

**COLLECTIVE EFFICACY AS IDENTIFIED BY TEACHERS AT HERITAGE**

**MIDDLE SCHOOL, EAST CENTRAL INDEPENDENT**

**SCHOOL DISTRICT, SAN ANTONIO, TEXAS**

A Record of Study

by

LUISA MARIA NAUMANN

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

May 2008

Major Subject: Educational Administration

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Approved by:

Co-Chairs of Committee, Virginia Collier  
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## ABSTRACT

Collective Efficacy as Identified by Teachers at Heritage Middle School,  
East Central Independent School District, San Antonio, Texas. (May 2008)

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The primary purpose of this study was to investigate the collective efficacy of teachers at Heritage Middle School in the East Central Independent School District in San Antonio, Texas, and to determine the relationship between selected demographic variables and the teachers' collective efficacy. The variables included teachers' ethnicity, gender, years of teaching at Heritage Middle School in the East Central Independent School District, total years of teaching, and highest degree earned. The researcher used the collective efficacy survey short form instrument developed by Roger D. Goddard to assess the campus's collective efficacy survey. Answers to the following questions were sought in this study.

The first question studied was, "What is the perceived collective efficacy as reported by teachers at Heritage Middle School, East Central Independent School District in San Antonio, Texas?" The results of the study indicated that the teachers who participated in the study all mildly agreed that they had the ability to make all the students at Heritage Middle School successful.

The second question studied was, “What is the relationship between selected demographic variables and the perceptions of the teachers regarding collective efficacy at Heritage Middle School, East Central Independent School District in San Antonio, Texas?” The results indicated that there were no statistically significant differences between the variables of gender, ethnicity, length of time in the classroom, length of time in the district, and length of time in the profession and the teachers’ collective efficacy.

During the 10 years that the Heritage Middle School has been in operation, there have been six different principals resulting in six different approaches to the management of the school. No research was found that explains how a school’s collective efficacy is affected when there are numerous administrative changes. Further research that examines the relationship between stability of leadership and collective efficacy of teachers is needed.

## DEDICATION

This study is dedicated to:

- My husband, Milton, who worked in Baghdad during the four years that I labored on my doctorate – even at a distance, he was always at my side.
- My elder son, Beto, who I know is proud of me even though he keeps it to himself and to my daughter-in-law, Michelle, who is a loving wife and mother.
- My younger son, David, who has always had words of encouragement and would not let me quit when I was at my wits end.
- My sister, Diana, who is my best friend and even at my age of 63, I'm still her little sister "Manita" who she protects, defends and guides.
- My brother-in law, Julian, who has always been there for me with words of encouragement – he has been a great role model.
- My grandson, Tony, who is the love of my life, I want him to be able to say that his Nona got her doctorate and that he will one day do the same.
- My parents, Ruperto and Guadalupe Sanchez, who worked from morning to night to give my sister and me the opportunities that they never had.
- My grandmother, "Madam," who taught me to love music, especially opera.
- And most of all to my "old maid aunt," Queta, who never once in her life was disappointed in me.

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- Dr. Phil Linerode, who provided enormous help with the statistical analysis.
- Dr. Virginia Collier, who was a remarkable chair for my committee. No matter how many times I called her for advice, she was always supportive and extremely helpful, especially in editing my work. I owe her a great debt of gratitude for her time, patience, and expertise.
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## CHAPTER I

### INTRODUCTION

Around 1980, President Reagan ordered a national commission to study our educational system. As a result, *A Nation at Risk* stated that the American education system had declined to a “rising tide of mediocrity.” The findings gave impetus for the need to change. Today, schools are still in the process of change and are facing pressures from both federal and state levels; namely, the No Child Left Behind Act (NCLB) of 2001 and the Texas Assessment of Knowledge and Skills (TAKS). Both focus on reading, mathematics, writing, science, and social studies with the intent that all students will perform at grade level and that schools are to be accountable for the students’ progress (Texas Education Agency [TEA], 2003). This past decade has engulfed the educational system with new technology, studies on brain research, a focus on diversity, learning style, and the task of incorporating all this to ensure students meet the increasingly firm standards of accountability.

But where must change occur that would incorporate NCLB, TAKS, accountability, and the need for higher student achievement? It basically filters down to the teacher and what happens in the classroom (Hoy, Sweetland, & Smith, 2002).

So how does a teacher affect student achievement? Hoy et al. (2002) have concluded that collective efficacy is “more important in explaining school achievement than SES” (p. 89). Researchers have established a strong connection between teachers’

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The style for this record of study follows that of the *Human Resource Development Quarterly*.

behavior and teachers' efficacy that promote student achievement (Woolfolk & Hoy, 1990).

There are basically two types of efficacy: individual and collective. Both are distinct but theoretically connected (Goddard & Goddard, 2001). In the education arena, there exists the self-efficacy of students, the sense of efficacy of teachers, and the collective efficacy of the school (Woolfolk & Hoy, 1990). Collective efficacy is a relatively new theory when compared to the research done in individual efficacy; however, researchers have indicated that collective efficacy is also correlated to student achievement (Bandura, 1993; Goddard, Hoy, & Hoy, 2000). Just as individual teacher efficacy can to a degree explain the effect of teachers on student achievement, collective efficacy explains it from an organizational viewpoint (Bandura, 1993).

So what is collective efficacy? Goddard (2003) defines it as "the perception of teachers in a specific school that the faculty as a whole can execute courses of action required to positively affect student achievement" (p. 184). Goddard, Hoy, and Hoy (2004) state that collective efficacy "represents a group's shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainment" (p. 4). Bandura (2000) states:

People's shared beliefs in their collective power to produce desired results are a key ingredient of collective agency...therefore; perceived collective efficacy is not simply the sum of the efficacy beliefs of individual members. Rather, it is an emergent group-level property. (p. 76)

Goddard et al. (2004) propose that the relationship between collective efficacy and student achievement depends on "the reciprocal relationships among collective

efficacy, teachers' personal sense of efficacy, teachers' professional practice, and teachers' influence over instructionally relevant school decisions" (p. 3). The importance of collective efficacy has as its basis the shared beliefs of the faculty and administration that their concerted efforts as a unit will positively impact students (Hoy & Miskel, 2005).

Collective efficacy exists as the collection and communion of individuals' self-efficacy. The concept of self-efficacy is the focal point of Bandura's social cognitive theory. This theory stresses the significance of observing and modeling the behaviors, attitudes, and emotional reactions of others. Bandura (1997) states:

Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling; from observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action. (p. 22)

Hoy et al. (2002) suggests the need for further research on how teachers and administrators can promote collective efficacy. As with all new theories, Bandura (1997) recognizes that challenges such as school policy, school culture, as well as student achievement and teacher success need to be present in order to develop a school efficacy that is effective.

### **Statement of the Problem**

Goddard and Goddard (2001) refer to collective efficacy as "the perceptions of teachers in a school that the faculty as a whole can organize and execute the courses of action required to have a positive effect on students" (pp. 3-4). Collective efficacy is the shared perception or predictor of the level of student success. Teachers may ask



themselves by what standard do they discover, compare, and align themselves to determine if their faculty possesses a collective efficacy persona or culture (Mawhinney, Haas, & Wood, 2005).

Research conducted by Hartford County Public Schools on a survey of 2,448 teachers in 49 schools in the district found that teachers' perceptions of collective efficacy were connected to school level. "In general, elementary teachers perceived higher collective efficacy and a more positive school culture for professional learning communities to develop than did middle and high school teachers" (Mawhinney et al., 2005, p. 2).

Results of this survey appear closely related to results found in the AEIS report on East Central Independent School District. In the 2005-2006 school year, the district consisted of one high and one middle school (Heritage Middle School), two intermediate and five elementary schools. All five elementary schools were recognized, the two intermediate schools were academically acceptable as were the middle school and high school.

Little evidence of research on the impact of demographic variables on collective efficacy in the middle schools was found. Given the accountability demands of NCLB in the State of Texas and the importance of collective efficacy on student achievement as reflected in the literature review, research on the relationship between collective efficacy and selected teacher demographics is needed at the middle school level.

### **Purpose of the Study**

The purpose of this study was to investigate the perceived collective efficacy as reported by teachers at Heritage Middle School in the East Central Independent School District and determine the relationship between selected demographic variables and the teachers' collective efficacy. The variables included the teachers' ethnicity, gender, years of teaching at Heritage Middle School and in the East Central Independent District, total years of teaching, and highest degree earned.

### **Research Questions**

Answers to the following questions were sought in this study.

1. What is the collective efficacy as reported by teachers at Heritage Middle School, East Central Independent School District in San Antonio, Texas?
2. What is the relationship between selected demographic variables and the perceptions of teachers regarding collective efficacy at Heritage Middle School, East Central Independent School District in San Antonio, Texas?

### **Operational Definitions**

The findings of this study are to be reviewed within the context of the following definitions of operational terminology:

*Collective Efficacy*: The perception of teachers in a specific middle school that the faculty as a whole can implement courses of action needed to positively affect student achievement as determined by the collective efficacy short form assessment instrument developed by Roger D. Goddard.

*East Central Independent School District:* Located in the southeastern part of San Antonio, Texas. It consists of one high school, two middle schools, and seven elementary schools with a total population of approximately 8,000 students. Although considered rural, the district lies within the boundaries of the city of San Antonio, Texas.

*Educational Level:* The level of education that a teacher has attained at an accredited college or university: bachelors, masters, or doctorate.

*Ethnicity:* Ethnic affiliation of teachers at Heritage Middle School: Hispanic, African-American, White, Native American, and Asian/Pacific Islander.

*Experience in District:* The number of years a teacher has taught as a teacher in the East Central Independent School District, San Antonio, Texas.

*Experience in Education:* The total number of years a teacher has worked as a teacher in the field of education.

*Experience on Campus:* The number of years a teacher has taught as a teacher at Heritage Middle School, East Central Independent School District, San Antonio, Texas.

*Gender:* The sex of the individual teacher, either female or male.

*Heritage Middle School:* One of two middle schools located in East Central Independent School District. It consists of grades 6 through 8 and has a school population of approximately 1,200 students and 72 teachers. Students are comprised of 10.6% African American, 50.8% Hispanic, and 38% White. Of the student population, 56.9% are economically disadvantaged. Teaching staff consists of 20 males and 51 females with 28.8% having over 20 years of teaching experience.

*Self-Efficacy*: The belief that one has the capability of performing in a certain manner or attaining certain goals. It is the power to produce that effect.

### **Assumptions**

The following assumptions were applied to this research:

1. The interpretation of the data collected accurately reflected that for which it was intended.
2. The methodology proposed and described here offered a logical and appropriate design for this particular research project.
3. The researcher was impartial in collecting and analyzing the questionnaire data.

### **Limitations**

The following limitations were applied to this research:

1. The research was limited to the campus of Heritage Middle School within the East Central Independent School District.
2. This research was limited to the data gathered from the literature review and the survey instrument.
3. It was impossible to identify all the variables that affect collective efficacy; thus, the researcher focused on those variables deemed important by the researcher.

## **Methodology**

### *Population*

The population of this study was 65 certified teachers at Heritage Middle School in the East Central Independent School District (ECISD) that is located in the southeastern area of San Antonio, Texas. The teaching staff was comprised of 13.2% African-American, 26.0% Hispanic, and 60.8% White. The majority of the teaching staff was 46.1% White female and 14.7% White male; 22.7% Hispanic female, 22.7% Hispanic male; 7.7% African American female and 5.5% African American male. The category of years of experience was made up of teachers with no experience, 30.9%; 1 to 5 years, 30.9%; 6 to 10 years, 12.6%; 11 to 20 years, 25.6%; and teachers with over 20 years experience, 22.6%. The average year of experience was 8.3%.

The general student population for the 2006-2007 school year was approximately 946 students. Heritage Middle School had a majority Hispanic population with over half of the students economically disadvantaged and at-risk. Heritage Middle School was not a Title I School.

### *Instrumentation*

The researcher used the short form instrument as developed by Goddard to assess the campus's collective efficacy. The short form consisted of 12 items that had a high internal consistency ( $\alpha = 0.94$ ) (Goddard (2002b)). The purpose of such research was to collect anonymous and unobservable information regarding the collective efficacy as reported by teachers at Heritage Middle School. Quantitative data were collected using basic questionnaire techniques outlined in *Educational Research: An Introduction* (Gall,

Gall, & Borg, 2003). Demographic variables were added to the questionnaire. Results of the study were reported using numerical and graphic techniques to report descriptive statistics. Tables, charts and graphs were used to report findings. The entire teaching staff was given the questionnaire and a reliability analysis was carried out upon its completion. A letter was sent to all participants explaining the purpose of the study and assuring them of confidentiality.

#### *Procedures*

Data concerning the collective efficacy of teachers at Heritage Middle School were acquired from teachers' responses on the survey. After having gained permission by the principal at Heritage Middle School, the sealed surveys were distributed and gathered from each teacher's mail box located in the teachers' workroom.

#### *Data Analysis*

The survey data were analyzed through the use of appropriate techniques as identified by Gall et al. (2003). The data collected were analyzed with a statistical analysis software program on a personal computer. Each item on the survey was analyzed independently or responses were summed to create a score for grouped items using SPSS for Windows-Version 12.0 database. The researcher used mean scores, standard deviations, frequencies, correlations, and analysis of variance (ANOVA) as part of the descriptive and inferential statistical analysis. Multiple displays such as charts and tables were used to present findings.

### **Significance of the Study**

The education of children has steadily evolved from teaching the three R's to encompassing the use of technology in the classroom, studies on brain research, focus on diversity, learning styles, and a global perspective. Standards are monitored and schools are held more accountable than at any other time in history. Student achievement in the basic skills is at the focus of the state's and federal government's endeavors.

Collective efficacy has shown to be a positive force in the improvement of student achievement. The findings of this study should assist administrators in providing support and staff development for teachers enabling faculty to establish and/or strengthen existing collective efficacy. The researcher will provide the results of the survey to the Heritage Middle School faculty. As a result, the faculty will be able to see how they stand on collective efficacy, related to the faculty as a body, and what they can do to strengthen their collective efficacy as well as further student achievement.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

#### **Introduction**

In this record of study, the collective efficacy as identified by teachers at Heritage Middle School, East Central Independent School District, San Antonio, Texas, was examined. This chapter summarizes information gathered through a review of literature on the perspective of collective efficacy and its relationship with teachers' ethnicity, gender, years of experience, and highest degree obtained. In addition, research on self-efficacy and teacher efficacy was examined as an introduction to collective efficacy.

