies that impact collective teacher efficacy.

Rural elementary principal interview findings. In contrast, three rural principals suggested that providing instructional leadership contributed to the efficacy of teachers. Subthemes that emerged from the data analysis were varied, but some consistencies in the themes did emerge. All three principals referenced designing professional development in their stories of how they provided instructional leadership. Rural Principal 1 felt that his role as a designer of professional learning was "challenging teachers to be the best that they can be for the kids." One way in which he supported teachers was encouraging them to be current in their

understanding of the "kid world." He advised that "the kids' world is changing, and they need to keep up with it and use the lens of how is this going to impact student learning" (Rural Principal 1).

One of the strongest representations of designing professional development was Rural Principal 2's discussion on assessment strategies she implemented to assist herself and the administration team in developing pertinent and meaningful professional development:

And so, we again assess them [the teachers] in ways to find out whether it is through exit slips or formative feedback that we have to engage in that assessment loop as well. So we know where they are at, what they don't know and how we are going to get them there.

An additional theme that emerged and was presented by two out of three rural principals was the impact of sharing practice on influencing the instruction of teachers. In particular, Rural Principal 3 celebrated student successes and the instruction that impacted these successes with his teaching staff: "Teachers need to wear those successes just as teachers often wear the failures." He continued: "We promote the idea of their [students'] success is your [teachers'] success, and you can't get away from that" (Rural Principal 3).

The differentiation of teachers' professional development needs was prominent in two of the three rural interviews. Both principals felt it was important to know individual staff's needs and to support teachers' growth using a variety of strategies. Rural Principal 2 considered individual teachers' needs when designing the school's overall professional development, stating that "the teachers are my class." She wanted to ensure she had entry points for all staff to access professional growth. Here is an excerpt from her story:

Our third piece is our individual growth and planning, how we collaborate and design for that, and so it sounds really broad but in all those pieces, people tap into what they are specifically learning about. . . . And everything we do is through our growth planning. So . . . everyone has a purpose for growing, and it's self-directed but aligns to our strategic ed. plan. (Rural Principal 2)

The final theme that surfaced under the umbrella of providing instructional leadership was *modelling*. Two of the three principals discussed the importance of modelling as a staff best practice, to ensure that, as leaders, they too were growing professionally. Once again, Rural Principal 2, who clearly was passionate about the importance of instructional leadership as a key competency for potentially influencing collective teacher efficacy, adamantly explained the significance of modelling: "'Cause I can't see telling them [teachers] to do something and requesting a big share out of their growth when we haven't done the same and so it's modelling that best practice piece" (Rural Principal 2). She went on to discuss the shift she saw in her own school division in terms of the instructional leadership capabilities of new principals: "The great teachers coming up are those who are moving into admin, and they as good teachers will be best to design great PD [professional development]" (Rural Principal 2).

Summary of providing instructional leadership findings. The findings for providing instructional leadership as a principal leadership competency highlighted the significance of designing professional development, knowing individual staff needs, sharing practices, and modelling for staff. Figure 11 is an amalgamation of the findings for and the impact on collective teacher efficacy.

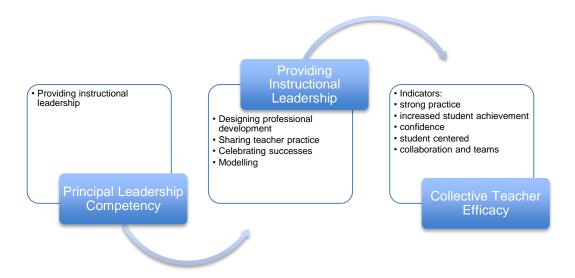


Figure 11. Providing instructional leadership and collective teacher efficacy.

Summary of findings for principal leadership competencies and collective teacher efficacy. The answers to the question "Are there particular principal leadership competencies that you feel make a positive impact on collective teacher efficacy?" suggested that principals, both urban and rural, saw a relationship between what they enacted as principals and the impact that this had on the collective efficacy of their teachers. Four competencies emerged as significant in impacting efficacy in teachers: fostering effective relationships, embodying visionary leadership, leading a learning community, and providing instructional leadership. As referenced by principals' stories, particular indicators of collective teacher efficacy were apparent in principals who displayed these competencies in their leadership. For instance, principals who were able to foster effective relationships also had staff that displayed positive relationships, professional trust, collaborated and worked well in teams, as well as having a sense of belonging; all qualities that were identified as indicators of collective teacher efficacy. Factors that were identified by principals in this study as impacting collective teacher efficacy, such as teachers' mindset and relationships, could potentially be positively influenced by principals who

displayed strong leadership competencies such as fostering effective relationships and leading a learning community. In summary, the findings in this study showed a strong relationship between particular principal leadership competencies (fostering effective relationships, embodying visionary leadership, leading a learning community, and providing instructional leadership) and collective teacher efficacy.

#### **Conclusion**

This chapter contains a report of the findings of the qualitative research study in which 21 elementary principals from urban focus groups, and principals from three urban and three rural settings in individual interviews were asked to answer six interview questions that coincided with the primary and secondary research questions for this study.

The results from this study demonstrated that principals used the Alberta Education (TAAPCS, 2012) document to define principal leadership competencies. Principals in the study identified embodying visionary leadership, promoting effective relationships, leading a learning community, and providing instructional leadership as key competencies in their leadership. All seven competencies were seen as valuable and contributing to the overall effectiveness of a principal. Collective teacher efficacy was defined by the participants as evidenced in a group with a shared responsibility and a common understanding, who were working towards the improvement of student learning. Twenty-six indicators of collective teacher efficacy were identified in this study. Main indicators were strong teacher practice, collaboration/teams, common understanding and cohesive practice, conversation/language, and positive relationships. Key factors that were identified as impacting collective teacher efficacy were mindset and relationships. Student complexity, community influences, and human factors had a strong presence in the data analysis as well. In all, 26 factors were recognized as shaping the collective

teacher efficacy in a school. Lastly, principals concluded that the leadership competencies of embodying visionary leadership, fostering effective relationships, leading a learning community, and providing instructional leadership had a positive relationship with collective teacher efficacy.

Chapter 5 contains a summary of the purpose of this research study, as well as discussion of the findings, implications for policy and practice, and recommendations for future research.

### **Chapter 5: Discussion and Conclusion**

This study was designed to query whether particular principal leadership competencies that aligned with Bandura's social cognitive theory were associated with developing indicators of collective teacher efficacy in a school staff. The positive ramifications of the potential of strong collective teacher efficacy for teacher practice, attitude, and student achievement are well supported in current and past research. Researchers claimed that where schools had high levels of collective efficacy, teachers believed that they could make a difference to students' achievement (Goddard, 2001). Teachers in those schools possessed more positive attitudes, confidence, and resilience to overcome challenging situations (City et al., 2009; Goddard et al., 2000; Ross et al., 2004). Through my research I came to the conclusion that collective teacher efficacy was a construct that clearly could have a positive impact on school culture and on teaching and learning in a school. I then began to wonder if there was a relationship between principal leadership and the existence of collective teacher efficacy in a school. If there was, then what were the actions, knowledge, or competencies a principal possessed to be able to develop collective efficacy in a school?

Research studies confirmed my belief that principal leadership had a substantial impact on student learning and achievement (City et al., 2009; Fullan, 2003; Leithwood, 2012; Mulford & Silins, 2003). A great deal of previous research noted the impact of principal leadership on teachers, which in turned impacted teachers' practice in the classroom directly relating to student achievement (Hallinger & Heck, 1998; Leithwood et al., 2004). Hipp (1996) specifically examined specific principal leadership behaviours and the relationship to teacher efficacy. Throughout this qualitative research study, I explored the possibility of specific leadership competencies that might enhance or develop collective teacher efficacy.

In this chapter I discuss the study's findings that related to the research questions and existing research. I give a condensed summary of the study, followed by a discussion of the research questions. Next, I discuss the implications for policy and practice, reporting any findings that have the potential to impact future policies, school districts, and school leadership development programs. Afterwards, I make recommendations for future research. The chapter closes with a concluding statement.

### **Summary of the Study**

Chapter 1 outlined the basis of this qualitative interpretive multi-case study to determine whether there was a relationship between particular principal leadership competencies and collective teacher efficacy. The following are the research questions that guided this study. First, the primary research question was, "Is there a relationship between specific principal leadership competencies and collective teacher efficacy as demonstrated and understood by a select group of principals?" Four secondary research questions were as follows:

- 1. What are the key indicators of collective teacher efficacy?
- 2. If there is an identifiable and evidentiary relationship between specific principal leadership competencies demonstrated and collective teacher efficacy demonstrated, what are the specific leadership competencies that have a positive correlation with collective teacher efficacy?
- 3. Does this research support the proposition that individual principal leadership competencies can positively impact collective teacher efficacy?
- 4. Does this study support or differ from the synthesis of current research?