#### **Definition of Self-Efficacy**

*Albert Bandura*

Albert Bandura (1994), a leading proponent of self-beliefs, defined perceived self-efficacy as "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives. Self-efficacy beliefs determine how people, feel, think, motivate themselves and behave" (p. 1). There are two significant aspects of this definition. First, self-efficacy is a belief about a person's perceived capability that may match one's true ability in a particular situation. This is called efficacy expectations. Second, is the notion that people use their efficacy judgments in reference to some goal or outcome expectancy (Pajares, 1996). These two theories are discussed further in the chapter.

Efficacy beliefs influence a person's actions, efforts, and determination when faced with obstacles. These beliefs can also affect whether people think in an erratic or



strategic manner, what direction they follow, their goals and commitment to those goals, the outcomes they wish to produce, and whether they are optimistic or pessimistic. Statistical analyses derived from other studies have verified the influential role of perceived self-efficacy in human adaptation and change (Bandura, 2000).

Bandura has determined that people with poor self-esteem tend to question their capabilities and avoid tasks that they perceive as personal threats (Bandura, 1994). Challenges are associated with adverse outcomes and, therefore, people's attempts are half-hearted. They lose confidence and tend to quickly give up. Stress and depression set in and the cycle continues. Even though self-esteem and efficacy beliefs are conceptually independent, they do affect one another. Generally, if a person has poor self-esteem, their efficacy beliefs follow suit (Bandura, 1994). Bandura (1986) further asserts that a person's actions and motivation are affected by both efficacy expectations and outcome expectancy.

### *Efficacy Expectations*

According to Bandura (1986) "efficacy expectations" is an individual's conviction that he or she has the capability to initiate a given task. Bandura elaborates by saying:

Perceived self-efficacy is defined as people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances. It is concerned not with the skills one has, but with judgments of what one can do with whatever skills one possesses. (p. 391)

### *Outcome Expectations*

Outcome expectations are an individual's guess of what the consequences might be at the estimated level of competence (Bandura, 1986). Goddard (2003) writes "Outcome expectations, on the other hand, reflect a person's belief that given attainments (i.e., certain ends) will lead to particular outcomes" (p. 187). Bandura (1986) expanded that concept by suggesting that outcome expectations "are judgments about the probable consequences of specific behaviors in a particular situation. An outcome is the consequence of an act, not the act itself" (p. 391). In other words, an individual or group needs to have a goal; without a focus, effective teaching strategies although well intentioned by nature would have little impact on student improvement (Goddard, 2003).

Woolfolk and Hoy (1990) illustrate the difference between efficacy expectation and outcome expectations. They explain that the question of whether teachers can override the effects of an unsympathetic student environment is an efficacy expectation and not an outcome expectation because "it involves the potential to perform" (p. 82). In this example, the efficacy expectation concerns itself with the beliefs of teachers in general, while the outcome expectation addresses the individual teacher.

Unlike Bandura, Ashton and Webb (1982) state that outcome and efficacy expectations can operate at an independent level. They propose an example of teachers who may believe that teaching is a significant factor in student learning, but that they are personally unable to affect their own students. Simultaneously, other teachers may accept that teaching in general has little influence on students, but that they are exceptions to the rule.

### **Sources of Efficacy-Shaping Information**

Goddard and Skrla (2006) write that the sources of efficacy information suggested by Bandura operate at both the individual and collective levels. But the question remains of how efficacy beliefs are formed. Bandura (1977, 1986) asserts that one's efficacy beliefs are formed through "cognitive processes...and through reflective thought" (Bandura, 1997, p. 79). These processes evaluate and incorporate the following four sources of efficacy-shaping information: (a) mastery experience, (b) vicarious experience, (c) social persuasion, and (d) affective states.

#### *Mastery Experience*

Bandura (1986) asserts that of the four sources, mastery experience is considered the most powerful. Efficacy beliefs are raised when people's goals have been attained. This notion contributes to the idea that future endeavors will follow suit, thus further raising efficacy beliefs. On the other hand, when people perceive that their endeavors and performance have not been met, their efficacy beliefs tend to lower, and therefore, any future attempts at meeting expectation will be half-hearted.

In a recent study, Goddard (2001) found that the reading achievement of different schools confirmed that the mastery experience is a significant positive predictor of differences in schools' collective efficacy perceptions rather than the schools' demographics and SES that are so commonly accepted as powerful predictors. With this in mind, it is important to recognize the importance of mastery experience in schools.

Teachers as a group experience successes and failures. Past school successes build teachers' beliefs in the capability of the faculty, whereas failures tend to undermine

a sense of collective efficacy. If success is frequent and too easy, however, failure is likely to produce discouragement. However, collective efficacy possesses a sense of resiliency that can be attributed to a school's experience in overcoming difficulties through past experience and persistent effort. In other words, a school's collective efficacy can bounce back (Goddard et al., 2000).

### *Vicarious Experience*

Vicarious experience is efficacy that is increased by examining the particular skills of successful models that are practiced by someone else. When the particular model performs correctly, the efficacy of the observer is increased. Likewise, if the model does not perform adequately, the efficacy of the observer tends to diminish. This holds true in individual efficacy as well as collective efficacy as illustrated in this statement (Goddard et al., 2004).

Perceived collective efficacy may also be enhanced by observing successful organizations, especially those that attain similar goals in the face of familiar opportunities and constraints. Organizations may also learn from somewhat dissimilar counterparts provided they have attained highly valued outcomes (p. 5).

An example of vicarious experience is when schools copy a successful model or program to achieve their campus goals. Dutton and Freedman (1985) remarked that borrowing from successful organizations is just as valued as firsthand learning. In the classroom setting, teachers can visit high-performing schools and observe teachers who have successfully met the standards implemented by the state and whose students have a record of success (Skrla, 2002). Argote, Beckman, and Epple (1990) and Levitt and March (1988), state that vicarious experiences suggest that social cognitive theory may

expand to the group level to justify that organizations do find out vicariously about their capabilities.

### *Social Persuasion*

According to Bandura (1986), social persuasion is the third source of efficacy information. It entails feedback from colleagues, supervisors, administrative staff, workshops, group sessions, students, faculty meetings, community, and other gatherings where ideas are exchanged in relation to teachers influencing students toward goal achievement. The value of social persuasion depends on the reliability, trustworthiness and know-how of the persuader (Bandura, 1986). Social persuasion works best in influencing collective efficacy beliefs when joined with models of success and mastery experience. This coupling enhances a faculty's conviction of goal attainment (Goddard, 2003; Goddard & Skrla, 2006).

As people socialize at the group level, their independent levels of efficacy create a collective or organizational efficacy. New teachers who secure a position at a school whose academic press inspires a positive collective efficacy will be socialized by the organization. They will learn what is expected; that is, what it takes to excel and how to handle any setbacks (Woolfolk & Hoy, 1990).

### *Affective States*

Affective states are the fourth and last source of efficacy beliefs. Affective states deals with the physical and emotional states of people. According to Bandura (1993), people learn to accurately interpret their own physical and emotional states. Strong emotions tend to lower performance for difficult tasks just as they tend to raise

performance for simple, repetitive tasks. People permit their emotional state to affect their judgment of self-efficacy. Just as people react to stress, so do organizations. If people are attuned to the source of their psychological arousal, this awareness can affect performance. Performance may be increased or decreased depending on the extent of the arousal. Affective states exert considerable influence on how individuals and organizations interpret and react to the numerous challenges they encounter (Goddard et al., 2004).

### **Definition of Teacher Efficacy**

The term “teacher efficacy” first identified in research conducted by Barfield and Burlingame (1974) as “a personality trait that enables one to deal effectively with the world” (p. 10). In following years, other definitions have evolved:

- Armor et al. (1976) defined teacher efficacy as “the extent to which the teacher believes he or she has the capacity to produce an effect on the learning of students” (p. 23).
- Ashton and Webb (1986) defined teacher efficacy as the “teachers’ situation-specific expectation that they can help students learn” (p. 3).
- Guskey and Passaro (1994) suggest that teacher efficacy is a “teacher’s belief or conviction that they can influence how well students learn, even those considered difficult or unmotivated” (p. 2).
- Tschannen-Moran, Hoy and Hoy (1998) defined teacher efficacy as the degree that teachers could “control the reinforcement of their actions, that is, whether control reinforcement lay within themselves or in the environment” (p. 202).

In general terms, these definitions share some commonality, such as teacher beliefs, student learning, and individual self-efficacy with the end result being student achievement that will be reviewed later in the chapter. Goddard et al. (2004) prefer the

term “teachers’ sense of efficacy” rather than “teacher efficacy” since the reader may interpret teacher efficacy as teacher effectiveness which it is not (p. 4) For this chapter, the researcher used the term teacher efficacy because the majority of the literature uses this term.

### **Teacher Efficacy: A Historical Overview**

#### *The Rand Study*

In 1976, the Rand Corporation initiated the Change Agent Study that examined the success of various reading programs and interventions using the work of Rotter (1966) as a theoretical base. Part of the study included a teacher questionnaire that asked two questions to indicate their level of agreement.

1. When it comes right down to it, a teacher really can’t do much because most student’s motivation and performance depends on his or her home environment.
2. If I really try hard, I can get through to even the most difficult or unmotivated students.

The sum of these two statements gave birth to the concept of teacher efficacy that professed to reveal the extent that teachers believed that the results of their teaching in regard to student motivation and learning were internally controlled. In other words, what occurred in the classroom was a result of teachers’ doing and capabilities and how teachers viewed themselves and their beliefs concerning their abilities were a significant factor in student learning.

Although the Rand Corporation relied on Rotter's internal and external control of reinforcement, it was not until Bandura's social cognitive theory (1986, 1997) and his conceptualization of self-efficacy (1997) that a better defined concept of teacher efficacy emerged.

### *Bandura's Social Cognitive Theory*

Bandura developed social cognitive theory to explain that depending on the strength of people's efficacy beliefs, or on how they control their lives, through their agentive actions is a powerful influence (Goddard & Goddard, 2001). Bandura states that people are both the doers and the receivers. How much control is reflective to the degree of a teacher's self-efficacy. Social cognitive theory asserts that when people are deliberately engaged in their own development, they are the producers of their actions.

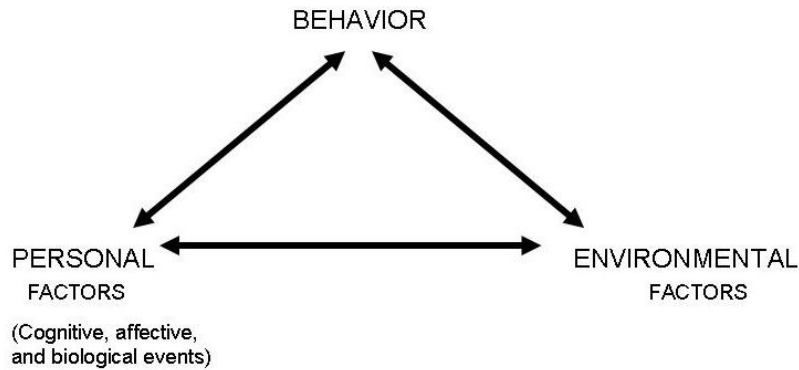
Pajares (2002) writes in regard to Bandura's social cognitive theory:

People are viewed as self-organizing, proactive, self-reflecting and self-regulating rather than as reactive organisms shaped and shepherded by environmental forces or driven by concealed inner pulses. Human functioning is viewed as the product of a dynamic interplay of personal, behavioral, and environmental influences. How people interpret the results of their own behavior informs and alters their environments and the personal factors they possess which, in turn, inform and alter subsequent behavior. (p. 1)

This interplay is the basis of Bandura's (1986) idea of reciprocal determinism that explains behavior in terms of a triadic, energetic, and reciprocal interaction of the environment, personal factors, and behavior (Figure 1). Interaction between all three factors will vary based on the person, a particular behavior, and the situation in which the behavior occurs (Huit, 2006).



*Figure 1.* Interplay of reciprocal determinism explaining behavior in terms of triadic, energetic, and reciprocal interaction of the environment, personal factors, and behavior.



Bandura (1986) acknowledges the possibility of a person’s behavior being conditioned through the use of consequences; in turn, a person’s behavior can also alter the environment. The same can be said of the relationship between personal factors and behavior or the environment. Each can impact and be impacted by the other and “what people think, believe, and feel affects how they behave” (Bandura, 1986, p. 25).

Teachers who are aware of social cognitive theory can help students’ emotional issues by helping students regard themselves in a more positive light (personal factors), improve the students’ academic skills and how they attend to their daily lives (behavior), and alter the classroom structure to encourage student success (environment) (Pajares, 2002).

#### *Human and Organizational Agency*

The choices one makes are an essential assumption of Bandura’s social cognitive theory. The strength of an individual or organization’s efficacy beliefs affects the choices

that are made. How humans function is seen as the result of the interplay of personal, behavioral, and environmental influences. People have self-beliefs that allow them to have a measure of control over their thoughts, feelings, and actions (Pajares, 2002). This agency (control) is related to the extent that people have control over their own thoughts and decisions. Decisions that teachers make are significantly related to their sense of efficacy as a teacher.

Organizational agency is the manner in which a school extends self-efficacy theory to the collective level by applying the assumptions of social cognitive theory. One of the fundamentals of social cognitive theory is its basis on human agency and when applied to teaching, organizational agency is the result from the agentive actions of teachers in the pursuit of desired goals. For example, teachers as an organization can generate the belief that they can raise students' scores in mathematics (Goddard et al., 2004). Bandura also adds that collective efficacy is an "emergent group level property" not a collection of efficacy beliefs (Bandura, 2000). Just as individual control is exercised in self-efficacy, a group's sense of efficacy that is based on individual efficacy can lead to a common goal (Hoy et al., 2002).

#### *Five Assumptions of Social Cognitive Theory*

Goddard (2003) writes that not only do teachers have self-efficacy beliefs but also beliefs about the shared capability of a school faculty. The social cognitive theory of Bandura stresses the importance of observing, modeling behaviors, emotional responses, and attitudes of others. Bandura (1997) states:

Learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behavior is learned observationally through modeling: from observing others, one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action. (p. 22)

Bandura's (1986) social cognitive theory is rooted in five basic assumptions:

- People can learn by observing others.
- Learning is an integral procedure that may or may not change behavior.
- Behavior is guided toward specific goals.
- Behavior eventually becomes self-controlled. This self-controlled behavior is initiated, monitored, and evaluated in reference to achieving that person's own goals.
- People's beliefs influence the effects of reinforcers. Prior experience with reinforcement may sway behavior more than current reinforcers.