Chapter 1 included an overview of the study, definitions, and limitations and delimitations to this research. In Chapter 2, I presented findings of past and current research

relevant to this study in a literature review. The chapter included an overview of the key elements of social cognitive theory and the derivation of collective teacher efficacy. Collective teacher efficacy as a construct was examined, as well as common indicators in schools of staff who were considered to have a high level of collective teacher efficacy. The literature review revealed that principal leadership competencies of relational trust, setting direction, collaborative decision making, and providing and participating in teacher learning and development were all competencies that had a decisive impact on collective teacher efficacy.

Chapter 3 presented the study's theoretical framework, methodology, data analysis, trustworthiness, and ethical considerations. This study involved participants from both urban and rural settings in Alberta. The 27 urban participants were from the same large urban school district and the three rural participants were from different school districts across the province of Alberta.

Data were gathered for this study by conducting three urban focus groups. Urban Focus Group 1 consisted of eight participants, Urban Focus Group 2 had seven participants, and Urban Focus Group 3 had six participants. In addition to the urban focus groups, three urban and three rural interviews were conducted. All participants participated in a semi structured interview format.

Chapter 4 presented the findings to this study and specifically examined the primary research question and the secondary research questions (see above). Principals in this study defined principal leadership competencies according to the Alberta Education (TAAPCS, 2012) document mentioned previously. As such, during the data analysis stage, I began to group findings based on these competencies.

Four principal leadership competencies were identified in the study as having a positive influence on collective teacher efficacy: (a) fostering effective relationships, (b) embodying visionary leadership, (c) leading a learning community, and (d) providing instructional leadership. None of the four competencies emerged as particularly more impactful on collective teacher efficacy than any other. However, fostering effective relationships was referenced in every urban focus group as well as in every interview. The other competencies (embodying visionary leadership, leading a learning community, and providing instructional leadership) were referred to in all but one group. Key indicators of collective teacher efficacy emerged in the findings to this study. The most prominent indicator was strong teacher practice, which was identified in all the focus groups and interviews. Other noteworthy indicators were collaboration, common understanding and cohesive practice, conversations/language, and positive relationships.

The chapter concluded by stating the most significant finding: elementary principals who participated in this study found a relationship between particular leadership competencies (specifically fostering effective relationships, embodying visionary leadership, leading a learning community, and providing instructional leadership) and collective teacher efficacy. This study showed that the aforementioned competencies contributed to the advancement of collective teacher efficacy.

Chapter 5 compares the findings in this study with existing research by discussing Secondary Research Questions 3 and 4: "Does this research support the proposition that individual principal leadership competencies can positively impact collective teacher efficacy?" and "Does this study support or differ from the synthesis of current research?" The implications for policy and practice section will report any findings that could impact future leadership

curriculum and professional development for principals along with recommendations for further research will be presented in this chapter. Finally, the study will finish with a concluding statement.

#### **Discussion of Research Questions**

Secondary Research Question 3. This research question was, "Does this research support the proposition that individual principal leadership competencies can positively impact collective teacher efficacy?" The findings in this study confirmed that elementary principals' perceptions did indeed indicate that specific principal leadership competencies could positively impact collective teacher efficacy. As presented in Chapter 4, several core competencies emerged demonstrating a positive relationship with collective teacher efficacy: fostering effective relationships, embodying visionary leadership, leading a learning community, and providing instructional leadership.

Many educational leadership researchers have also expressed strong views about the work of principals in their leadership and the impact on collective teacher efficacy. Authors such as Tschannen-Moran and Woolfolk Hoy (1998) and Goddard, Hoy, and Woolfolk Hoy (2004) have discussed the significance of teachers' efficacy beliefs relating to school culture (leading a learning community). In their view, these beliefs had a positive relationship with principal leadership and organizational structure; they created a collaborative environment where teachers were encouraged to share practice with one another (leading a learning community, fostering effective relationships) and focused on student academic achievement (embodying visionary leadership, providing instructional leadership). In her research study *Teacher Efficacy: Influence of Principal Leadership Behaviour*, Hipp (1996) also confirmed the impact principals have in their actions as leaders, including modelling behaviour, creating a positive climate for success,

celebrating successes, promoting teamwork and collaboration, fostering positive relationships, and developing collective teacher efficacy in a school.

Confirmation to this overarching question is addressed specifically in the ensuing section, which provides a comparison of the findings in this study to existing research.

Secondary Research Question 4. This research question was, "Does this study support or differ from the synthesis of current research?" This section provides a breakdown of each of the areas addressed in this study, reviewing findings and comparing them to existing research. I begin by revisiting the definitions of principal leadership competencies and collective teacher efficacy as defined by this select group of elementary principals. Following this, I compare the indicators of collective teacher efficacy identified in this research study to current research. In addition, I provide a brief summary of the factors seen as impacting collective teacher efficacy uncovered in this particular study as well as other research. Subsequently, I discuss the overall findings for the four competencies—fostering effective relationship, embodying visionary leadership, leading a learning community, and providing instructional leadership—and compare the findings with past research. Finally, I conclude with a summary of the general findings and the relationship to current research.

#### **Defining Principal Leadership Competencies**

The preliminary interview question, "How do you define principal leadership competencies?" was seen by two of the three participants in the focus groups, urban interviews, and rural interviews as relating to the Alberta Education document referred to above (TAAPCS, 2012). The document emphasizes the importance of every child having an opportunity to "engage in quality learning experiences and that lead to achievement of the goals of education and that address his or her learning and developmental needs" (TAAPCS, 2012, p. 1). The

document goes on to state that the importance of school leaders was to be skilled teachers who are "fulfilling the essential purpose of educational leadership" (TAAPCS, 2012, p. 1). Part of this fulfillment is to demonstrate seven leadership competencies: (a) fostering effective relationships, (b) embodying visionary leadership, (c) leading a learning community, (d) providing instructional leadership, (e) developing and facilitating leadership, (f) managing school operations and (g) understanding and responding to the larger societal context. Principals in this study referred to these competencies when defining what principal leadership competencies meant to them. In general, principals appreciated the document as a tool to guide their own practice. Concerning professional leadership competencies, one principal stated:

Basically [they] illustrate all those competencies and skills and practices so being knowledgeable, being aware of them. . . . I am glad they are defined, they are very clear and concise and I can reference examples to them for what I do in practice. (Urban Principal 1)

The seven competencies appeared throughout the existing research on principal leadership competencies, although the wording varied. Leithwood (2012) identified four core practices essential to educational leadership: "setting direction, developing people, redesigning the organization, and improving the instructional program" (p. 57). Robinson (2011) discussed specific principal capabilities as "establishing goals and expectations, ensuring quality teaching, and leading teacher learning and development" (p. 9). In alignment with fostering effective relationships,) presented the idea of the interconnectedness between culture and relationships. They theorized that if leaders "change the form of a culture (the relationships among people) and you have a good chance of changing its content too" (Hargreaves & Fullan, 2012, p. 104).

In addition to the Alberta Education (TAAPCS, 2012) document, two urban principals and one urban focus group also defined competencies as the knowledge and skills that principals brings to their role. Similarly, Robinson (2012) referred to this as "relevant expertise" (p. 7). As such, a leader could influence others by demonstrating knowledge and skills, which not only influence others but assist teachers in growing in their own practice (Robinson, 2012, p. 7).

As reported in the findings, principals in this study felt that it was important to speak specifically about the ability to build relationships as an essential component of any definition of principal leadership competencies. These results were present in one urban focus group as well as two out of three rural interviews. These participants all referenced the Alberta Education document in defining leadership competencies, and they also specifically addressed the importance of relationships in their definition. Other researchers have felt that the role of relationships was integral to a principal's work. Wiley (2001, as cited in Leithwood, 2012) stated that in order for principals to build a positive school culture, encourage risk taking, and have a strong sense of professional trust, they "must foster collaborative and effective working relationships among teachers" (p. 33). In discussing three capabilities for student-centred leadership, Robinson (2011) referred to relationship skills as being embedded in all five dimensions of student-centred leadership (p. 34). Bryk and Schneider (2002) found that a leader's ability to build trust was related to the amount of success teachers would experience when working together.

In addition, the importance of instructional leadership also emerged in the findings from two of three urban focus groups and two of the three rural interviews. Many researchers also included instructional leadership or the improvement of teacher practice as a principal leadership competency. Leithwood (2012) discussed the significance of understanding and developing

people, and Robinson's (2011) Dimension 4 was related to promoting and participating in teacher learning and development. Levin (2012) proposed seven practicalities required of leaders who want to lead change; one of these was a focus on teaching and learning.