Social cognitive theory (Bandura, 1997) is related to human agency; that is, the manner in which people use some level of control over their own lives; their beliefs in their abilities to "organize and execute a course of action required to produce a given attainment" (p. 3). People generally aim for challenging, attainable, and rewarding goals.

In an educational setting, social cognitive theory can predict that what teachers do in the classroom is affected by their sense of efficacy for teaching. The greater the efficacy, the more likely it is that the teacher will be apt to triumph over problems and continue when faced with failure. Given that people are social beings, the theory of human agency can be expanded to encompass others' beliefs to pursue a common desired result (Goddard et al., 2004). This common desired result, this "emergent group

level property” is what is known as collective efficacy. Teacher efficacy, collective efficacy, and a school’s academic press, which is reviewed later in the chapter, have been proven by research conducted during the past 20 years to be good predictors of student achievement (Bandura, 1993, 1997; Goddard et al., 2000).

### **Teacher/Collective Efficacy and Student Achievement**

Research has determined that individual efficacy and collective efficacy are related to student achievement (Bandura, 1993; Goddard et al., 2000). Gibson and Dembo (1984) suggest that teacher efficacy “may influence certain patterns of behavior known to influence achievement gains” (p. 579). Stated differently, a teacher’s behavior may intervene between what their efficacy beliefs are and their student’s achievement.

Ross (1994) in a mega-analysis of 88 teacher efficacy studies identified six ways that a teacher’s efficacy beliefs affected their behavior and, in turn, student achievement. Teachers with higher levels of efficacy are more apt to:

- Acquire and implement new approaches and strategies for teaching.
- Persevere when the going gets tough.
- Establish goals that can be reached.
- Give special assistance to low-achieving students.
- Use a management system that encourages student autonomy.
- Develop students’ self-image that they are academically capable.

Ashton and Webb (1986) noted that efficacious teachers tend to assist students in discovery rather than provide answers. They write that “teachers with a high sense of efficacy seemed to employ a pattern of strategies that minimized negative affect,

promoted an expectation of achievement, and provided definition of the classroom situation characterized by warm interpersonal relationships and academic work” (p. 3).

Lee, Dedrick, and Smith (1991) also noted the relationship between teacher efficacy and teacher fulfillment.

Studies have recognized other variables that have shown a positive relationship between student achievement and teacher efficacy (Goddard, 2003) such as:

- A teacher’s trust in students and their parents in reference to math and reading achievement (Tschannen-Moran & Hoy, 2000).
- The use of student incentives (Bandura, 1993).
- Innovative classroom management strategies and teachers’ implementation of new strategies and methods (Goddard, 2002a).
- A positive school climate, teacher empowerment, and a lack of obstacles in providing valuable instruction (Goddard, 2000).
- Partially decentralizing administrative practices have shown to promote greater staff efficacy and gains in student achievement (Jacobs & Kritsonis, 2006).
- Incorporating activity-based learning (Enochs, Scharmann, & Riggs, 1995).
- A positive and open attitude to educational reform (Guskey, 1988)

Although these variables focus on teachers’ efficacy, they can be viewed in the collective sense as the collective efficacy of the faculty.

## **Collective Efficacy and Academic Press**

### *Collective Efficacy*

Collective efficacy refers to a group's perceptions "concerned with the performance capability of a social system as a whole" (Bandura, 1997, p. 469). Zaccaro, Blair, Peterson, and Zazanis (1995) define collective efficacy as "a sense of collective competence shared among individuals when allocating, coordinating, and integrating their resources in a successful concerted response to specific situational demands" (p. 309).

In reference to teachers, Goddard et al. (2000) state that collective efficacy refers to "the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (p. 480). Bandura (1993) writes that collective efficacy even has a greater impact on student achievement than socioeconomic status. Goddard et al. (2000) support Bandura's study that collective efficacy helps in improving student achievement and helps put in perspective the role that a student's socioeconomic status plays.

A school's perceived collective efficacy has been shown to be as a good predictor of student achievement and control for SES. In addition, the role of a school's academic press has also been shown to be a positive force in the same regard (Hoy et al., 2002).

### **Academic Press**

Many of the characteristics of effective schools are synonymous with academic press. Hoy et al. (2002) define academic press as:

the extent of which the school is driven by a quest for academic excellence. In such schools, teachers set high but achievable goals: they believe in the capability of their students to succeed; the school environment is orderly and serious; and students, teachers, and principals all respect academic achievement and work for success. Academic press is a collective characteristic of the school; it refers to the normative and behavioral environment of a school. (p. 79)

Academic press is the “collective characteristic of the school” (p. 79). It shapes the normative and behavioral environment of a school. If the majority of teachers are committed to strong academic performance, the environment will pressure teachers to escalate their efforts. Teachers who do not do so will be socially sanctioned. Hoy et al. (2002) write that:

the effect of an individual teacher’s academic press may be either attenuated or enhanced depending on the collective or school-level academic press. Thus, the academic press of a school may positively affect numerous teacher behaviors that tend to increase student achievement. (p. 81)

Not only does academic press have a strong social presence and influence on teacher behavior and student achievement, it also has a reciprocal causality whereby a strong academic press is positively associated with student achievement and, in turn, positive student achievement creates and/or reinforces the existing academic press (Hoy et al., 2002).

### **Fundamentals of Collective Efficacy**

Bandura was one of the first to research the positive effects of collective efficacy in schools in regard to student achievement. The results confirmed that just as teacher efficacy affects students’ achievement, so does the collective efficacy effort (Goddard, 2003).

In his definition of collective efficacy, Bandura (1986) also adds that “Perceived collective efficacy will influence what people choose to do as a group, how much effort they put into it, and their staying power when group efforts fail to produce results” (p. 449).

When perceived collective efficacy is high in schools, teachers believe they can connect with students and that they can meet opposing challenges. As a group, teachers are more persistent in their endeavors, are better planners and accept responsibility for student achievement. Temporary setbacks do not dissuade them. A faculty with a strong perceived collective efficacy enhances individual performance and also “influences the pattern of shared beliefs held by organizational members” (Goddard et al., 2000, p. 497).

Although this study concerns itself with collective efficacy in schools, it is worth noting that collective efficacy has also impacted other areas (Watson, Chemers, & Preiser, 2001) such as team sports (Spink, 1990), muscular endurance tasks (Hodges & Carron, 1992), undergraduates working on a model construction (Silver & Bufanio, 1996), and a brainstorming task (Prussia & Kinicki, 1996). Goddard et al. (2000) proposed two key elements in the development of collective teaching efficacy: analysis of the teaching task and assessment of teaching competence.

- Analysis of the teaching task is when teachers determine what is needed to perform teaching individually and at their school level. At the school level, teachers ask what is needed to perform successfully at their school. This includes “the abilities and motivations of students, the availability of instructional materials, the presence of community resources and constraints,

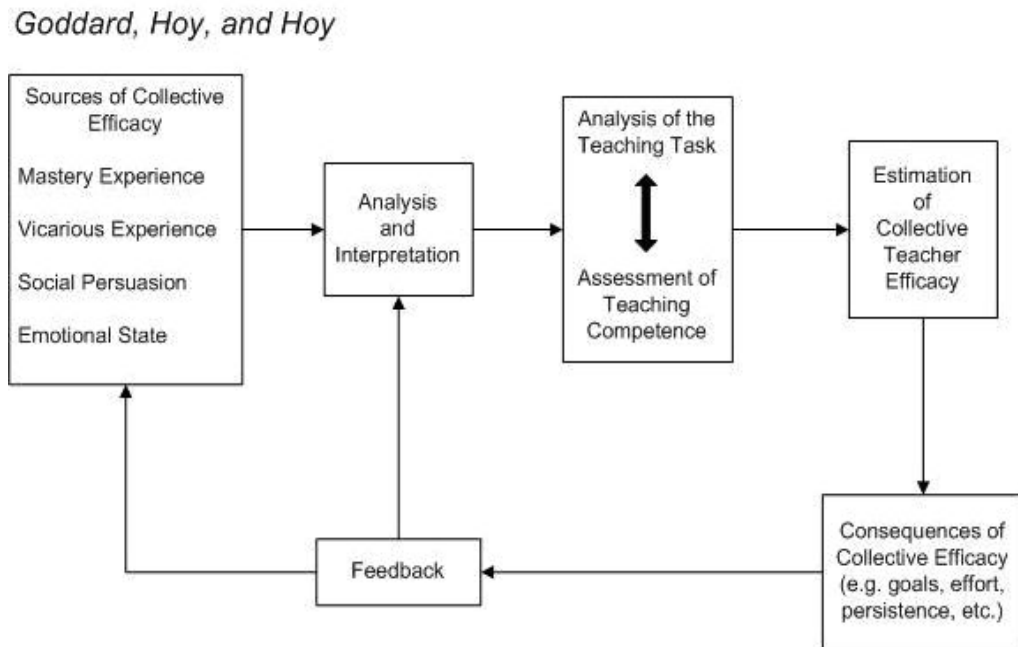


and the appropriateness of the school's physical facilities" (p. 485). In general, this means that teachers analyze what makes successful teaching in their school, what obstacles and drawbacks need to be addressed, and what resources are available.

- Assessment of teaching competence occurs when teachers assess the competency of the faculty in conjunction with their assessment. In this element, teachers make inferences concerning the competency of the faculty in terms of their teaching skills, methods, training, and experience in regard to the ability of the students in their school.

These elements take into play the four sources of efficacy belief: (a) mastery experience, (b) vicarious experience, (c) social persuasion and (d) affective state, which are key to the formation and continuation of a school's collective efficacy. The interaction of these two elements, the analysis of the teaching task and the assessment of teaching competence, occur simultaneously as the collective efficacy of teachers within the school emerges. Stated differently, teachers do what is required of them on an individual basis as well as what is required of the faculty to do their job. During this time, teachers are analyzing the teaching task both at the individual and collective level and making judgments of their teaching as well as making inferences about their colleagues' teaching capabilities. According to Goddard et al. (2000), all the cognitive processes that are occurring form the basis of teachers' perceptions about the collective efficacy of teachers within their school, i.e. the development and workings of collective teacher efficacy are summarized in Figure 2.

Figure 2. A simplified model of collective teacher efficacy.



### Collective Efficacy Beliefs in Schools

Collective efficacy in schools refers to:

the perceptions of teachers in a school that the faculty as a whole can organize and execute the courses of actions required to have a positive effect on students. To fully understand the impact of collective efficacy, one must recognize that schools and the beliefs that characterize their culture provide complex and normative environments for their students and faculty. (Goddard, 2003, p. 184)

Bandura (1997) states:

Analysis of the culture of organizations should be concerned not only with traditions of how things are done but also with shared beliefs about the organization's capabilities to innovate and perform effectively. Because of their diverse impact, an organization's beliefs about its efficacy to produce results are undoubtedly an important feature of its operative culture. (p. 476)

Using Bandura's social cognitive theory as a framework, teachers can improve students' emotional status, encourage their self-efficacy and habits of thinking, develop their academic skills and self-regulatory behavior, and in turn, modify the school and classroom structure and environmental factors that may demoralize student success (Pajares, 2002).

As a result of findings concerning teacher efficacy, recent research has focused on efficacy beliefs in schools. Not only do teachers have self-efficacy beliefs but also beliefs about the shared capability of a school faculty. This perception is the foundation for the emerging organizational property known as collective efficacy in schools (Goddard, 2003).

### **Relationship Between Teachers and Collective Efficacy**

Although theoretically-related, individual and collective efficacies are distinct. Bandura's (1997) social cognitive theory provides the theoretical structure underlying both teacher and collective efficacy and that both are related to student achievement (Bandura, 1993; Goddard et al., 2000).

Research confirms that teacher efficacy is a significant predictor of productive teaching practices such as organized classroom strategies and better organization. Teachers not only understand and practice self-efficacy but have ideas about the conjoint capability of a school faculty. This union of perceptions is the basis of what is called collective efficacy (Bandura, 1997; Goddard et al., 2000; Hoy et al., 2002).

Bandura (1986) also states that people generally do not live isolated lives, and the problems they face also generally reflect group problems that need the collective effort

for any resolution. The variables affecting collective efficacy include the social environments, group aspirations, and group cohesion, and they are reciprocally influenced by collective efficacy. The strength of groups lies partly in a group's sense of collective efficacy that they can resolve their problems by working together.

If the majority of teachers in a school believe that they as a faculty can make a difference in helping students succeed, the normative and behavioral environment will press teachers to continue their efforts. Those teachers who do not believe in the faculty effort will be socially sanctioned by the academic press of the school. Just as a school can have a collective mastery experience, so can individual teachers; therefore, mastery experience is able to work conjointly with both individual efficacy and collective efficacy (Goddard et al., 2004).

### **Efficacy Beliefs of Novice and Experienced Teachers**

#### *Novice Teachers*

The first year(s) of teaching have been described by Weinstein (as cited in Hoy & Spero, 2000) as the “unrealistic optimism” of novice teachers. There have been few studies on the development of efficacy beliefs among novice teachers. The little research that has been conducted indicates that first-year teachers' efficacy beliefs are related to stress and their commitment to teaching as well as their satisfaction with peer encouragement and teacher preparation. This drop could be attributed to the discovery that there is more to teaching than what is learned in the college textbooks.

Teachers with a high sense of teacher efficacy possess a higher level of competence, less stress, a more positive outlook, and plans to remain in the teaching

field. They attributed the quality of their preparation as higher than less efficacious teachers (Hoy & Spero, 2000).

The organization of the school's norms and values also affects the efficacy of the novice teacher. The first few years of teaching is a period of mixed messages. What is taught in the college classroom is usually at variance with the norms and values of experienced teachers. Evidence has shown that the value of input from staff development, in-services, etc., varies depending on the number of years a teacher has been in the field (Tschannen-Moran et al., 1998). Hoy and Spero (2000) have suggested that "longitudinal studies across teacher preparation program and the first several years in the field could begin to map the development of efficacy beliefs and could assess the impact of different teacher preparation programs and practices on efficacy" (p. 10).

Woolfolk and Hoy (1990) also found that prospective teachers tended to concern themselves with control in the classroom. Barfield and Burlingame (1974) found that teachers who possessed low self-efficacy tended to be custodial in their beliefs. Woolfolk and Hoy (1990) also determined that as teachers gained experience, they also became more custodial. Ashton and Webb (1986) suggest that low-efficacy teachers are focused on maintaining order and use strict, punitive management tactics. This goes along with the idea that having good control is equated with good teaching. On the other hand, high efficacy teachers encourage student autonomy, trust, and responsibility.