The notion that principal leadership competencies are interrelated, so that principals can use more than one particular competency at any given time, emerged in the findings of this study in two out of three urban focus groups as well as in one urban-principal interview and one rural-principal interview. Principals speculated that individual principal competencies did not stand alone; often, a principal's work required her or him to use some or all of the competencies at any particular time. Rural Principal 1 stated that for him, principal leadership competencies were the an "amalgamation between all" seven in Alberta Education's definition. Likewise, a participant in Urban Focus Group 3 defined principal leadership competencies as a "blend and flow." This coincides with current research, which has avoided leadership styles in defining leadership.

Instead, researchers have defined leadership intertwining words such as *capabilities*, *competencies*, and *practice* to create leadership that has a positive impact on student achievement in a school (Fullan, 2014; Leithwood & Seashore-Louis, 2012; Levin, 2012; Robinson, 2011).

In summary, it is evident that this study's findings on the manner in which principals define principal leadership competencies were in alignment with existing research.

#### **Defining Collective Teacher Efficacy**

As indicated in Chapter 2, Bandura (1997a) defined the construct of perceived collective teacher efficacy as "a group's shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainments" (p. 477). According to social cognitive theory, and similar to the role of self-efficacy in individuals, collective efficacy affects the aspirations of the group, the level of persistence of its members, and the resilience of

the group when faced with difficulties (Bandura, 2000). Additional research conducted by Goddard et al. (2000) defined collective teacher efficacy as a group attribute, deriving from the interaction of the group. The definition used for this research study was, "The perception of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (Goddard et al., 2000, p. 477).

Findings from elementary principals participating in this study found similarities in how collective teacher efficacy was defined in the research. In the findings, the notion of a collective group—"collective meaning that everyone is in and expected to do it, there is accountability" (Focus Group 2)—had the highest amount of frequency appearing in two rural interviews, three urban focus groups, and two urban interviews. This was followed by three other concepts. First, a common purpose: "So this is what I mean about teacher efficacy—if they all have the same belief and are on the same page, that is what I have to encourage" (Rural Principal 1). Second, improved student learning: "[The belief that] you have a role to play in the learning, [and] you can impact and have the skills to do so" (Rural Principal 3). And third, a sense of shared responsibility: "sense of collective responsibility" (Urban Focus Group 3).

Indicators of collective teacher efficacy. Indicators of collective teacher efficacy were considered elements that exist in a school and among staff evidencing a high level of collective teacher efficacy in a school culture (see Figure 12). The principals in this study identified 26 indicators of collective teacher efficacy. This was far more than I was able to uncover in the literature review, which identified only six such indicators. This could be attributed to the advantage of doing a qualitative study that allows participants to share their stories or have a discussion, which broadened and developed their initial responses. When delving deeper into the findings, I considered indicators that were referred to four or more times as significant. Strong

practice emerged as the most significant indicator in this study of collective teacher efficacy; it was discussed as an indicator in every urban focus group and urban and rural interview.

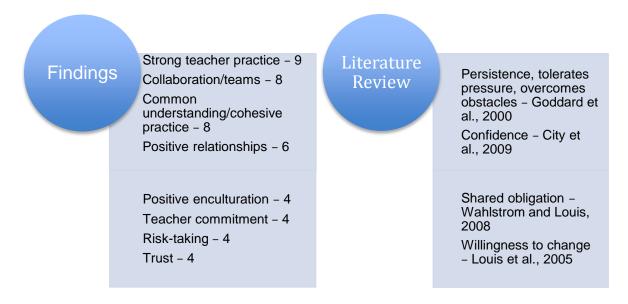


Figure 12. Indicators of collective teacher efficacy.

Other significant indicators that materialized were collaboration and strong teams, common understanding and cohesive practice, positive relationships, positive enculturation, teacher commitment, risk taking, and trust. In contrast, indicators identified in the literature review were persistence, tolerance of pressure, overcoming of obstacles (Goddard et al. 2000), confidence (City et al., 2009), shared obligation (Wahlstrom & Louis, 2008), and a willingness to change (Louis et al., 2005).

Principals used examples of strong practice such as "research-based" (Urban Focus Group 1), "innovation" (Rural Principal 2), "continuous improvement" (Urban Principal 3), and "critical reflection of practice" (Urban Principal 1). It is interesting that it appeared that this select group of elementary principals did not see a connection between strong practice and increased student achievement; increased student achievement was mentioned only by three principals in this study (Rural Principals 1 and 2, and Urban Principal 1). By contrast, Goddard

(2000) clearly argued that student academic achievement improves when teachers felt efficacious about their collective capability to affect the quality of teaching and learning in a school. In addition, Goddard & Goddard (2001) found that low collective teacher efficacy can produce lower student achievement, which in turn results in a cycle of low performance for students and ineffective practices for teachers.

Louis et al. (2005) discussed the importance of teachers being willing to change in terms of their teaching. It is possible that for these authors, a "willingness to change" (Louis et al., 2005, p. 198) was directly linked to the level of collective teacher efficacy in a school. Even though this quality of willingness to change was not specifically mentioned by participants in this study, it could be considered to be a contributing factor that leads to strong teacher practice. Goddard (2000, 2001) discussed the relationship between collective efficacy and teacher confidence; he found that when teachers were more willing to analyze their practice in a critical manner their willingness to change increased. Risk taking, identified by four principals in this study (Urban Focus Group 1, Urban Focus Group 2, Rural Principal 1, and Urban Principal 3), could be linked to the confidence level of teachers. Confidence was also identified by two principals in this study (Urban Focus Group 2, Rural Principal 3) as an indicator of collective teacher efficacy.

Findings in this study indicated that three urban focus groups, two urban interviews, and three rural interviews strongly supported collaboration and working in teams as significant indicators of collective teacher efficacy. Also, having a common understanding and a cohesive practice was seen in seven out of the possible nine groups (two urban focus groups, two urban interviews, and three rural interviews) as indicators of collective efficacy. For Wahlstrom and Louis (2008), a collective sense of responsibility and a "shared obligation" to improve student

learning (p. 466) could result from teachers working collaboratively and having a common understanding of the school's vision and instructional practices. Teacher commitment, shared as an indicator in four of the interview groups, ties in with shared obligation in this study's findings relating to teacher commitment: "I think when we talk collective teacher efficacy, I think they are in it for each other as well" (Focus Group 2). When talking about the professional learning and the relationship to collective teacher efficacy, Rural Principal 2 shared her thoughts on the indicators of professional commitment:

It is collective teacher efficacy that comes from—I hate the word "accountability," but a sense of follow through. And integrity and urgency for the need to do the best job that we can possibly be, and you don't do that in isolation. (Rural Principal 2)

Hargreaves and Fullan (2012) have shown that collaborative relations, shared responsibility, and teachers' teamwork increased professional school capital, a significant contributor to increasing student achievement.

Positive relationships were deemed a significant indicator in this study. It was identified in two of the three urban focus groups, urban interviews, and rural interviews. This aligns with the existing literature, which concluded that positive working relationships were established through collaboration and having a sense of shared obligation to one another as well as trust in their colleagues' capabilities (Bryk & Schneider, 2002; Goddard et al., 2001; Serva et al., 2005). Bryk and Schneider (2002) attested to the impact of high levels of relational trust had on teachers' abilities to cooperate, support one another, and commit to school goals. Serva et al. (2005) put forth the notion that high level of collective teacher efficacy was obtained through teachers' capacity to believe in their colleagues' capabilities. Principals in this study viewed

positive relationships as relating to trust as well. Urban Principal 2 shared the importance of professional trust and the ability for staff to feel comfortable enough to challenge each other on a professional level: "And then the trust too is really evident in the professional challenging each other in those professional conversations." Principals in this study also deemed positive relationships as including a culture of respect and honesty (Rural Principal 2) as well as supportive (Rural Principal 3; Urban Focus Group 2).

An analysis of the existing research and the findings in this study showed similarities in overall themes of indicators of collective teacher efficacy. Strong practice was deemed the most significant indicator of collective teacher efficacy in this research study. Strong practice was not directly referenced in the literature; but improved student achievement, confidence, and willingness to change could be seen as indicators having a direct impact on influencing teacher practice.

Factors impacting collective teacher efficacy. Factors impacting collective teacher efficacy may change a collective group or individual's sense of efficacy either positively or negatively (see Figure 13). Principals in this study identified more factors than did researchers in the literature review. A contributing factor in generating the numbers of examples given was the qualitative design of this study, which allowed participants to delve deeply into their conversations.