Watters and Ginns (as cited in Tschannen-Moran et al., 1998) remark that efficacy beliefs are more apt to change when novice teachers are exposed to vicarious learning experiences or social persuasion. Woolfolk and Hoy (1990) add that actual

student teaching has a positive effect on personal efficacy, yet during the first years of teaching, there is a decline in efficacy in the face of reality in the classroom. Bandura (1997) suggests that experience is one of the most significant influencers of efficacy. Novice teachers reported that student teaching gave them confidence, whereas, the lack of classroom experience during their early years made them less confident (Knobloch & Whittington, 2002).

Knobloch and Whittington's (2002) study of novice and student teachers in agricultural education reported 10 factors that influenced novice teachers' efficacy:

- Support and feedback
- Knowledge and education
- Teaching and student teaching experience
- Positive interactions with students
- Preparation, anticipation, and expectations
- Resources and facilities
- Personal background
- Intrinsic motivation
- Isolation, overwhelmed, and helplessness
- Other factors such as school procedures, paperwork, workload unrealistic expectations (p. 332).

The most predominant factor mentioned by novice teachers is the need for personal support and guidance from the administration. Teachers face student discipline problems, assigned duties such as cafeteria, hallway, bus, etc., classroom observations,

organizational challenges, and the feeling that they are not empowered; that they are at the bottom of the totem pole and that their voice is rarely heard. Conley (2007) suggests that they may need to refocus their efficacy beliefs and participate more actively in the collective efficacy of their school, which will give them a sense of belonging.

### *Experienced Teachers*

Efficacy beliefs among experienced teachers tend to be stable even after attending workshops and being exposed to new teaching methods (Ross, 1994). According to Ohmart (1992), experienced teachers who attended an “efficacy seminar” did initially increase their sense of efficacy; however, six weeks later, the more recent scores indicated that the initial increase had disappeared. Bandura (1997) noted that when experienced teachers acquire new skills, they may have to face the challenge of a lower estimate of their capabilities. They “hold their efficacy beliefs in a provisional status, testing their newly acquired knowledge and skills before raising their judgments on what they are able to do” (p. 83). Once the experienced teacher meets the challenge on how to address changes and realizes that student learning has improved, the teacher’s personal efficacy increases. Bandura (1993) writes:

Longevity in teaching represents the total number of years teaching, years teaching in the same school and same grade, and the number of different grade levels taught. Teaching longevity has a small, positive effect on school achievement; but, interestingly, it also seems to create in teachers a jaundiced view of their schools’ collective instructional efficacy. Staffs’ collective sense of efficacy that they can promote high levels of academic progress contributes significantly to their schools’ level of academic achievement. (p. 143)

Guskey (1986) maintains that change is gradual and difficult for teachers and it is common for teachers to fall back; however, with encouragement, support, and positive feedback, confidence is regained.

On the other hand, Guskey (1986) noted that teachers who attended workshops and seminars and who did not implement what they had learned had greater self-confidence than those who did. Those teachers who did practice what they learned underwent a decrease in self-confidence. Tschannen-Moran et al. (1998) state that “Teachers with a great deal of confidence may not feel the need for new strategies and so do not attempt to implement what they have learned” (p. 237).

Guskey (1984) remarks that in order to support and improve efficacy for experienced teachers that in addition to verbal persuasion in the form of workshops or in-service programs, professional development must be accompanied by the training of new skills that enhance performance and increase student learning. Otherwise, the impact of any training may be short-lived. Tschannen-Moran et al. (1998) suggest that teachers may need to be forewarned that new methods may lower their self-efficacy. Staff developments and encouragement are needed to assist teachers during this down time. It is when positive results in student achievement are evidenced, that higher efficacy beliefs will take hold.

Even though the increase of standards challenges teachers’ beliefs about their effectiveness, the personal efficacy of teachers improves as they develop new strategies, gain confidence, and see gains in student learning. There is, however, a drawback that



comes with increased staff development. It is possible that conversing with peers concerning a new method could have a negative impact (Tschannen-Moran et al., 1998).

Collective inefficacy may stall implementing new methods or programs as well (Tschannen-Moran et al., 1998). Poole, Okeafor, and Sloan (1989) write that efficacious teachers report that the less contact with peers in regard to “task-relevant interactions,” the more apt they were to use any newly adapted curriculum.

Ross (1998) outlines the following processes that occur when experienced teachers try to implement new methods. Initially, their efficacy beliefs are lowered; however, when the new methods indicate improvement, their efficacy beliefs rebound.

- High teacher efficacy might contribute to experimentation and new teaching ideas by influencing teachers’ goal setting.
- Teacher efficacy could decline as the new techniques disrupted the smoothness of existing practice.
- Efficacy beliefs might remain depressed even if there was early success if the perceived superiority of the new technique persuaded teachers of the inadequacy of their routine practice.
- Teacher efficacy might begin to increase as teachers integrate the new methods into their repertoire and begin to enjoy increased student performance consistently.
- Enhanced efficacy might motivate the search for new skill development opportunities.

Tschannen-Moran et al. (1998) report that little has been researched on how efficacy beliefs change during a teacher's lifetime in the classroom. A study conducted by Brown and Gibson (as cited in Tschannen-Moran et al., 1998) found that teachers in the later years of their careers had a lower sense of efficacy. Then again, Pigge and Marso (as cited in Tschannen-Moran et al., 1998) found no differences across career phases among exceptional teachers. Mawhinney et al. (2005) also discovered that teachers with years of experience are no more likely than novice teachers to view their contemporaries as effective. Furthermore, teachers who had taught at the same school for a length of time were no more likely than novice teachers to perceive their colleagues in the school as effective. An additional study conducted by Hoy and Woolfolk (1993) indicated that teachers with a higher level of education and more teaching experience had higher levels of both personal and general teaching efficacy.

### **Perceived Collective Efficacy: Teachers' Gender, Ethnicity, and Education**

#### *Teachers' Gender*

In a study conducted by Tschannen-Moran and Hoy (in press), one outcome indicated that teachers' race and gender were not systematically related to either novice or experienced teachers' self-efficacy beliefs. Knobloch and Whittington (2002) state that gender has also been studied as a predictor of teacher efficacy. Although, female teachers have been typically more efficacious than male teachers, this may be because the teaching community is seen as predominately female (Ross, 1994). Research studies have also found significant differences between female and male teachers in regard to levels of job satisfaction and security, stress, and confidence (Vaughan, 2005). Ma and

MacMillan (1999) also established that gender was found to be an important predictor of job satisfaction. In their study, females were more positive about their jobs than males. Mawhinney et al. (2005) in their study of grade levels and collective efficacy also discovered a correlation between gender and collective efficacy that was small but significant. They found that females had a higher collective efficacy than male teachers. A study by Brimblecombe, Ormston, and Show (1996) reported that prior, during, and after classroom inspections, female teachers worried more and voiced less confidence than their male counterparts. On the other hand, Goddard and Skrla (2006) in their study of school social composition on teachers' collective efficacy beliefs found no statistical significance between male and female teachers in regard to the strength of collective efficacy beliefs.

#### *Teachers' Ethnicity*

Goddard and Skrla (2006) found in their research of urban schools in the southwestern United States that both Hispanic and African American teachers had higher perceived collective efficacy than their mostly White teacher colleagues. In addition, teachers with more than 10 years of teaching experience had slightly higher perceived collective efficacy than those less experienced. Furthermore, there was little significance in the strength of the perceived collective efficacy of female teachers and their male counterparts. It was also determined that the increase of the Hispanic teacher population in a school was connected with growing levels of perceived collective efficacy. The possible reasons for this increase could be the cultural relationship between the Hispanic

teachers and Hispanic students, the possible ability of Hispanic teachers to speak Spanish, or that Hispanic teachers are in greater demand in already efficacious schools.

#### *Teachers' Level of Education*

Hoy and Woolfolk (1993) found that teachers with a graduate degree tended to have a higher level of teacher efficacy than those who did not. Ross, Cousins, and Gadalla (1996) added that the rationale was that a graduate program would increase teachers' awareness of the causes that would diminish their teaching effectiveness in the hope of dispelling the idea that the past could not be corrected. Acquiring a graduate degree with an emphasis on curriculum planning would stimulate a feeling of security and as a result a higher teacher efficacy. A graduate program might also make teachers aware of the importance of student engagement and motivation when preparing instruction.

As previously mentioned in the study conducted by Hoy and Woolfolk (1993), teachers with a higher level of education and more teaching experience had higher levels of both personal and general teaching occurrences. Teachers with graduate degrees felt more prepared which, in turn, produced higher levels of teacher efficacy. Other studies conducted by Darling-Hammond (1999) and Darling-Hammond, Chung, and Frelow (2002) determined that regardless of whether teachers received a university education or an alternative certification that once years of experience was incorporated into the study, educational background was no longer significant.

### **Teachers' of Different Grade Levels Perceptions of Collective Efficacy Beliefs**

Bandura (1993) writes that teachers' perceived collective efficacy changes markedly across different grade levels. At the kindergarten level, perceived collective efficacy is low due largely to the minimal academic demands. This reflects teachers' perception of the perceived unpreparedness of the children. In the early grades, teachers' perceived collective efficacy rises because students are better acclimated and teachers view their students as teachable. As the years progress, teachers' perceived collective efficacy drops as a result of more rigid accountability and the teachers view their schools as waning in instructional efficacy. Bandura also notes that middle school teachers express stronger efficacy beliefs, and that in succeeding grade levels, teachers perceive their schools as weakening in instructional efficacy.

Webb and Ashton (as cited in Tschannen-Moran & Hoy, 2007) concur that middle school teachers possessed a higher self-efficacy than junior high teachers. Although the teachers related more problems with colleagues, the middle school teachers had higher expectations of academic success for students and expressed more satisfaction with teaching.

### **Unique Needs of Middle Schools**

Wiles and Bondi (as cited in Friedman, Hartshorne, & Algozzine, 2005) report that in the beginning of the 20<sup>th</sup> century, children attended two types of schools: a K-8 institution and high school that included grades 9 to 12. During the 1930's, the idea of junior high schools for grades 7 to 8 emerged with the idea of preparing students for high school. The purpose of the junior high was not only to help in the transition to high

school but to help meet those particular needs of young adolescents. Around the 1960's, there was concern that the junior high schools were not adequately serving these students; and as a result, the idea of the middle school emerged (Friedman et al., 2005). The middle school was planned to focus on grades 6 to 8 with the intent of administering to that age group's particular needs. According to Finn (2005), a pivotal report named *Turning Points: Preparing Youth for the 21<sup>st</sup> Century* was published in 1989. Backed by the Carnegie Council on Adolescent Development and the National Middle School Association (NMSA), the middle grades were presented as not being a time for academic learning but rather for focusing on adolescents' social and physical adjustment and looking out for the needs of the entire child. There existed another school of thought that proposed that academics should be at the forefront, especially in regard to No Child Left Behind and results-based accountability. Middle schools can and should be places of serious learning.

According to Beane and Lipka, between 1991 and 2003, numerous studies relating to middle school were published and out of these, a set of principles and practices emerged in 2003 known as the middle school concept that was backed by both the Carnegie Council and NMSA's newly updated policy statement entitled, *This We Believe: Successful Schools for Young Adolescents*. This policy statement placed the emphasis on academics and stated that middle schools should:

- Increase academic achievement
- Appreciate and understand young adolescents
- Offer a stimulating and integrative curriculum
- Appreciate and understand young adolescence
- Incorporate small teaching teams to provide support and a safe environment

- Assure improved teacher preparation for the middle school grades
- Develop relationships with families and communities. (Beane & Lipka, 2006, pp. 26-27)

According to Kasak (2004), successful middle schools excel when students are challenged intellectually and when the methods and materials intended especially for them during this period of their lives are used. Kasak (2004) suggests five needs that would enhance the middle school experience:

- A close, mutually respectful environment
- High-quality instruction and developmentally appropriate programs
- Mandated teacher training at the middle level
- High-quality, ongoing professional development
- An emphasis on literacy (p. 45).

Today there is still debate as to whether a K-8 setting is more appropriate than middle school for the adolescents at grades 6-8, but research has shown that either configuration should create small learning communities, quality relationships, and strong transition assistance in order to be effective (Beane & Lipka, 2006).

In addition to the unique perspective suggested for middle schools, the role the teacher plays in a middle school environment has also been researched. The teacher's role has been studied and researched and results have indicated the need for specialized programs that prepare teachers of adolescents in middle schools. Indications are that preparation should include the philosophy of middle school education and knowledge about the psychological, social, and intellectual development of early adolescents. Programs that provide experiences in middle school settings and courses that focus on the nature of adolescents are also needed in a pre-service teacher education curriculum for middle school teachers. According to Harnett (1991), teachers who are prepared for

the middle school environment are more likely to remain in that field of teaching. In addition, studies conducted by Tschannen-Moran and Hoy (2002) indicate that teaching levels do contribute to teachers' sense of efficacy. In general, the lower the grade level, the higher the teachers' sense of efficacy. Middle school teachers have less confidence in their classroom management abilities as well as in providing appropriate instructional strategies. This is a need that the educational system needs to attend to by considering "structural changes and professional development opportunities that could help boost the efficacy of older children" (Tschannen-Moran & Hoy, 2002, p. 7).

### **Collective Efficacy Beliefs of Teachers in Different Schools**

Collective teacher efficacy is positively associated with the differences in student achievement that occur between different schools (Goddard et al., 2004). Research has determined that individual efficacy and collective efficacy are related to student achievement (Bandura, 1993; Goddard et al., 2000). In a study conducted by Goddard and Goddard (2001) at urban schools, they found that any variation between schools in teacher efficacy could be explained by the collective efficacy of the school. Even considering SES and mean prior achievement, collective efficacy was the only significant predictor of teacher efficacy differences among the urban schools. High collective efficacy expectations promoted a sense of expectation for successful teaching, whereas low collective efficacy expectations debilitated teachers in their attempts to change their way of teaching (Goddard & Goddard, 2001).

A second study conducted by Goddard et al. (2004) on the perceived collective efficacy of 70 schools in regard to both reading and mathematics remarked that the



findings were consistent with Bandura's (1993) study indicating that collective efficacy was significantly and certainly associated with school-level student achievement. Moore and Esselman (1992) suggest that teacher efficacy varies between schools in regard to a positive school climate, lack of impediments to effective teaching, and teacher empowerment. Tschannen-Moran et al. (1998) also add that principals' influence and the academic press of a school are significant factors in maintaining a positive collective efficacy.