Student complexity and community influences were identified by participating principals in this study as potentially having a negative impact on collective teacher efficacy. In the literature review, one study (Adams & Forsyth, 2006) found that contextual factors such as student behaviour, socioeconomic status, and prior school performance could have a negative impact on collective teacher efficacy. There was a general consensus among principals in this

study, as well as in past research, that contextual factors can be overcome and collective teacher efficacy can be increased (Goddard, 2002a, 2002b).

Other factors identified in this study such as mindset and relationships often can be mitigated by principals who possess leadership competencies identified in this study that have a positive impact on collective teacher efficacy (Hipp, 1996).

# Findings for Factors That Influence Collective Teacher Efficacy

 Mindsets, relationships, human factors, student complexity, community influences

# Findings From Past Research That Influence Collective Teacher Efficacy

Contextual variables (Adams & Forsyth, 2006)

Figure 13. Factors impacting collective teacher efficacy.

#### **Principal Leadership Competencies and Collective Teacher Efficacy**

Four competencies emerged from the literature review as having a positive impact on collective teacher efficacy: (a) relational trust, (b) setting direction, (c) collaborative decision making, and (d) promoting and participating in teacher learning and development. It is interesting that, as previously stated in Chapter 3, these same four principal leadership competencies were perceived by the elementary principals participating in this study. This alignment became apparent during the data analysis. Elementary principals in this study concurred with the principal leadership competencies listed in the Alberta Education document mentioned above (TAAPCS, 2012). Generally, when discussing the possible relationship of principal leadership competencies and collective teacher efficacy, the examples used by participants in this study tended to fall under four competencies: fostering effective relationships,

embodying visionary leadership, leading a learning community, and providing instructional leadership. This was exciting, as the elementary principals in this study expanded their ideas in more depth than I uncovered in my own review of the literature. The following provides a brief discussion and comparison of these four competencies in relation to the existing research.

Fostering effective relationships. In the Alberta Education (TAAPCS, 2012) document. fostering effective relationships is defined as follows: "A school leader must build trust and foster positive working relationships in the school community on the basis of appropriate values and ethical foundations" (p. 4). Descriptors that related to the findings in this study were (a) demonstrates a sensitivity to and genuine caring for others; (b) cultivates a climate of mutual respect; and (c) uses effective communication, facilitation, and problem-solving skills (TAAPCS, 2012, p. 4). This study confirmed that this select group of elementary principals clearly valued the importance of positive and professional relationships and the relationship to collective teacher efficacy. All three urban focus groups and all urban and rural principals who participated in this study acknowledge this relationship. Principals valued the importance of professional trust, being supportive of teachers, knowing staffs' strengths, valuing teacher voice, and communicating effectively. This excerpt from Urban Focus Group 2 encapsulated some of the competencies required to foster effective relationships:

*Respondent 7*: That's trust.

Respondent 4: And also tying in your professionals, I trust you as a professional to have those conversations that you need to have. Without me redirecting the professional conversation.

Respondent 5: I think there is opportunity in just rolling up your sleeves and trying in those conversations and opening up what your vulnerabilities are and your

questions, or I didn't think of that or you know what that's changed our course here because that's much better. . . . That's responsive leadership to people's needs and trusting.

Research also supported the view that cultivating relationships with staff and among staff had a positive impact on collective teacher efficacy. As discussed in Chapter 2, the notion of trust is strongly tied to the construct of collective teacher efficacy. Teaching staff holding professional trust in their colleagues' capabilities to execute the vision and the goals of the school raised their level of collective teacher efficacy (Serva et al., 2005). A leader's ability to establish an environment of trust and professional learning was seen as a significant competency in the research (Bryk & Schneider, 2002; City et al., 2009; Robinson, 2010). In his book, The Art of School Leadership), Hoerr (2005) noted that "collegiality is built on congeniality" (p. 31). He went on to state that principals should create a school climate where "everyone gets along" (Hoerr, 2005, p. 31), and ensure that as leaders they understand the importance of effective communication with adults. Similarly, Murphy (2002, as cited in Hoerr, 2005) stated the importance of understanding the needs of the followers: when people know that their needs are understood, they tend to be more willing to implement new initiatives suggested by a leader. Fullan (2014) discussed the idea that a principal builds trust though "clear communication and expectations" (p. 130). Fullan (2014) also argued that people cannot just talk their way into trust; instead they need to model trust in their day-to-day actions.

Consistent with Bandura's social cognitive theory, one's affective state is a factor contributing to collective teacher efficacy. The more content teachers feel in terms of their own confidence, value, and contributions to the group, the higher collective teacher efficacy will exist

in a school. Therefore, it is imperative that principals take into account the affective state of their teachers and staff as a whole when building positive relationships with and between teachers.

In sum, the research in this study and past research together connect the importance of fostering effective relationships as a key competency in enhancing the collective efficacy of a teaching staff. Figure 14 captures the discussion and relationship between fostering effective relationships, social cognitive theory, and indicators of collective teacher efficacy.

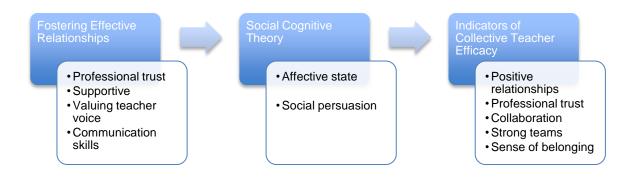


Figure 14. Fostering effective relationships in relation to social cognitive theory and indicators of collective teacher efficacy.

Embodying visionary leadership. As defined by the Alberta Education document (TAAPCS, 2012), embodying visionary leadership encapsulates "creating and sustaining shared vision, mission, values, principles and goals" (p. 3) Relevant elements of this competency include creating a clear vision based upon "sound research" (TAAPCS, 2012, p. 3) and school data; engaging the school community in creating the vision; ensuring that decisions and planning are in alignment with the vision; and communicating the vision and celebrating the accomplishments of the school (TAAPCS, 2012).

Significantly, the positive impact on collective teacher efficacy of communicating a clear vision effectively was shared in all three urban focus groups, two of the three urban interviews,

and all three rural-principal interviews. Equally, visionary leadership is valued in the current literature as contributing to teacher efficacy. School cohesion resulting from common visions and goals was found to have a stronger impact on collective teacher efficacy than prior school achievement (Ross et al., 2004). This impact makes sense, given that efficacy is seen as linked to motivation (Goddard et al., 2000). According to social cognitive theory, teachers are motivated only when they believe that the environment in which they work favours the realization of goals that they consider personally significant. This has also been corroborated in previous studies (Goddard, 2001; Kurz & Knight, 2004; Robinson, 2011) that demonstrated a positive correlation between goal consensus and collective teacher efficacy. The findings in this study confirmed previous research that the establishment of clear goals motivates a staff to work as a group on the vision of the school (see Figure 15).

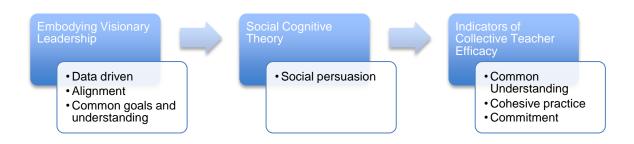


Figure 15. Embodying visionary leadership.

Leading a learning community. Leading a learning community involves developing "a school culture that values and supports learning" (TAAPCS, 2012, p. 4). Descriptors relevant to this particular study in relation to leading a learning community were "(a) promotes and models life-long learning for students, teachers and other staff, (b) fosters a culture of high expectations for students, teachers and other staff, and (c) promotes and facilitates meaningful professional development for teachers and other staff" (TAAPCS, 2012, p. 4).

The idea of developing a culture of learning and continuous improvement through collaboration was discussed in all three urban focus groups, all the urban interviews, and two of the three rural interviews. Principals in this study discussed the significance of developing a shared sense of responsibility. One principal did this by ensuring that all teachers had input into the school development plan, so that "everybody has had a voice, everybody felt like they have, and you know everybody has contributed" (Focus Group 2). Involving teachers in decisions that impacted their own work allowed them to feel that their professionalism was valued and that, as teachers, they had a voice in the daily operations of a school. This in turn had a positive impact on collective teacher efficacy as teachers felt empowered (Goddard, 2002a, 2002b; Hipp,1996; Newman et al., 1989). Goddard (2002b argued that when teachers are given the opportunity to influence significant school decisions such as the school development plan, then they are more likely to believe in their colleagues' capabilities to execute the work.

To facilitate collaboration, principals in this study said that working in professional learning communities was a crucial component in developing a culture of learning and common understanding, thus raising the collective efficacy of teachers. As Rural Principal 2 reflected on her leadership journey, she stated that the professional learning helped "create a culture of trust and learning." Collaboration was viewed by many researchers as increasing the social capital of the group and developed the collective efficacy of the group (Hargreaves & Fullan, 2012; Mawhinney et al., 2005; Mulford, 2008).

In his work on collective teacher efficacy Bandura (1986, 1997a) identified four factors that enhanced collective teacher efficacy, two of which were vicarious learning experiences and social persuasion. Through creating a culture of collaboration and focusing on teaching and learning, teachers learn vicariously from other teachers' experiences in the classroom. Leithwood

(2012) supported the notion that when teachers problem-solve together (learning vicariously through others), their shared practices develop more effective teaching strategies. The power of social persuasion was clearly articulated by Fullan (2014); he used the idea of "mobiliz[ing] the group" (p. 67) as the leverage to change culture—using the "power of the group to change the group" (p. 29). Teacher rounds (Marzano, 2007) can also be a platform to provide vicarious learning experiences for staff; as teachers visiting and observing in other classes provide a reciprocal learning experience for both parties.

For City et al. (2009), the challenge of efficacy is to move from the individual level to the school or organizational level. These authors proposed that collective efficacy was derived from collective work and the establishment of collective norms and not simply from individuals' isolated learning. Hence, City et al. designed instructional rounds to promote collective learning. They went as far as to state that rounds model "the relationship between individual learning about efficacy and collective learning about efficacy by putting people in certain situations where they have to develop common norms and a common understanding about the conditions that produce their success" (City et al., 2009, p. 165). Social persuasion can have a powerful effect on collective efficacy.

Related to this are indicators of collective teacher efficacy such as a cohesive staff. Ross et al. (2004) believed the greater the cohesion in a staff the more likely that teachers could be persuaded by the group to engage in professional learning. Teachers also saw that the power of the group working towards a common goal was motivating, consequently increasing the collective efficacy of the group.

Figure 16 depicts the relationship between leading a learning community, the relationship to Bandura's (1986) social cognitive theory, and the evidence of indicators of collective teacher

efficacy that were identified by the select group of elementary principals participating in this study.

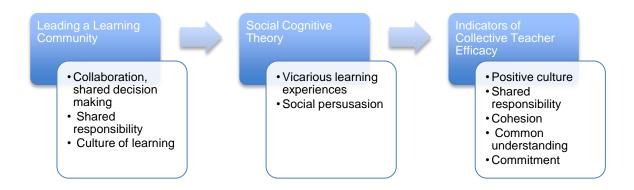


Figure 16. Leading a learning community in relation to social cognitive theory and indicators of collective teacher efficacy.

Providing instructional leadership. Providing instructional leadership, as articulated in the Alberta Education document (TAAPCS, 2012), was to ensure that "each student has access to quality teaching and the opportunity to engage in quality learning experiences" (p. 4). As detailed in the descriptors, principals are expected to have an excellent knowledge of effective pedagogy and curriculum as well to make certain that teachers use suitable pedagogy to respond to various student needs and implement "strategies for addressing standards of student achievement" (TAAPCS, 2012, p. 4).

Once more, principals who participated in this study overwhelmingly supported the positive influence that instructional leadership had on collective teacher efficacy. All three urban focus groups and rural principals, as well as two of the three urban interviews, shared stories of the role that instructional leadership played on collective teacher efficacy in their school. These findings corresponded with the most significant indicator perceived by principals who partook in

this research, which was strong teacher practice. Principals believed that their role as instructional leaders made a difference to teacher practice and thus increased the collective efficacy of the staff. Principals perceived that the instructional practice of the school improved when they designed relevant professional development, provided support for teachers, encouraged teachers to share their practice, and modelled continuous learning and improvement. Teachers could see visible results of their work and developed a stronger sense of efficacy as a whole.

These leadership qualities contributed to teacher success and confidence, in accordance with Bandura's (1986) social cognitive theory, which is that collective teacher efficacy is obtained through mastery experiences. Leithwood (2012) argued for a leader providing support for teachers, based on individual needs as well as those of the whole group, as enhancing teacher capacity and confidence, allowing teachers to "develop a sense of mastery" (p. 60). Similarly, Rural Principal 3 shared his story of developing a teacher's capacity in the area of literacy and her growth in confidence:

She now knows that she has a few tools that she knows she can rely on. So through that as part of her efficacy is that what she was doing anyway although not really a restrictive program . . . that there were components of what she was doing that were found in daily five.

When principals set clear goals and provided appropriate supports for teachers to attain success, the collective efficacy increased as teachers achieved a sense of mastery (Robinson, 2011; M. Wheatley, 2008).

In conclusion, the competency of providing instructional leadership was seen as contributor to elevating the collective efficacy of a teaching staff. Hargreaves and Fullan (2012)

emphasized the importance the role that professional development played in building teacher efficacy and capacity. The findings in this study confirmed conclusions in current research in regard to the significance of principals providing instructional guidance and opportunities, encouraging teacher collaboration, sharing of practice, learning alongside teachers, and acknowledging successes (City et al., 2009; Leithwood, 2012; Robinson, 2010; Robinson et al., 2008; Schechter & Tschannen-Moran, 2006). These actions taken by principals in order to be effective leaders concur with the concept of social cognitive theory and the powerful effect of mastery experiences on collective teacher efficacy (see Figure 17).

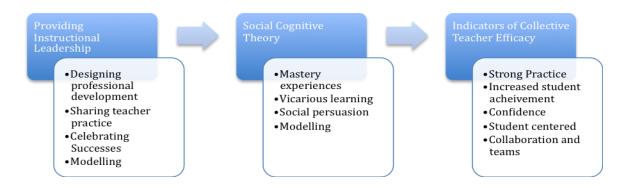
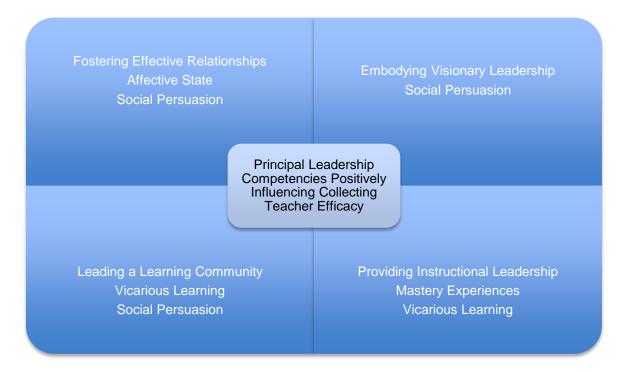


Figure 17. Providing instructional leadership in relation to social cognitive theory and indicators of collective teacher efficacy.

#### **Principal Leadership Competencies and Collective Teacher Efficacy**

Figure 18 depicts the findings of this study. These results affirmed current and past research, namely that the principal leadership competencies of fostering effective relationships, embodying visionary leadership, leading a learning community, and providing instructional leadership elevate the level of collective teacher efficacy on a staff. Higher levels of collective teacher efficacy have been proven to contribute to improved teacher practice increased student achievement (Goddard, Hoy, & Woolfolk Hoy, 2004). These findings provide guidance for

school leaders in engaging in effective leadership practices that contribute to the overall goal of education, which is to increase student achievement.



*Figure 18.* Principal leadership competencies relating to social cognitive theory and collective teacher efficacy.

In the following sections, I discuss the implications of this research as well as recommendations for future research. The chapter closes with a concluding statement.

## **Implications for Policy and Practice**

This research study found notable relationship between collective teacher efficacy and the principal leadership competencies of (a) fostering effective relationships, (b) embodying visionary leadership, (c) leading a learning community, and (d) providing instructional leadership. Based on this study's findings, the following recommendations were made for policymakers, college and university curriculum designers, and school district leadership development programs.

- Policymakers may want to use the information contained in this research study to
  include information on the relationship between specific leadership competencies and
  the impact of collective teacher efficacy and the impact on school culture.
- Universities and school districts can use the information gained in this study in educational leadership courses and school district leadership development programs.
- Principals should become more knowledgeable of the positive impact of collective teacher efficacy on school culture and improving teacher practice.
- Principals should use this study to reflect on their own practices and the impact that
  they are having in increasing the collective teacher efficacy of their staff.

#### **Recommendations for Future Research**

The primary objective of this study was to identify specific principal leadership competencies, based on the perceptions of current elementary principals in the province of Alberta that were perceived to have the potential to positively impact collective teacher efficacy. Recommendations for future research would include, but not be limited to, the following:

- Given that this research study included only elementary principals in Alberta, repeating this study with a larger sample is recommended. The inclusion of principals from other provinces or more school districts would provide a larger sample population, a broader perspective that would aid in generalizing the results.
- Widening this study to include principals from middle and high schools potentially
  could produce different perceptions of specific principal leadership competencies and
  the impact on collective teacher efficacy.