In a study conducted by Goddard and Goddard (2001) in a large Midwestern school district, the data gathered concluded that collective efficacy emerged as the strongest predictor of variation among schools in teacher efficacy. Indications were that collective efficacy is a powerful method of characterizing school culture. The more input teachers have in school decisions, the more likely the higher collective efficacy will be. Goddard et al. (2004) write that "Schools that formally turn over instructionally relevant school decisions tend to have higher levels of collective efficacy. Collective efficacy, in turn, fosters commitment to schools' goals, and ultimately, gains in student achievement" (p. 24). Teachers may find themselves in schools that possess low morale and a low sense of collective efficacy. On the other hand, teachers may be employed in a school where there is a high perceived collective efficacy. In either situation, an individual teacher's perceived self-efficacy is tested (Goddard et al., 2004).

An additional study conducted by Goddard (2001) using student and school-level data from a sample of urban elementary schools, found that mastery experience was a significant predictor of differences among schools' perceived collective efficacy. Also, it

again determined that even after controlling student demographics and prior achievement, collective efficacy was significantly associated with differences in student achievement among schools.

### **Collective Efficacy and Leadership**

Bandura (1993) writes that the quality of leadership is an important contributor to a school's collective efficacy. Principals who are able to provide teachers with a sense of ownership and the opportunity to discuss educational issues, affords them with a sense of purpose. In doing so, the principal expresses faith in their capabilities as a unit to overcome barriers to educational attainment. Goddard (2003) contends that a faculty needs a leadership that motivates groups to achieve reachable goals that affect everyday occurrences in the classroom where results of their collective achievement can be readily seen. As confidence is gained, the leadership must continue to work to build the collective efficacy of the faculty. Allowing teachers to exert influence over decisions that affect their daily lives is one way to cultivate collective efficacy in the schools. According to Fullan (1999), meaningful change cannot occur if leadership is too authoritative and little or no control is given to the teaching staff. Jacobs and Kritsonis (2006) write that "partially decentralizing administrative practices will build stronger staff efficacy and improve student achievement. More can be accomplished when the staff takes control and provides feedback on what is working and what is not working in the school's organizational structure" (p. 4). Tschannen-Moran and Hoy (2007) concur that in a study of teachers in an urban Midwestern school district, the teachers who

professed to have more freedom on decisions that affected their classrooms had higher levels of efficacy.

As previously mentioned, collective efficacy is not limited to the field of education. Research shows that sport teams who have a confident coach/leader had stronger collective efficacy at the beginning of the season that was partly due to verbal persuasion and modeling. For teams who had performed poorly, as their confidence was built up by strong leadership, verbal persuasion and modeling became less important and personal experience became more important (Watson et al., 2001). There is, however, the danger of overconfidence in the absence of learning. Leadership may be important in creating “self-correcting spirals.” A confident leader may have to “focus on the mistakes a group made on its way to success to prevent overconfidence” (Watson et al., 2001, p. 1067).

### **Summary**

This chapter reviewed the literature pertinent to the issue of perceived collective efficacy and its relationship with teachers’ ethnicity, gender, years of experience, and highest degree earned. Literature revealed the need for further study of the reported higher levels of perceived collective efficacy of Hispanic teachers and for further study on the differences among schools in perceived collective efficacy (Goddard & Skrla, 2006). Also reported was the need for further research into developing more sophisticated measures of teacher efficacy (Guskey & Passaro, 1994).

### **CHAPTER III**

#### **PROCEDURES AND METHODOLOGY**

The purpose of this study was to evaluate the collective efficacy as identified by teachers at Heritage Middle School, East Central Independent School District in San Antonio, Texas during the school year 2006-2007. The relationship of six demographic variables and the perceptions of the teachers regarding collective efficacy was studied.

The six demographic variables analyzed were teacher ethnicity, gender, years of teaching at Heritage Middle School, years of teaching in the East Central Independent School District, total years of teaching and highest degree earned. In addition, a review of literature on teacher and collective efficacy was provided in Chapter II.

These relationships were examined by the following two research questions.

1. What is the collective efficacy as reported by teachers at Heritage Middle School, East Central Independent School District in San Antonio, Texas?
2. What is the relationship between selected demographic variables and the perceptions of teachers regarding collective efficacy at Heritage Middle School, East Central Independent School District in San Antonio, Texas?

In order to analyze the research questions, the researcher requested and gained permission from Roger D. Goddard to use his 12-item collective efficacy short form survey (Appendix A). The short form consisted of 12 items that had a high internal consistency ( $\alpha = 0.94$ ). Questions on demographic variables completed the 20-item survey (Appendix B).

The 12 items consisted of statements regarding the participant's response to what they perceive to be the school's collective efficacy. Levels of agreement ranged from Strongly Disagree to Strongly Agree. A thirteenth item was included that asked for any additional comments.

### **Description of Variables**

#### *Ethnicity*

Ethnicity was chosen as one of the demographic variables because the majority of the Heritage Middle School's student population is Hispanic and recent studies have suggested that when a teacher's and a student's ethnicity were similar, the school's collective efficacy increased (Goddard & Skrla, 2006). Of the 58 teachers who responded to the survey, there were 15 Hispanics, 40 Whites, 2 African Americans, and 1 Asian/Pacific Islander (Table 1). Due to the very low numbers of African-Americans and Asian/Pacific Islanders, it was decided to divide the teachers into three groups: White, Hispanic and Other with focus on Whites and Hispanics. A t-test was conducted to analyze the relationship between teachers' ethnicity and the perceptions of teachers regarding collective efficacy at Heritage Middle School.

**Table 1. Ethnicity of Teachers at Heritage Middle School**

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Hispanic	15	25.9	27.3	27.3
White	40	69.0	72.7	100.0
Subtotals	55	94.8	100.0	
African American	2	3.4		
Asian/Pacific Island	1	1.7		
Subtotals	3	5.2		
Totals	58	100.0		

### *Gender*

Gender was the second demographic variable studied. Research has indicated that the teaching community is predominately female and that females tend to be more efficacious than males (Ross, 1994). The faculty at Heritage was predominately female with a ratio of 36 females to 22 males (Table 2). A t-test was performed to establish whether males or females perceived more collective efficacy at Heritage Middle School.

**Table 2. Gender of Teachers at Heritage Middle School**

Valid	Frequency	Valid Percent	Cumulative Percent
Males	22	37.9	37.9
Females	36	62.1	100.0
Totals	58	100.0	

### *Number of Years Teaching*

Years of teaching was divided into three basic variables: (a) years of teaching at Heritage Middle School, (b) years of teaching in the East Central Independent School District, and (c) total years of teaching. Research on whether the number of years teaching has had an effect on teachers' perceptions of a school's collective efficacy has varied. Research on whether the number of years teaching has had an effect on teachers' perceptions of a school's collective efficacy has varied.

### *Years of Teaching at Heritage Middle School*

Based on the frequency of years of teaching at Heritage Middle School, it was decided to collapse the numbers into the following three groups:

- 1 year of experience
- 2 to 5 years of experience
- 7 to 10 years of experience

Ten years was the maximum numbers of years since the school has been in operation for only 10 years (Table 3). An ANOVA was performed to determine the relationship of years teaching at Heritage Middle School and the teachers' perceived collective efficacy.

**Table 3. Years of Teaching at Heritage Middle School (Three Groups)**

Valid	Frequency	Valid Percent	Cumulative Percent
1 year	18	31.0	31.0
2-5 years	21	36.2	67.2
6-10 years	19	32.8	100.0
Totals	58	100.0	

*Years of Teaching at East Central Independent School District*

Years of teaching in the East Central Independent School District ranged from 1 to 35 years (Table 4). The researcher chose to divide the years into four relatively even numbered groups. A one-way ANOVA was conducted on the group's perceived collective efficacy based on their years of working as a teacher in the East Central Independent School District.

**Table 4. Years of Teaching in East Central ISD (Four Groups)**

Valid	Frequency	Valid Percent	Cumulative Percent
1-2 years	15	25.9	25.9
3-5 years	16	27.6	53.4
6-13 years	14	24.1	77.6
14-35 years	13	22.4	100.0
Totals	58	100.0	

### *Total Years of Teaching*

Total years of teaching ranged from 1 to 39 years. Again, because of the low numbers and their frequency, they were collapsed into three groups: 1 to 10 years, 11 to 20 years and 21 or more years (Table 5). In order to determine the relationship of total teaching years of experience with the perception of Heritage Middle School teachers' collective efficacy, an ANOVA was conducted.

**Table 5. Total Years of Teaching Experience of Teachers at Heritage Middle School**

Valid	Frequency	Valid Percent	Cumulative Percent
Beginning Teacher	3	5.2	5.2
1-5 years	15	25.9	31.0
6-10 years	7	12.1	43.1
11-20 years	19	32.8	75.9
Over 20 years	14	24.1	100.0
Totals	58	100.0	

### *Highest Degree Earned*

Highest degree earned by teachers at Heritage Middle School consisted of 41 teachers with a bachelor's degree, 16 with a master's degree, and 1 with a doctorate. Again, because of the numbers, it was decided to collapse the numbers into two groups: bachelors and masters/doctorate (Table 6). A t-test was performed to determine the relationship between highest degree earned by teachers at Heritage Middle School and their perception regarding collective efficacy.

**Table 6. Highest Degree Earned by Teachers at Heritage Middle School (Two Groups)**

Valid	Frequency	Valid Percent	Cumulative Percent
Bachelor's Degree	41	70.7	70.7
Master's Degree/Doctorate	17	29.3	100.0
Totals	58	100.0	



A proposal for the study was submitted to and approved by the graduate committee at Texas A&M University. A letter requesting approval to conduct this study was sent to the principal at Heritage Middle School (Appendix C). Permission to conduct this study was granted by the principal of Heritage Middle School (Appendix D). Permission was also obtained from Roger D. Goddard to use his 12-item collective efficacy short form that was eventually distributed to participating teachers (Appendix A). The researcher was granted approval to conduct the study by the Office of Research Compliance Institutional Review Board on May 23, 2007.

Chapter III reports the research methods used to identify this study. The chapter is divided into the following sections: (a) population, (b) instrumentation, (c) procedures, and (d) data analysis.

### **Population**

The population of this study consisted of 58 certified teachers at Heritage Middle School in the East Central Independent School District in San Antonio, Texas. The total teaching staff consisted of 66 teachers, of which 58 responded to the survey.

East Central Independent School District is located in the southeastern part of San Antonio, Texas. Although it is inside the city limits of Bexar County, it is still considered a rural school district. In the past 10 years, housing has doubled and farming land is rapidly diminishing to make room for residential areas. There are no city bus routes and student transportation is mainly provided by the district. The district is comprised of 17 schools with approximately 8,000 students.

During the 2006-2007 school year, Heritage Middle School had approximately 946 students that included grades 6, 7, and 8. The majority of the student population was Hispanic with over half of the students economically disadvantaged and/or at risk. Heritage Middle School was not a Title I school. The school has been in operation for 10 years and has been the only middle school in the district until the 2006-2007 school year when a second middle school was opened. Heritage Middle School was rated academically acceptable, commended on reading/ELA and social studies and showed comparable improvement in mathematics. For the past two years, Heritage Middle School has met the state's target of having all schools with 100% highly qualified teachers.

The teaching staff is comprised of 13% African-American, 23% Hispanic, 62% White, and 2% percent Asian/Pacific Islander. The teaching staff was 46.1% White female and 14.7% White male; 22.7% Hispanic female, 22.7% Hispanic male; 7.7% African American female and 5.5% African American male. The average years of experience was 8.3%.

It is important to note that during the 10 years that Heritage has been in operation, the school has had six principals. Reasons for their departures have been for promotions to the central office, assignments to other schools as principals, and transfer to a position in another district. The turnovers have impacted not only the school's operations but the morale of the faculty. It has been difficult to establish a school culture and to maintain some consistency. Research has indicated that the role of the principal

not only affects student achievement but a faculty's collective efficacy (Goddard, 2002a; Watson et al., 2001).

### **Instrumentation**

One instrument was used to collect the data for this study to assess the campus's perceived collective efficacy. Permission was granted from Roger D. Goddard to use his 12-item collective efficacy short form (Appendix A). The 12-item short form has high internal consistency ( $\alpha = .94$ ). Originally, the instrument consisted of 21 questions, but further study by Goddard determined that the 12-item scale was strongly related to the original scale.

The use of the 12-item scale provided anonymous and unobservable information regarding collective efficacy as reported by the participating teachers. Quantitative data were collected using basic questionnaire techniques outlined in *Educational Research: An Introduction* (Gall et al., 2003).

The demographic variables were added to the questionnaire.

### **Procedures**

In April 2007, the researcher met the principal of Heritage Middle School to explain the purpose of the research and obtain, through him, the permission and support of the school district. A letter was written and signed by him granting the researcher permission to conduct the survey at Heritage Middle School in the East Central Independent School District (Appendix D).

During the latter part of May 2007, every certified teacher received in their school mail box a sealed packet containing the following (Appendix E):

- A letter addressed to the faculty asking for their participation, informing them of the principal's approval, and that participation was voluntary.
- An information sheet explaining the purpose of the study of their perceived collective efficacy.
- Instructions on how to complete the survey and the survey itself.
- A stamped envelope for the completed survey addressed to me at my home.
- Once the survey was completed, teachers were asked seven demographic questions and one open-ended question.

A reminder was sent to all certified teachers at Heritage Middle School in July 2007 reminding them to complete the survey and return it to the researcher (Appendix F).

### **Data Analysis**

Results of the data gathered by the researcher for this study were reported using both numerical and graphic techniques. From the interpretation of the data, descriptive and inferential data analyses were used. Appropriate statistical measures used in the study included mean scores, frequencies, percentages, central tendencies, t-tests, and one-way ANOVAs. Teacher's demographics and any responses on the open-ended question were also incorporated in the analysis. The means and standard deviations were calculated and presented for each of the 12-item survey questions.

This was primarily a descriptive study. Multiple displays such as charts and tables were used to present findings. Analysis and interpretation of the data adhered to the principles prescribed for data description by Gall et al. (2003) in *Educational Research: An Introduction*.

## **CHAPTER IV**

### **PRESENTATION AND ANALYSIS OF FINDINGS**

#### **Introduction**

The purpose of this study was to evaluate the collective efficacy as identified by teachers at Heritage Middle School in the East Central Independent School District in San Antonio, Texas. It also sought to investigate the relationship of six demographic variables with the perceived collective efficacy of the teaching staff. The six demographic variables were teachers' ethnicity, gender, years of teaching at Heritage Middle School, years of teaching at East Central Independent School District, total years of teaching, and highest degree earned. This chapter presents the results of this research.