- Including a larger group of stakeholders, such as teachers and support staff, could
  provide a wider range of perspectives regarding effective principal leadership
  competencies that positively influence collective teacher efficacy.
- Including a survey that each principal participating in the study (whether in a focus
  group or interview) could complete might have the potential to gather further data on
  indicators and specific details under each competency.

#### **Concluding Statement**

After completing this interpretive multi-case study, I have concluded that there was a significant relationship between specific principal leadership competencies and collective teacher efficacy. It is exciting to confirm that a school principal has the potential to have a powerful impact on the collective efficacy of a teaching staff by leadership competencies enacted on a daily basis. This study and existing research highlighted the benefits of having a staff with a high level of collective efficacy not only on school culture and a group's ability to believe they can do the work but on teaching practice which in the end contributes to increased student achievement (Goddard, Hoy, & Woolfolk Hoy, 2004; Leithwood et al., 2004; Tschannen-Moran & Barr, 2004). This is encouraging information for the provincial and state governments and school districts that are in pursuit of identifying research-based practices for school leaders. School administrators need to be aware of the influence collective teacher efficacy has on the various components of their schools and staff.

Findings from this research affirmed the significant impact that a school principal's actions have on the teaching and learning in a school. Existing research has confirmed the importance of the teacher in impacting student achievement; in addition, research attested to the impact a principal has on shaping the school environment in order to increase student

achievement (City et al., 2009; Hallinger & Heck, 1998; Leithwood, 2012; Marzano, Waters, & McNulty, 2005; Robinson, 2011). Principals' leadership and the competencies they exhibit in their daily work affect school culture. When principals display competencies such as embodying visionary leadership, fostering effective relationships, leading a learning community, and promoting instructional leadership, then high levels of collective teacher efficacy exist in a school culture—thus improving teaching and learning.

#### References

- Adams, C. M., & Forsyth, P. B. (2006). Proximate sources of collective teacher efficacy. *Journal of Educational Administration*, 44, 625–642. https://doi.org/10.1108/09578230610642656
- Alberta Education. (2009). The principal quality practice guideline: Promoting successful school leadership in Alberta. Retrieved from https://education.alberta.ca/leaderhship-excellence/leadership-competencies/
- Alberta School Boards Association. (2011, June). *The Alberta professional practice*competencies for school leaders. Retrieved from http://www.asba.ab.ca/files/pdf
  /prof\_practice\_competencies\_fgm11.pdf
- Alberta Teachers' Association. (2013). *Provincial framework agreement*. Retrieved from http://www.teachers.ab.ca/SiteCollectionDocuments/ATA/News-Room/2013
  /Framework%20Agreement.pdf
- Ashton, P. T., & Webb, R. B. (1986). Making a difference: Teachers' sense of efficacy and student achievement. New York, NY: Longman.
- The Association of Alberta Public Charter Schools. (2012, June 6). Professional practice competencies for school leaders in Alberta. Retrieved from http://www.taapcs.ca/pdf /Professional%20Practice%20Competencies%20for%20School%20Leaders%20in%20Alberta.pdf
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory.

  Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28, 117–148. https://doi.org/10.1207/s15326985ep2802\_3

- Bandura, A. (1997a). Self-efficacy: The exercise of control. New York, NY: Freeman.
- Bandura, A. (1997b). Self-efficacy: Toward a unifying theory of behavioural change.

  \*Psychological Review, 84, 191–215. https://doi.org/10.1037/0033-295X.84.2.191
- Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science*, *9*, 75–78. https://doi.org/10.1111/1467-8721.00064
- Blasé, J., & Blasé, J. (1999). Principals' instructional leadership and teacher development: Teachers' perspectives. *Educational Administration Quarterly*, *35*, 349–378. https://doi.org/10.1177/0013161x99353003
- Bloomberg, L. D., & Volpe, M. (2008). *Completing your qualitative dissertation: A roadmap from beginning to end.* Thousand Oaks, CA: Sage.
- Bryk, A. S., & Schneider, B. L. (2002). *Trust in schools: A core resource for improvement*. New York, NY: Russell Sage Foundation.
- City, E. A., Elmore, R., Fiarman, S. E., & Teitel, L. (2009). *Instructional rounds in education: A network approach to improving teaching and learning*. Cambridge, MA: Harvard Education Press.
- Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.). Boston, MA: Pearson.
- Crotty, M. (2010). The foundations of social research: Meaning and perspectives in the research process. Thousand Oaks, CA: Sage.
- Dweck, C. (2006). Mindset: The new psychology of success. New York, NY: Ballantine Books.
- Fancera, S. F., & Bliss, J. R. (2011). Instructional leadership influence on collective teacher efficacy to improve school achievement. *Leadership and Policy in Schools*, *10*, 349–370. https://doi.org/10.1080/15700763.2011.585537

- Fern, E. F. (1982). The use of focus groups for idea generation: The effects of group size, acquaintanceships, and moderator on response and quantity and quality. *Journal of Marketing Research*, *19*, 1–13. Retrieved from https://www.ama.org/publications/JournalOfMarketingResearch/Pages/Current-Issue.aspx
- Flyvberg, B. (2011). Case study. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 301–316). Thousand Oaks, CA: Sage.
- Friesen, S., & Jardine, D. (2009). 21st century learning and learners. Retrieved from http://education.alberta.ca/media/1087278/wncp%2021st%20cent%20learning %20(2).pdf
- Fullan, M. (2003). The moral imperative of school leadership. Thousand Oaks, CA: Corwin.
- Fullan, M. (2014). *The principal: Three keys to maximizing impact*. San Francisco, CA: Jossey-Bass.
- Goddard, R. D. (2000). *Collective efficacy and student achievement*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Goddard, R. D. (2001). Collective efficacy: A neglected construct in the study of schools and student achievement. *Journal of Educational Psychology*, *93*, 467–476. https://doi.org/10.1037/0022-0663.93.467
- Goddard, R. D. (2002a). Collective efficacy and school organization: A multilevel analysis of teacher influence in schools. In C. Miskel & W. K. Hoy (Eds.), *Theory and research in educational administration* (Vol. 1, pp. 169–184). Charlotte, NC: Information Age.
- Goddard, R. D. (2002b). A theoretical and empirical analysis of the measurement of collective efficacy: The development of the short form. *Educational and Psychological Measurement*, 62, 97–110. https://doi.org/10.1177/00131644020620001007

- Goddard, R. D., & Goddard, Y. L. (2001). A multilevel analysis of the relationship between teacher and collective efficacy in urban schools. *Teaching and Teacher Education, 17*, 807–818. Retrieved from http://www.journals.elsevier.com/teaching-and-teacher-education/
- Goddard, R. D., Hoy, W. K., & Woolfolk Hoy, A. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Educational Research Journal*, *37*, 479–507. https://doi.org/10.3102/00028312037002479
- Goddard, R. D., Hoy, W. K., & Woolfolk Hoy, A. (2004). Collective efficacy beliefs:

  Theoretical developments, empirical evidence, and future directions. *Educational Researcher*, *33*(3), 3–13. https://doi.org/10.3102/0013189X033003003
- Goddard, R. D., LoGerfo, L., & Hoy, W. K. (2004). High school accountability: The role of perceived collective teacher efficacy. *Educational Policy*, 18, 403–425. 10.1177/0895904804265066
- Goddard, R. D., Tschannen-Moran, M., & Hoy, W. K. (2001). A multilevel examination of distributed and effects of teacher trust in students and parents in urban elementary schools. *Elementary School Journal*, 102, 3–17. https://doi.org/10.1086/499690
- Hallinger, P., & Heck, R. H. (1998). Exploring the principal's contribution to school effectiveness: 1980–1995. *School Effectiveness and School Improvement*, *9*, 157–191. https://doi.org/doi:10.1080/0924345980090203
- Hargreaves, A., & Fink, D. (2006). Sustainable leadership for sustainable change. San Francisco, CA: Jossey-Bass.
- Hargreaves, A., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school*. New York, NY: Teachers College Press.

- Hargreaves, A., & Shirley, D. (2009). *The fourth way: Inspiring future for educational change*. Thousand Oaks, CA: Sage.
- Hipp, K. A. (1996, April). *Teacher efficacy: Influence of principal leadership behaviour*. Paper presented at the Annual Meeting of the American Educational Research Association, New York, New York. Retrieved from http://files.eric.ed.gov/fulltext/ED396409.pdf
- Hoerr, T. R. (2005). *The art of school leadership*. Danvers, MA: Association for Supervision and Curriculum Development.
- Hoy, W. K., Smith, P. A., & Sweetland, S. R. (2003). A test of a model of school achievement in rural schools: The significance of collective efficacy. In C. Miskel & W. K. Hoy (Eds.), *Theory and research in educational administration* (Vol. 1, pp. 185–202). Charlotte, NC: Information Age.
- Klassen, R. M., Tze, V. M. C., Betts, S. M., & Gordon, K. A. (2011). Teacher efficacy research 1998–2009: Signs of progress or unfulfilled promise? *Education Psychology Review*, 23, 21–43. https://doi.org/10.1007/s10648-010-9141-8
- Knodel, J. (1993). The design and analysis of focus group studies: A practical approach. In D. L.Morgan (Ed.), Successful focus groups: Advancing the state of the art (pp. 35–50).Newbury Park, CA: Sage.
- Krueger, R. A., & Casey, M. A. (2009). Focus groups: A practical guide for applied research.

  Thousand Oaks, CA: Sage.
- Kurz, T. B., & Knight, S. L. (2004). An exploration of the relationship among teacher efficacy, collective teacher efficacy, and goal consensus. *Learning Environments Research*, 7, 111–128. https://doi.org/10.1023/B:LERI.0000037198.37750.Oe

- Leithwood, K. (2007). The emotional side of school improvement: A leadership perspective. In T. Townsend (Ed.), *International handbook of school effectiveness and improvement* (pp. 615–634). https://doi.org/10.1007/978-1-4020-5747-2\_34
- Leithwood, K. (2012). Core practices: The four essential components of the leader's repertoire.

  In K. Leithwood & K. S. Louis (Eds.), *Linking leadership to student learning* (pp. 57–67). San Francisco, CA: Wiley.
- Leithwood, K., & Jantzi, D. (2012). Collective leadership: The reality of leadership distribution within the school community. In K. Leithwood & K. S. Louis (Eds.), *Linking leadership to student learning* (pp. 11–24). San Francisco, CA: Wiley.
- Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning*. Retrieved from http://www.wallacefoundation.org/knowledge-center/school-leadership/key-research/Documents/How-Leadership-Influences-Student-Learning.pdf
- Leithwood, K., Patten, S., & Jantzi, D. (2010). Testing conception of how school leadership influences student learning. *Educational Administration Quarterly*, 46(5), 672–706. https://doi.org/10.1177/0013161X10377347
- Leithwood, K., & Seashore-Louis, K. (2012). *Linking leadership to student learning*. San Francisco, CA: Wiley.
- Levin, B. (2012). *How to change 5,000 schools: A practical and positive approach for leading change at every level*. Cambridge, MA: Harvard Education Press.
- Louis, K. S., Febey, K., & Schroeder, R. (2005). State-mandated accountability in high schools:

  Teachers' interpretations of a new era. *Educational Evaluation and Policy Analysis*, 27,

  177–204. https://doi.org/10.3102/01623737027002177

- Marzano, R. J. (2007). The art and science of teaching: A comprehensive framework for effective instruction. Alexandria, VA: Association for Supervision and Curriculum Development.
- Marzano, R. J., Waters, T., & McNulty, B. (2005). School leadership that works: From research to results. Aurora, CO: Association for Supervision and Curriculum Development and Mid-Continent Research for Education and Learning.
- Mascall, B., Leithwood, K., Straus, T., & Sacks, R. (2008). The relationship between distributed leadership and teachers' academic optimism. *Journal of Education Administration*, 46(2), 214–228. https://doi.org/10.1108/09578230810863271
- Mawhinney, H., Hass, J., & Wood, C. (2005). Teachers' collective efficacy beliefs in professional learning communities. *Leading and Managing*, 11(2), 12–45. Abstract retrieved from National Library of Australia, Trove database. (Accession No. 149313)
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Wiley.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Wiley.
- Miles, M. B., Huberman, M. A., & Saladana, J. (2014). *Qualitative data analysis: A methods sourcebook*. Thousand Oaks, CA: Sage.
- Morgan, D. L. (1996). Focus groups. *Annual Review of Sociology*, 22, 129–152. https://doi.org/10.1146/annurev.soc.22.1.129
- Morgan, D. L., & Krueger, R. A. (1993). When to use focus groups and why. In D. L. Morgan (Ed.), *Successful focus groups: Advancing the state of the art* (pp. 3–19). Newbury Park, CA: Sage.

- Mulford, B. (2008). *The leadership challenge: Improving learning in schools*. Retrieved from the Australian Council for Educational Research website: http://research.acer.edu.au/cgi/viewcontent.cgi?article=1000&context=aer
- Mulford, B., & Silins, H. (2003). Leadership for organizational learning and improved student outcomes—what do we know? *Cambridge Journal of Education*, *33*, 175–195. https://doi.org//10.1080/03057640302041
- Newmann, F. M., Rutter, R. A., & Smith, M. S. (1989). Organizational factors that affect school sense of efficacy, community, and expectations. *Sociology of Education*, *62*, 221–238. https://doi.org/10.2307/2112828
- Prussia, G., & Kinicki, A. (1996). A motivational investigation of group effectiveness using social cognitive theory. *Journal of Applied Psychology*, 81, 187–198. https://doi.org/10.1037//0021-9010.81.2.187
- Ritchhart, R., Church, M., & Morrison, K. (2011). *Making thinking visible*. San Francisco, CA: Jossey-Bass.
- Robinson, V. M. J. (2010). From instructional leadership to leadership capabilities: Empirical findings and methodological challenges. *Leadership and Policy in Schools*, *9*, 1–26. https://doi.org/10.1080/15700760903026748
- Robinson, V. M. J. (2011). Student-centered leadership. San Francisco, CA: Jossey-Bass.
- Robinson, V. M. J., Lloyd, C. A., & Rowe, K. J. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly*, 44, 635–674. https://doi.org/10.1177/0013161X08321509

- Ross, J. A., & Gray, P. (2006a). School leadership and student achievement: The mediating effects of teacher beliefs. *Canadian Journal of Education*, 29, 798–822. https://doi.org/10.2307/20054196
- Ross, J. A., & Gray P. (2006b). Transformational leadership and teacher commitment to organizational values: The mediating effects of collective teacher efficacy, school effectiveness and school improvement. *International Journal of Research, Policy and Practice*, 17(2), 179–199. https://doi.org/10.1080/09243450600565795
- Ross, J. A., Hogaboam-Gray, A., & Gray, P. (2004). Prior student achievement, collaborative school processes, and collective teacher efficacy. *Leadership and Policy in Schools*, *3*, 163–188. https://doi.org/10.1080/15700760490503689
- Saldana, J. (2013). The coding manual for qualitative researchers (2nd ed.). London, UK: Sage.
- Scardamalia, M., & Bereiter, C. (2006). Knowledge building: Theory, pedagogy, and technology. In K. Sayer (Ed.), *Cambridge handbook of the learning sciences* (pp. 97–118). New York, NY: Cambridge University Press.
- Schechter, C., & Tschannen-Moran, M. (2006). Teacher's sense of collective efficacy: An international view. *International Journal of Educational Management*, 20, 480–489. https://doi.org/10.1108/09513540610683720
- Senge, P. M., Cambron-McCabe, N., Lucas, T., Smith, B., & Dutton, J. (2000). Schools that learn: A fifth discipline field book for educators, parents, and everyone who cares about education. New York, NY: Doubleday.
- Serva, M. A., Fuller, M. A., & Mayer, R. C. (2005). The reciprocal nature of trust: A longitudinal study of interacting teams. *Journal of Organizational Behavior*, 26, 625–648. https://doi.org/10.1002/job.331

- Spillane, J. P., Halverson, R., & Diamond, J. B. (2004). Towards a theory of leadership practice:

  A distributed perspective. *Educational Researcher*, *36*, 3–34.

  https://doi.org/10.1080/0022027032000106726
- Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: Sage.
- Tschannen-Moran, M., & Barr, M. (2004). Fostering student learning: The relationship of collective teacher efficacy and student achievement. *Leadership and Policy in Schools, 3*, 189–209. https://doi.org/10.1080/15700760490503706
- Tschannen-Moran, M., & Woolfolk Hoy, A. (1998). Teacher efficacy: Its meaning and measure.