Collective efficacy refers to a group's perceptions that are "concerned with the performance of a social system as a whole" (Bandura, 1997, p. 469). It has also been defined as "a sense of collective competence shared among individuals when allocating, coordinating, and integrating their resources in a successful concerted response to specific situational demands" (Zaccaro et al., 1995, p. 309). In reference to teachers, it refers to "the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (Goddard, 2000, p. 480). The role of collective efficacy is a relatively new concept; however, research has proven its effectiveness in raising student achievement and closing the achievement gap.

The collective efficacy surveys were distributed to the faculty as reported in Chapter I. One week after the surveys were distributed, a letter, email, or phone call was made to remind some teachers that their survey had not been received. Following the

Winter Break, a third request for surveys was made. Each time, it was mentioned that participation was voluntary and confidential. Fifty-eight (58) of 66 teachers responded to the survey.

The information gained from this research will be available to Heritage Middle School and East Central Independent School District. The results of this study may prove helpful to the district and campus administration in recognizing the value of collective efficacy and in educational staff development programs for teachers and administrators and in the recruitment of new personnel. All data were obtained from the teacher surveys that were distributed on the campus. The researcher and administrative staff did not participate in the study.

#### **Collective Efficacy Survey – The Short Form**

The research instrument used for this study was the Collective Efficacy Survey Short Form developed by Goddard (2002a). A copy of the survey is Appendix A. There are six questions that are written positively and six that are negatively written. The survey consists of a 12-item Likert scale with six levels of agreement:

- 1 = Strongly Disagree
- 2 = Somewhat Disagree
- 3 = Mildly Disagree
- 4 = Mildly Agree
- 5 = Somewhat Agree
- 6 = Strongly Agree

The scale developed by Goddard only had the end points labeled as Strongly Disagree and Strongly Agree. The researcher has provided reasonably appropriate words for each of the other four points to aid in continued discussion.

1. Items 1-12 are questions that have a six-point Likert scale ranging from Strongly Disagree as 1 to Strongly Agree as 6.
2. Item 13 is the open-ended question that asks participants if they wish to add comments in regard to their perception of Heritage's ability to effectively teach students.
3. Items 14-20 describe the part of the survey that had demographic variables.
4. Item 14 asks for gender: either male or female.
5. Item 15 asks the number of total years of teaching at Heritage Middle School.
6. Item 16 asks for the number of teaching years at East Central Independent School District.
7. Item 17 asks for the number of total years of teaching experience.

Participants choose from the following groups:

- Beginning teacher (within your first year of teaching)
  - 1-5 years of experience
  - 6-10 years of experience
  - 11-20 years of experience
  - Over 20 years of experience
8. Item 18 regards ethnicity:

- African American
  - Hispanic
  - European American (White)
  - Native American
  - Asian/Pacific Islander
9. Item 19 asks for the total number of years of experience in teaching overall.
  10. Item 20 asks for the highest degree earned: bachelor's, master's, or doctorate.

The intent of the study was to answer two questions regarding collective efficacy.

The two questions asked were:

1. What is the collective efficacy as reported by teachers at Heritage Middle School, East Central Independent School District in San Antonio, Texas?
2. What is the relationship between selected demographic variables and the perceptions of teachers regarding collective efficacy at Heritage Middle School, East Central Independent School District in San Antonio, Texas?

#### *Survey Item 13*

Survey item 13 was an open-ended question asking the participants to add any additional comments regarding their perceptions of the campus's ability to effectively teach students. Of the 58 participants in the survey, 16 participants (28%) made comments ranging from an "OK" to one or two sentences. Of the 16 who made comments, 8 were White females, 3 White males, 2 Hispanic females, 1 Hispanic male, 1 African-American male, and 1 Asian/Pacific Islander. Years of teaching at Heritage



Middle School ranged from 1 to 35 years. The researcher chose to disregard item 13 in the analysis of data because of the limited response and the use of one- or two-word comments. Furthermore, the comments were all positive in nature. Finally, there was a disconnect between the quantitative nature of the two research questions and the qualitative data obtained in item 13.

#### *Survey Item 17*

Survey item 17 asked the participants to identify the number of years they had been teaching based on five categories:

- Beginning teacher
- 1-5 years of experience
- 6-10 years of experience
- 11-20 years of experience
- Over 20 years of experience

The researcher noted that this item was almost identical to item 19. Item 19 also grouped the total number of years in teaching and were grouped according to responses. For all practical purposes, the same information would have been gathered and analyzed twice, and it was, therefore, decided to disregard item 17.

## Analysis of Demographic Data

### *Research Question 1*

What is the collective efficacy as reported by teachers at Heritage Middle School, East Central Independent School District in San Antonio, Texas?

Table 7 provides the frequency distribution of means in reference to the collective efficacy of the 58 respondents based on the first 12 items of the survey.

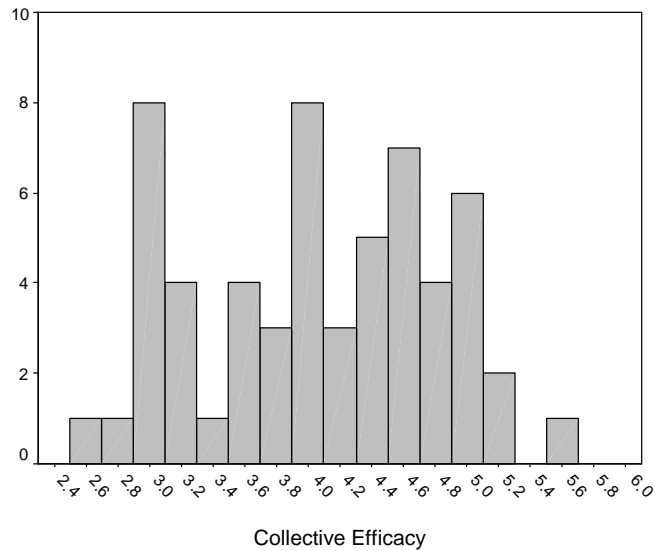
**Table 7. Frequency of Mean Scores of Teachers From Heritage Middle School Based on the First 12 Items on the Collective Efficacy Survey**

Valid	Frequency	Valid Percent	Cumulative Percent
2.67	1	1.7	1.7
2.83	1	1.7	3.4
2.92	3	5.2	8.6
3.00	1	1.7	10.3
3.08	4	6.9	17.2
3.25	4	6.9	24.1
3.33	1	1.7	25.9
3.67	4	6.9	32.8
3.75	3	5.2	37.9
3.92	5	8.6	46.6
4.00	2	3.4	50.0
4.08	1	1.7	51.7
4.17	2	3.4	55.2
4.25	1	1.7	56.9
4.33	4	6.9	63.8
4.42	1	1.7	65.5
4.50	3	5.2	70.7
4.58	2	3.4	74.1
4.67	2	3.4	77.6
4.75	2	3.4	81.0
4.83	2	3.4	84.5
4.92	2	3.4	87.9
5.00	3	5.2	93.1
5.08	1	1.7	94.8
5.17	1	1.7	96.6
5.25	1	1.7	98.3
5.50	1	1.7	100.0
<b>Total</b>	<b>58</b>	<b>100.0</b>	

The frequency distribution was divided into four quartiles. Quartile 0 had a minimum mean score of 2.67, Quartile 1 at the 25% mark had a mean score of 3.25, Quartile 2 at the 50% mark had a mean of 4.00, Quartile 3 at the 75% mark had a mean of 4.58, and Quartile 4 had the maximum mean score of 5.50. Half of the scores fell above 4.00 and half fell below 4.00. The majority of scores fell in the middle with a median of 4.00. The range of scores was between 2.67 and 5.50, and the middle 50% of the scores ranged from 3.25 to 4.58. Based on Table 7, the median indicates that on average, the entire group of 58 participants felt that they essentially all mildly agreed that they had the ability to make all the students at Heritage Middle School successful.

Figure 3 further illustrates the mean scores of the 58 participants. The histogram rounds the scores to the nearest tenth. The majority of mean scores congregate in the middle providing a crude picture of a normal distribution. The majority of responses were within the overall mean of 4.0. The bottom and top scores were evenly distributed and close and indicate an even distribution. The histogram also indicates that participants used the whole scale. Mathematically, there was little distortion, which indicates that participants did not answer in a bizarre way.

*Figure 3.* Histogram of mean scores of teachers from Heritage Middle School based on the first 12 items on the Collective Efficacy Survey.



### *Research Question 2*

What is the relationship between selected demographic variables and the perceptions of teachers regarding collective efficacy at Heritage Middle School, East Central Independent School District in San Antonio, Texas?

The purpose of this research question was to determine if any significant differences existed within the demographic variables of ethnicity, gender, years of teaching at Heritage Middle School, years of teaching in the East Central Independent School District, years of total teaching experience, and highest degree earned. The null hypothesis for this question was that the variables would have no impact on the perceived collective efficacy of the teachers at Heritage Middle School.

## Ethnicity

Item 18 asked for the participants to identify themselves as African-American, Hispanic, European American (White), Native American, and Asian/Pacific Islander.

The descriptive statistics reported on the issue of ethnicity is illustrated in Table 8.

Table 8. Frequencies and Percentage of Demographic Information Based on Ethnicity of Teachers at Heritage Middle School

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Hispanic	15	25.9	27.3	27.3
White	40	69.0	72.7	100.0
Subtotals	55	94.8	100.0	
African American	2	3.4		
Asian/Pacific Island	1	1.7		
Subtotals	3	5.2		
Totals	58	100.0		

Based on the frequency and the low numbers of African-Americans and Asian/Pacific Islanders, the researcher chose to divide the ethnicities into two groups: White and Hispanic. Table 9 illustrates the mean and standard deviations scores of Whites and Hispanics.

Table 9. Descriptive Statistics: Total Mean and Standard Deviation Scores of White and Hispanic Teachers From Heritage Middle School Based on Ethnicity

Ethnicity	n	Mean	Standard Deviation
White	40	4.0153	0.71077
Hispanic	15	3.9440	0.73844

### *Ethnicity Results*

The null hypothesis for ethnicity was that there would be no statistical difference between the ethnic groups. The analysis was conducted using an independent samples t-test. Table 10 provides the data for the independent samples t-test. The level of significance for the procedures was 0.744. This was greater than the alpha level of 0.05. As a result, the decision was made to accept the null hypothesis of no difference. There was no statistical difference between the perceived collective efficacy of White and Hispanic teachers at Heritage Middle School.

Table 10. Independent Samples t-test of the White and Hispanic Teachers From Heritage Middle School in the Perceived Collective Efficacy Survey

	T	df	Sig. (2-tailed)
Collective Efficacy Equal Variances Assumed	0.328	53	0.744

### **Gender**

Item 14 asked for participants to identify themselves as male or female. Table 11 reports the descriptive statistics for both male and female.

Table 11. Descriptive Statistics: Total Mean and Standard Deviation Based on the Gender of Teachers at Heritage Middle School

Group	n	Mean	Standard Deviation
Males	22	3.9127	0.67421
Females	36	4.1325	0.76782

The 22 males had a mean of 3.91 and the 36 females had a mean of 4.13. In this sample of 58 participants, the females did have a higher mean than the males, but the

difference did not exceed the magnitude of 7% that would be due to chance alone and was not statistically significant. Therefore, the null hypothesis that there would be no difference between the perceived collective efficacy of males and females was upheld.

### *Gender Results*

The null hypothesis that there would be no difference in the perceived collective efficacy between male and female teachers at Heritage Middle School was analyzed using an independent samples t-test. Table 12 provides the data for the independent samples t-test. The level of significance for the procedure was 0.273. This was greater than the alpha level of 0.05. As a result, the decision was made to accept the null hypotheses of no difference. Therefore, it was inferred that the means in the population, from which these sample means were drawn, were the same. There was no statistical difference between the population means.

Table 12. Independent Samples t-test of the Perceived Collective Efficacy of Teachers at Heritage Middle School Based on Gender

	F	Sig.	t	df	Sig. (2-tailed)
Collective Efficacy Equal Variances Assumed	1.29 0	0.26 1	1.10 6	56	0.273

### **Years of Teaching at Heritage Middle School**

Item 15 asked the participants to record the total years of teaching experience they have had at Heritage. Tables 13 and 14 report the frequency distribution of teaching years at Heritage Middle School.

Table 13. Frequency Distribution of Teaching Years at Heritage Middle School

Valid	Frequency	Valid Percent	Cumulative Percent
1	18	31.0	31.0
2	6	10.3	41.4
3	7	12.1	53.4
5	8	13.8	67.2
7	4	6.9	74.1
8	1	1.7	75.9
9	4	6.9	82.8
10	10	17.2	100.0
Total	58	100.0	

Table 14. Frequency Distribution of Teaching Years at Heritage Middle School (Three Groups)

Valid	Frequency	Valid Percent	Cumulative Percent
1 year	18	31.0	31.0
2-5 years	21	36.2	67.2
6-10 years	19	32.8	100.0
Totals	58	100.0	

It must be noted that Heritage Middle School has only been in operation for 10 years, so the maximum number of years a teacher could be employed at the school was 10 years.

For analysis purposes, the numbers were collapsed into the following categories: 1 year of experience, 2 to 5 years of experience, and 6 to 10 years of experience. The numbers were relatively even and the number of years intuitively fell into these three larger breaks as illustrated in Table 14.

Table 15 reports the mean and standard deviation of the three groups. The means were relatively even.



Table 15. Mean and Standard Deviation of the Perception of Teachers' Collective Efficacy Regarding Years of Experience at Heritage Middle School

Years Experience	N	Mean	Standard Deviation
1 year	18	4.0928	0.83659
2-5 years	21	4.0205	0.64666
6-10 years	19	4.0395	0.76466
Total	58	4.0491	0.73555

*Years of Teaching at Heritage Middle School Results*

The null hypothesis for this variable was that there was no difference in the perception of collective efficacy based on years of teaching Heritage Middle. A one-way analysis of variance (ANOVA) was used to analyze this data and Table 16 provides the results. The level of significance for the procedure was 0.954. This was greater than the alpha level of 0.05. As a result, the decision was made to accept the null hypothesis of no difference. There was no statistical difference between the population means. The perceived collective efficacies of teachers based on their years of teaching at Heritage Middle School were not statistically different.