  \*Review of Educational Research, 68, 202–248. Retrieved from http://www.aera.net

  /Publications/Journals/ReviewofEducationalResearch/tabid/12611/Default.aspx
- Vaughn, S., Schumm, J. S., & Sinagub, J. (1996). Focus group interview in education and psychology. Thousand Oaks, CA: Sage.
- Wahlstrom, K. L., & Louis, K. S. (2008). How teachers experience principal leadership: The roles of professional community, trust, efficacy and shared responsibility. *Educational Administration Quarterly*, 44, 458–495. https://doi.org/10.1177/0013161X08321502
- Wahlstrom, K. L., Louis, K. S., Leithwood, K., & Anderson, S. (2010). *Investigating student links to improved student learning: Executive summary of research findings*. Retrieved from http://www.wallacefoundation.org/knowledge-center/school-leadership/keyresearch/Documents/Investigating-the-Links-to-Improved-Student-Learning-Executive-Summary.pdf
- Ware, H., & Kitsantas, A. (2007). Teacher and collective efficacy beliefs as predictors of professional commitment. *Journal of Educational Research*, 8, 303–310. https://doi.org/10.3200/JOER.100.5.303-310

- Wheatley, K. F. (2005). The case for reconceptualising teacher efficacy research. *Teaching and Teacher Education*, 21, 747–766. https://doi.org/10.1016/j.tate.2005.05.009
- Wheatley, M. (2008). What is our role in creating change? Retrieved from http://www.margaretwheatley.com/articles/Wheatley-WhatIsOurRole.pdf
- Yin, R. K. (2009). Case study research: Design and methods. Thousand, Oaks, CA: Sage.

#### Appendix A: Letter to Participants

Dear Principal [Name],

The purpose of this letter is to ask for your participation in a research study on the possible relationship between principal leadership competencies and collective teacher efficacy. I am a doctoral candidate in the Faculty of Education at the University of Calgary, and I am interested in the professional opinions and experiences as a principal in regard to this topic. This study has been approved by the University of Calgary conjoint faculties ethics review process as well as your school district. Your superintendent, Mx. [Name], has recommended you as a possible participant to include in this study.

As a participant in this study, you will be committing to participating in one ninety-minute focus group discussion at a location that is convenient to all participants. If a face to face meeting is not possible then the focus group will be held via Skype and will be recorded.

Confidentiality and anonymity are of the utmost importance to this research. At no time will you be identified by name in reporting the data, and coding numbers will be used to identify results obtained from participants. The data collection will remain confidential with only myself, my supervisor, and a professional transcriber (who must also sign a confidentiality agreement) having access to the data. The data that are received in paper form will be kept in a locked filing cabinet at all times, and will be destroyed at the completion of my degree. You may withdraw from participation at any time without consequence or explanation prior to the data analysis stage which will begin in April, 2015.

As this study also involves participation in a focus group of eight individuals, anonymity cannot be guaranteed due to the collaborative nature of participation in a focus group. While I am unable to control where information is shared with others beyond the researcher in a group

setting, participants will be reminded about the importance of anonymity and confidentiality at the beginning of the focus group and will be asked to sign a confidentiality agreement.

All information obtained for the purposes of this study will be maintained in accordance with the guidelines of institutional research for human subjects.

If you are interested in participating in this study, please indicate your interest by responding to this email in the next two weeks. Your response can be sent to me at the following address: [email address]. If you prefer, you may contact me by phone at [telephone number]. If you have any questions about this research, you may also contact my dissertation supervisor Dr. Kent Donlevy at [email address].

Thank you in advance for your consideration.

Sincerely,

Zoe Serediuk, Doctoral Candidate (University of Calgary)

### Appendix B: Informed Consent for Research Participant

#### Researcher

Zoe Serediuk, Faculty of Education, Graduate Programs in Education (Ed.D), [telephone number], [email address]

#### **Supervisor**

Dr. Kent Donlevy, [email address]

#### **Title of Project**

Principal Leadership Competencies and Collective Teacher Efficacy: A Case Study

This consent form, a copy of which has been given to you, is only part of the process of informed consent. If you want more details about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The University of Calgary conjoint Faculties Research Ethics Board has approved this study.

## **Purpose of the Study**

The primary purpose of this study is to obtain and analyze professional educator generated data and that either supports or disputes existing literature as demonstrated by my theoretical model concerning the relationship between principal leadership competencies and collective teacher efficacy.

In your capacity as a formally designated superintendent or principal in an Alberta public school system, you are invited to participate in this research study.

#### What Will I Be Asked to Do?

As a voluntary participant in the research, you will have the opportunity to participate in a focus group via Skype during the month of March. This discussion will centre on your professional experiences and opinions in regard to the relationship between principal leadership competencies and collective teacher efficacy. The discussion will be audio recorded and stored as a digital file. Some comments that you make will be recorded in written point form as well. All written and digital recordings will be used as study data.

Your inclusion in the focus group will take a total of about 90 minutes.

You may withdraw participation without consequence or explanation prior to the data analysis stage which will begin in April, 2015.

## What Type of Personal Information Will Be Collected?

Should you agree to participate in the study, your professional position, years of experience in your current role, and qualifications may be noted by the researcher. However, all study data will be reported in an anonymous format and no personally identifying information will be included in study reports.

There will be no remuneration or compensation for participating in this study.

I grant permission to be audio taped: Yes: \_\_\_ No: \_\_\_

#### Are There Risks or Benefits if I Participate?

There are no foreseeable risks or benefits related to participation in this study, other than the professional learning opportunities inherent in the research design. Professional risks are low but still present some level of risk as data collection is gathered via a focus group. Therefore, what you potentially share could be shared with others such as your supervisors or with other colleagues. Participants are asked to keep information confidential but this cannot be guaranteed.

#### What Happens to the Information I Provide?

Participation in this study is completely voluntary. Personal information collected on the demographic profile will only be accessible by the researcher, her supervisor and a professional transcriber. Once the focus group has been completed and transcribed, participants will have the opportunity to review the transcripts and, if they choose, made additions, corrections, or deletions to the record of comments they contributed. Findings emerging from this study will be synthesized and sent to you.

Following successful submission and defence of the dissertation relating to this study, the findings may be shared with the larger educational community through presentations, peer reviewed journals, or in book format. The data collection will remain confidential and be kept in a locked filing cabinet at all times, and will be destroyed at the completion of my degree. You may withdraw participation without consequence or explanation prior to the data analysis stage which will begin in April, 2015. If you choose to withdraw prior to April 1, 2015 then all personal information, interview transcripts will be destroyed and not used as a component of data analysis for the study. As this study involves participation in a focus group of three individuals, I anonymity cannot be guaranteed due to the collaborative nature of participation in a focus. I am unable to control where information is shared with others beyond the researcher in a group setting. However, participants will be reminded about the importance of anonymity and confidentiality at the beginning of the focus group and will be asked to sign a confidentiality agreement.

# **Signatures (Written Consent)**

Your signature on this form indicates that you 1) understand to your satisfaction the information provided to you about your participation in this research project, and 2) agree to participate as a research subject.

In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from this research project at any time up to the point of data analysis which will be April 1, 2015. All personal documentation and interview transcripts will be destroyed and not used as part of the data analysis prior to April, 1, 2015. You should feel free to ask for clarification or new information throughout your participation.

Participant's Name: (please print)		
Participant's Signature:	Date:	
Researcher's Name: Zoe Serediuk		
Researcher's Signature:	Date:	

# **Questions/Concerns**

If you have any further questions or want clarification regarding this research and/or your participation, please contact:

Ms. Zoe Serediuk, (Principal Researcher) Department/Faculty of Education

[telephone number] or email: [email address]

Dr. Kent Donlevy (Supervisor), Graduate Programs, Faculty of Education,

[telephone number] or email: [email address]

If you have any concerns about the way you've been treated as a participant, please contact the Senior Ethics Resource Officer, Research /Services Office, University of Calgary at [telephone number]; email: [email address].

A copy of this consent form has been given to you to keep for your records and reference.

The investigator has kept a copy of the consent form.

# Appendix C: Protocol for Focus Group Discussion

#### Interview Protocol

1. What, if any, is the relationship, if any, between the competencies of principals and collective teacher efficacy as experienced by a select group principals?

Research questions	Interview questions
2. If There Is A Relationship Between The Competencies Of Principals And Collective Teacher Efficacy, What Are The Specific Leadership Competencies That, In Your Experience And Opinion, Have A Positive Correlation With Collective Teacher Efficacy?	How Would You Define Principal Leadership Competencies?
	Can You Give Me Some Examples Of How These Leadership Competencies May Play Out In A School?
	How Would You Define Collective Teacher Efficacy?
	Are There Some Particular Competencies Of Principals/Leaders That You Believe Would Positively Impact Collective Teacher Efficacy If So, Please Explain?
3. What are the key indicators of collective teacher efficacy?	What do you feel are indicators of collective teacher efficacy? Please provide some examples of these indicators.
4. Does this study support or differ from the synthesis of current research?	In your building what do you do that you believe impacts collective teacher efficacy.
	How do you know? What is your evidence?