Table 16. One-Way ANOVA on the Perceived Collective Efficacy of Teachers' Years of Teaching at Heritage Middle School

	Sum of the Squares	df	Mean Square	f	Sig
Between Groups	0.053	2	0.027	0.048	0.954
Within Groups	30.786	55	0.560		
Total	30.839	57			

### Years of Teaching in the East Central Independent School District

Item 16 asked for the number of years of teaching experience the participant had in the East Central Independent School District. Table 17 illustrates the frequency distribution on the number of years teachers at Heritage Middle School had taught in the East Central Independent School District.

Table 17. The Perceived Collective Efficacy of Teachers at Heritage Middle School and the Number of Years Taught in the East Central Independent School District

Years	Frequency	Valid Percent	Cumulative Percent
10	2	3.4	3.4
9	3	5.2	8.6
5	9	15.5	24.1
22	2	3.4	27.6
2	5	8.6	36.2
1	10	17.2	53.4
3	6	10.3	63.8
7	3	5.2	69.0
18	2	3.4	72.4
6	1	1.7	74.1
8	2	3.4	77.6
29	1	1.7	79.3
16	1	1.7	81.0
11	1	1.7	82.8
4	1	1.7	84.5
35	1	1.7	86.2
32	1	1.7	87.9
15	1	1.7	89.7
12	1	1.7	91.4
13	1	1.7	93.1
28	1	1.7	94.8
35	1	1.7	96.6
20	1	1.7	98.3
33	1	1.7	100.0
Total	58	100.0	

Due to the small numbers in each category, the researcher decided to group the number of years taught in the district into four categories. The numbers were relatively even and the number of years intuitively fell into these four larger breaks. Table 18 provides this information. The categories were:

- 1-2 years
- 3-5 years
- 6-13 years
- 14 or more years

Table 18. Years of Teaching at East Central Independent School District (Four Groups)

Valid	Frequency	Valid Percent	Cumulative Percent
1-2 years	15	25.9	25.9
3-5 years	16	27.6	53.4
6-13 years	14	24.1	77.6
14-35 years	13	22.4	100.0
Totals	58	100.0	

Table 19 illustrates the mean and standard deviations of the four groups.

Table 19. Mean and Standard Deviation of the Perceived Collective Efficacy of Teachers at Heritage Middle School and the Number of Years Taught in the East Central Independent School District

Years Experience	N	Mean	Standard Deviation
1-2 years	15	4.2720	0.80534
3-5 years	16	3.8863	0.57935
6-13 years	14	3.8750	0.73211
14-35 years	13	4.1800	0.81343
Total	58	4.0491	0.73555

*Years of Teaching in the East Central Independent School District Results*

The null hypothesis investigating the potential differences in the perception of collective efficacy of teachers at Heritage Middle School and the number of years they have taught in the East Central Independent School District was analyzed using a one-way analysis of variance (ANOVA) procedure. Table 20 provides the results of the one-way ANOVA. The level of significance for the procedure was 0.346. This was greater than the alpha level of 0.05. As a result, the decision was made to accept the null hypothesis of no difference. It was inferred that all the means in the population from which these samples were drawn were the same as there was no statistical difference among the population means. In other words, the perceived collective efficacy of teachers at Heritage Middle School were the same regardless of the number of years those teachers taught in the East Central Independent School District.

Table 20. One-Way ANOVA on the Perceived Collective Efficacy of Teachers at Heritage Middle School and Their Years of Teaching in the East Central Independent School District

	Sum of the Squares	df	Mean Square	f	Sig
Between Groups	1.817	3	0.606	1.127	0.346
Within Groups	29.023	54	0.537		
Total	30.839	57			

**Total Years of Teaching Experience**

Item 19 asked the teachers for their total number of years teaching. Table 21 indicates the descriptive analysis of Heritage Middle School Teachers' total years of teaching experience.

Table 21. Descriptive Analysis of Heritage Middle School Teachers' Total Years of Teaching Experience

Years Experience	Frequency	Valid Percent	Cumulative Percent
1	3	5.2	5.2
2	2	3.4	8.6
3	5	8.6	17.2
4	2	3.4	20.7
5	6	10.3	31.0
6	2	3.4	34.5
7	1	1.7	36.2
8	1	1.7	37.9
9	3	5.2	43.1
10	1	1.7	44.8
11	4	6.9	51.7
12	1	1.7	53.4
13	2	3.4	56.9
14	1	1.7	58.6
15	2	3.4	62.1
16	1	1.7	63.8
17	3	5.2	69.0
18	3	5.2	74.1
19	1	1.7	75.9
21	2	3.4	79.3
24	1	1.7	81.0
26	1	1.7	82.8
28	2	3.4	86.2
29	1	1.7	87.9
30	1	1.7	89.7
32	2	3.4	93.1
33	2	3.4	96.6
35	1	1.7	98.3
39	1	1.7	100.0
Total	58	100.0	

Based on the frequency of the numbers and that the numbers were relatively even, the number of years intuitively fell into three larger groups. Table 22 illustrates the groups. The three groups were:

- 1-10 years of experience
- 11-20 years of experience

- 21 or more years of experience

Table 22. Descriptive Statistics for the Perceived Collective Efficacy of Teachers at Heritage Middle School Based on Total Years Experience in Teaching

Valid	Frequency	Valid Percent	Cumulative Percent
1-10 years	26	44.8	44.8
11-20 years	18	31.0	75.9
Over 20 years	14	24.1	100.0
Total	58	100.0	

Table 23 illustrates the mean and standard deviation of teachers' total years experience in teaching.

Table 23. Mean and Standard Deviation of the Perceived Collective Efficacy of Teachers at Heritage Middle School Based on the Total Number of Years in Teaching

Years Experience	n	Mean	Standard Deviation
1-10 years	26	4.0285	0.76765
11-20 years	18	3.9089	0.65228
Over 20 years	14	4.2679	0.77654
Total	58	4.0491	0.73555

In this sample of 58 participants, the teachers with over 20 years of experience had a higher mean than those with 1 to 10 and 11 to 20 years experience, but this difference was not significant. This magnitude of difference would occur 7% of the time by chance alone.

#### *Total Years of Teaching Experience Results*

The null hypothesis that there would be no difference in the perceived collective efficacy of teachers at Heritage Middle School based on their total years of teaching experience was tested using a one-way analysis of variance (ANOVA) procedure.

Table 24 reports the ANOVA results of the three groups. The level of significance for the procedure was 0.391. This was greater than the alpha level of 0.05. As a result, the decision was made to accept the null hypothesis of no difference. It was inferred that all the means in the three populations from which these sample means were drawn were the same and that there was no statistical difference between population means.

Table 24. One-Way ANOVA Results of the Perception of Teachers' Collective Efficacy in Regard to Their Total Years of Teaching Experience

	Sum of the Squares	Df	Mean Square	f	Sig
Between Groups	1.035	2	0.517	0.955	0.391
Within Groups	29.804	55	0.542		
Total	30.839	57			

### Average Years of Teaching Experience

Table 25 provides a summary of the overall average teaching experience at Heritage Middle School, East Central Independent School District, and total years of experience.

Table 25. Teaching Experience of Collective Efficacy Participants

Average Years Teaching Experience at Heritage Middle School	Average Years Teaching Experience in East Central Independent School District	Average Total Years Teaching Experience
4.5	9.2	13.8

### Highest Degree Earned

Item 20 asked the teachers to indicate the highest degree earned. Of the 58 teachers who participated in the survey, 41 had a bachelor's degree, 17 had a master's

degree, and 1 had a doctorate. Those teachers with advanced degrees (masters and doctorates) were combined into one group. Tables 26 and 27 illustrate the descriptive statistics of the two groups.

Table 26. Frequency Distribution of Teachers From Heritage Middle School Based on Highest Degree Earned

Valid	Frequency	Valid Percent	Cumulative Percent
Bachelor's Degree	41	70.7	70.7
Master's Degree/Doctorate	17	29.3	100.0
Total	58	100.0	

Table 27. Mean and Standard Deviation of the Perceived Collective Efficacy of Teachers From Heritage Middle School Based on the Highest Degree Earned

Years Experience	N	Mean	Standard Deviation
Bachelor's Degree	41	4.0878	0.70549
Master's Degree/Doctorate	17	3.9559	0.81858

### *Highest Degree Earned Results*

The null hypothesis that there was no difference between the perceived collective efficacy of teachers at Heritage Middle School in reference to the highest degree earned was tested using an independent samples t-test. Table 28 provides the data for the independent samples t-test. The level of significance for the procedure was 0.539. This was greater than the alpha level of 0.05. As a result, the decision was made to accept the null hypotheses of no difference. Therefore, it was inferred that the means in the population, from which these samples means were drawn, were the same and there was no statistical difference between the population means. In other words, the perceived



collective efficacy of teachers at Heritage Middle School indicated no statistical difference between the population means. There is no difference in the perceived collective efficacy of teachers at Heritage Middle School in reference to the highest degree earned.

Table 28. A t-test of the Highest Degree Earned (Two Groups) of Teachers at Heritage Middle School in the Perceived Collective Efficacy Survey Group Statistics

	T	df	Sig. (2-tailed)
Collective Efficacy Equal Variances Assumed	0.618	56	0.539

### Summary of Findings

This study investigated data from a survey given to teachers at Heritage Middle School during the school year 2006-2007. There were a total of 58 participants.

The first research question dealt with identifying the perceived collective efficacy of teachers at Heritage Middle School. The overall indication is that the majority of teachers' scores fell in the middle range of 3.25 to 4.58, with an average mean score of 4.00. This indicates that on a scale of 1 to 6, the 58 participants "mildly agreed" that they had the ability to make all the students successful.

The second research question dealt with the relationship between six variables and the perception of the teachers regarding collective efficacy at Heritage Middle School. All six variables indicated no significant differences between groups regarding ethnicity, gender, years of teaching experience at Heritage, the school district, total years

of teaching, and highest degree earned. The null hypothesis that the variables had no impact on the teachers' collective efficacy was upheld.

## **CHAPTER V**

### **SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS**

This chapter contains a summary, findings, recommendations for future research, and closing remarks. The findings, categorized by research question, include conclusions and recommendations and implications for practice.

#### **Summary**

The primary goal of this record of study was to examine the perceived collective efficacy as reported by teachers at Heritage Middle School and the relationship of collective efficacy to the six variables of teachers' ethnicity, gender, years of teaching at Heritage Middle School, years of teaching in the East Central Independent School District, years of total teaching experience, and highest degree earned used in this study.

The study addressed two major questions:

1. What is the collective efficacy as reported by teachers at Heritage Middle School, East Central Independent School District in San Antonio, Texas?
2. What is the relationship between selected collective demographic variables and the perceptions of teachers regarding collective efficacy at Heritage Middle School, East Central Independent School District in San Antonio, Texas?

The researcher used the short form instrument developed by Roger D. Goddard to assess the campus's collective efficacy. The short form consisted of 12 items regarding the participants' response to what they perceived to be the school's collective efficacy. Levels of agreement ranged from Strongly Disagree to Strongly Agree. The researcher

added demographic variables to the survey. After receiving permission from the principal to conduct the survey, a letter was distributed explaining the purpose of the study and ensuring the faculty of confidentiality. Fifty-eight (58) out of 65 teachers responded. At the time of the survey, Heritage Middle School consisted of predominately White male teachers and a student population of approximately 946 students, the majority of which were Hispanic.

## **Findings**

### *Research Question 1*

What is the collective efficacy as reported by teachers at Heritage Middle School, East Central Independent School District in San Antonio, Texas?

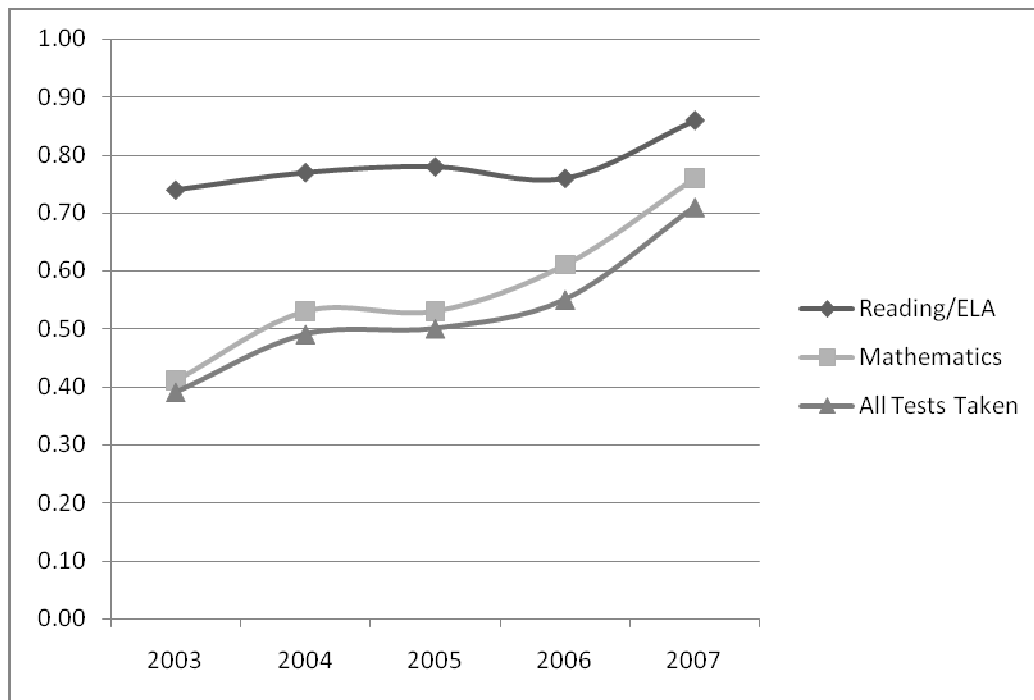
## **Conclusions**

Research question 1 was based on teachers' responses to the 12 statements regarding collective efficacy. Table 25 in Chapter IV shows that on average, the entire group of 58 participants mildly agreed that they had the ability to make all the students successful. They neither strongly agreed nor strongly disagreed on the faculty's collective efficacy. For the past 10 years, the school has been rated "academically acceptable" with some improvement in math and reading scores.

As illustrated in Figure 4, TAKS scores in reading and mathematics have risen during the past five years. From the 2003 to the 2007 school year, scores in reading rose 12% as compared to a 17% increase at the state level, and scores in mathematics rose 35% as compared to a 20% increase at the state level. For all students, all tests taken during this period rose 32% as compared to a 25% increase at the state level. Despite

these increases, Heritage Middle School remains an academically acceptable campus and is still some distance from obtaining recognized or exemplary status under the campus rating system of Texas.

*Figure 4.* Multi-year history of reading and mathematics TAKS scores at Heritage Middle School from 2003 to 2007.



In the Texas system for rating schools, this level is in the middle of the rating scale with the categories of “academically recognized campus” and “academically exemplary campus” indicating higher achievement than the “academically acceptable” rating. The results of this record of study indicated that the collective efficacy of Heritage Middle School could be the reason for their campus rating. These two ratings would appear to be in alignment in regard to the rating scales in which they appear. Both an

acceptable rating and the mild agreement that the campus has collective efficacy are in the middle of their respective rating scales. It should be noted that Heritage Middle School has had frequent changes in leadership over the 10 years since the campus opened. For example, there have been six different principals resulting in six different approaches to the management of the campus.

These findings are similar to Goddard et al. (2000) and Bandura (1993) as discussed in Chapter II. Both confirmed that individual efficacy and collective efficacy were related to student achievement. Just as teacher efficacy affects student achievement, so does the collective efficacy effort. Tschannen-Moran et al. (1998) remarked that a principal's influence and the academic press of a school were significant factors in maintaining a positive collective efficacy. Hoy, Tarter, and Hoy (2006) add that there are three organizational descriptors that constitute a difference in student achievement: (a) academic press, (b) the collective efficacy of the faculty, and (c) the faculty's trust in students and parents. Hoy et al. (2002) added that a school's academic press shaped the normative and behavioral environment of a school and is positively associated with student achievement. Murphy, Weil, Hallinger, and Mitman (1982) write that school policies that promote academic press in turn affect classroom practices that promote academic press. They list six policies that appear to be related to student progress and academic press.

- A homework school policy that is meaningful and establishes high expectations for students.
- A school-wide grading policy that is implemented by the principal.

- Remediation that ensures mastery.
- Frequent progress reports.
- School-wide monitoring that informs students that they are held responsible and expected to learn specific amount of information.
- A retention and promotion policy that makes student mastery as the basis for promotion.

Of the six policies, Heritage needs consistency in four areas. Homework is up to the discretion of each teacher. Remediation does not always ensure mastery, each academic department has their own grading policy, and the retention/promotion policy is not strictly followed. It was and is a major concern of Heritage's faculty as to why, with all their efforts and added responsibilities, the students have had minimal academic success. Heritage Middle School has not had the opportunity to develop a strong academic press due to the frequent changes in campus leadership, and in turn, a strong collective efficacy was not present. This could be due in part to the numerous changes in administration and an unstable environment. This scenario could be related to the lack of a strong response on the teachers' perception of their collective efficacy.

In contrast to the research findings of Tschannen-Moran et al. (1998) as discussed in Chapter II, in a study conducted by Hallinger and Heck (1996), there was little or no direct relationship between principal leadership and student achievement. If there is a cause for the underdeveloped academic press, a less than strong collective efficacy, and unremarkable student achievement at Heritage, it might not be related to the numerous

administrative changes, but rather to other variables not researched in this record of study.

### *Research Question 2*

What is the relationship between selected demographic variables and the perceptions of teachers regarding collective efficacy at Heritage Middle School, East Central Independent School District in San Antonio, Texas?

### **Conclusions for the Six Variables**

The following paragraphs discuss conclusions for the six variables used in the study.

#### *Variable 1: Ethnicity*

The results of this study indicated that there was no statistical difference between the perceived collective efficacy of White and Hispanic teachers at Heritage Middle School. The mean score of White teachers was 4.02 and the mean score of Hispanics was 3.95. Although White teachers had a higher mean score, t-test results indicated that there was no significant differences among the ethnic groups in regard to their perceived collective efficacy of the campus. The findings of this study did not support what is in the literature. In Goddard's and Skrla's (2006) research of urban schools in the southwestern United States, they found that both Hispanic and African-American teachers had higher perceived collective efficacy than their White counterparts. It was also established that an increase of the Hispanic population in a school was connected with growing levels of collective efficacy. Goddard and Skrla listed three possible reasons for the increase:



1. The cultural relationship that exists between Hispanic students and Hispanic teachers.
2. The possible ability of Hispanic teachers who speak Spanish.
3. Hispanic teachers are in greater demand in already efficacious schools.

Two reasons could account for the “no real difference” conclusion in the study of Heritage Middle School. First, an explanation could be that the White teacher population was larger than the Hispanic teacher population and the literature indicates that collective efficacy rises with an increase in Hispanic teachers. Second, the Hispanic teachers, like the majority of Hispanic students at Heritage Middle School, have been so assimilated into the American way of life that they no longer speak Spanish or are aware of their cultural heritage. As a result, both White and Hispanic teachers’ responses were similar regarding their collective efficacy.

#### *Variable 2: Gender*

The results of this study indicated that there was no statistical difference between the perceived collective efficacy of male and female teachers at Heritage Middle School. The mean score of male teachers was 3.91, and the mean score of female teachers was 4.13. At Heritage Middle School, female teachers outnumbered male teachers 36 to 22. The t-test results indicated that there was no significant difference resulting from the gender of the teachers.

Knobloch and Whittington (2002) stated that gender has been studied as a predictor of teacher efficacy and that female teachers had been typically more efficacious than male teachers. Ross (1994) added that this may be because the teaching community

was seen as predominately female. In this study, the teaching community is predominately male. Mawhinney et al. (2005) in their study of collective efficacy and grade levels found that there was a correlation between gender and collective efficacy that was small but significant. On the other hand, Goddard and Skrla (2006) in their research of school social composition on teachers' collective efficacy perceptions found no statistical significance between male and female teachers in regard to the strength of collective efficacy beliefs. Goddard's and Skrla's research concurs with the results of the study of perceived collective efficacy at Heritage Middle School.

*Variable 3: Years of Teaching Experience at Heritage Middle School*

The results of this study indicated that there was no statistical difference between the years of teaching experience at Heritage Middle School and teachers' perceived collective efficacy. For analysis purposes, the numbers were collapsed into three categories:

- 1 year of teaching experience had a mean of 4.09
- 2 to 5 years of teaching experience had a mean of 4.02
- 6 to 10 years of teaching experience had a mean of 4.03

A one-way analysis of variance (ANOVA) was used to analyze the data. Results indicated that the perceived collective efficacies of teachers based on their years of teaching at Heritage Middle School were not statistically different.

Goddard (2003) contended that a faculty needed leadership that motivated groups to achieve reachable goals that affected everyday occurrences in the classroom where results of their collective achievement could be readily seen. Leadership was needed to

build the collective efficacy of the faculty. Six principals in 10 years is evidence of frequent changes in leadership. The argument can be made that no matter the number of years a teacher had at Heritage Middle School, a stable administration would have resulted in stronger teacher efficacy.

This study also indicated that teachers who had taught at Heritage for 1 year had the highest mean score compared with teachers who had taught there between 2 and 10 years. The results of the record of study did not ask for the number of years a teacher had prior to their first year of teaching at Heritage. This researcher could not find any literature or research that addressed the collective efficacy of novice and experienced teachers in regard to employment in a new school. This could be a recommendation for further study.

*Variable 4: Years of Teaching Experience at East Central Independent School District*

The results of this study indicated that there was no statistical difference between the perceived collective efficacy of teachers at Heritage Middle School related to the number of years taught in the East Central Independent School District. Years of teaching in the district ranged from 1 to 35. Due to the low numbers, the years taught in the district were grouped into four categories:

- 1 to 2 years of teaching experience with a mean of 4.27
- 3 to 5 years of teaching experience with a mean of 3.89
- 6 to 13 years of teaching experience with a mean of 3.88
- 14 to 35 years of teaching experience with a mean of 4.18

The results of an ANOVA inferred that all the means in the population were the same. The results also coincided with the results of years teaching at Heritage Middle School; that is, no relationship between years of teaching and collective efficacy. Again, the novice teachers had the highest mean in this variable.

Tschannen-Moran and Hoy (2001) wrote that the self-efficacy beliefs of novice teachers was an area that needed further investigation since the early years of teaching can either make or break a teacher. Moran and Hoy further recommended that teacher preparation programs also needed to provide for more actual experiences and initially, if possible, assign novice teachers to smaller classes and more capable students.

Tschannen-Moran et al. (1998) found that experienced teachers' efficacy beliefs dropped when faced with change, but when evidence of improved learning occurred, their efficacy beliefs started to rise. The research indicates that when a campus and teachers are in a midst of change, their collective efficacy would be negatively impacted. In an effort to improve student scores in reading and mathematics, the East Central District directed that students with low TAKS scores be assigned to two math classes and additional reading classes. Teachers of different subject matter also volunteered to tutor students in math and reading in an after-school program. These changes could have had a depressing effect on the perceived collective efficacy of the campus. This situation would align with the finding of Ross (1994, 1998) who wrote that when experienced teachers tried to implement new methods, their efficacy beliefs were lowered; however, when the new methods indicated improvement, their efficacy beliefs rebounded. The

collective efficacy of the teachers at Heritage Middle School may still be somewhat depressed due to the changes in both teaching strategies and leadership.

*Variable 5: Total Years of Teaching Experience*

The results of this study indicated that there was no statistical difference between the perceived collective efficacy of teachers at Heritage Middle School based on their total years of teaching experience. Total years of teaching ranged from 1 to 35 years. Based on the frequency and relatively even numbers, the years intuitively fell into three groups:

- 1 to 10 years of experience with a mean score of 4.03
- 11 to 20 years of experience with a mean score of 3.91
- 21 or more years of experience with a mean score of 4.27

Teachers with more than 20 years had the highest mean of the groups. This finding was similar to that of Guskey (1986) who maintained that change is gradual and difficult for teachers, and it was common for teachers to fall back. With encouragement, support, and positive feedback, confidence was regained. As shown in Table 25, in Chapter IV, the means of teachers in reference to their collective efficacy increased with experience. Contrary to this, Brown and Gibson (as cited in Tschannen-Moran et al., 1998) found that teachers in the later years of their careers had a lower sense of efficacy. The results of the Heritage study in regard to total years of experience did not support the Brown and Gibson finding.

*Variable 6: Highest Degree Earned*

The results of this study indicated that there was no statistical difference between the perceived collective efficacy of teachers at Heritage Middle School in reference to the highest degree earned. Teachers with a bachelor's degree had the higher mean of 4.09. The combined mean score of teachers with advanced degrees was 4.00.

This finding is similar to Darling-Hammond (1999) and Darling-Hammond et al. (2002), as discussed in Chapter II, who determined that regardless of whether teachers received a university education or alternative certification, once years of teaching experience were included in the study, educational background was no longer significant.

On the other hand, a study conducted by Hoy and Woolfolk (1993) indicated that teachers with a higher level of education and more teaching experience had higher levels of both personal and general teaching efficacy. They also found that teachers with a graduate degree tended to have a higher level of teacher efficacy than those who did not. Ross et al. (1996) added that the rationale was that a graduate program would increase teachers' awareness of the causes that would lower their teaching effectiveness in the hope of dismissing the idea that the past could not be corrected. Acquiring a graduate degree would increase a feeling of security and result in higher teacher efficacy. Bandura (1993), Ross (1994), Tschannen-Moran et al. (1998), Hoy and Woolfolk (1993), and Guskey (1984), as reported in Chapter II, also remarked that the number of years in teaching did indicate some positive differences in regard to a teacher's perceived self-efficacy. The results of this study do not show support for Ross's work.

### **Recommendations and Implications for Practice**

The following are recommendations and implications for practice that arose from this research:

- The collective efficacy survey should be administered at the start and end of the school year to determine if the teachers' collective efficacy had increased, decreased, or remained unchanged. A causal study should be considered if any change is of significance.
- Principals should consider completing the teacher's collective survey to familiarize themselves as to what is being asked of the faculty. This will provide the principal with a preview of those areas that the teachers might identify as possible concerns in the development of the faculty's collective efficacy.
- Campus administration needs to make teachers aware that a faculty's collective efficacy is subject to change depending on many factors and that there are also periods of adjustment. Staff developments on how to build and maintain a positive collective efficacy should be presented to teachers on a periodic basis throughout the school year.
- Heritage Middle School, as well as the other campuses in the East Central Independent School District, should be offered the opportunity to experience the four factors that shape collective efficacy: mastery experience, vicarious experience, social persuasion, and affective states. The collective efficacy of a campus's core academic departments needs to be researched. For example,

Heritage's math department was comprised of industrious and compassionate teachers who provided every opportunity for students to succeed. Math scores, however, were not what they should have been and teacher morale suffered. Initiating strategies that would uplift teachers' spirit would be a good example of Bandura's fourth efficacy shaping process; namely, the affective state that deals with physical and emotional states of people.

- This record of study indicated that the teacher's ethnicity showed no statistical significance in their perception of the faculty's collective efficacy. However, research did indicate in Chapter II that Hispanics have a higher collective efficacy. Because the Hispanic population has increased rapidly during the past decade, it would be prudent for the school and district to actively recruit and promote the hiring of Spanish-speaking teachers and administrators to support this growth.
- East Central Independent School District could make a concerted effort to encourage teachers to attain a masters or doctorate by providing scholarships or some type of financial assistance. Several San Antonio school districts have partnered with local universities to provide classes that are housed in the school's classrooms making it convenient for teachers to attend. The district, campus, and students should benefit from providing such an opportunity. The review of literature discussed in Chapter II indicated that a higher level of education had higher levels of both personal and general teaching efficacy.



- Schools and faculty need to be provided research data that explains how collective efficacy is a stronger predictor of student achievement than the students' socio-economic status. Knowledge of this data would emphasize the importance of collective efficacy and refute any ideas that little can be done to help these students. In other words, minorities and poor children can learn.
- Principals need to be cognizant that when teachers are provided the power to influence school decisions concerning the instructional program, the greater their level of collective efficacy. The literature discussed in Chapter II indicated that teachers who professed to have more freedom on decisions that affected their classrooms had higher levels of efficacy.
- There has been little research on how to increase the collective efficacy of a school. This is an area that the district or school administrators should research. Staff developments on the topic of collective efficacy should be presented at the start of the school year and address the factors that create and impact collective efficacy.
- There has also been little research on the impact of principals' self-efficacy and how it bears on the schools' collective efficacy. Can a school's collective efficacy be immune to a principal's sense of self-efficacy?

### **Recommendations for Future Research**

The following are recommendations for future research that arose from this study:

- Further research is needed on how to develop a school's collective efficacy. For example, what can be done to build and strengthen mastery experiences and vicarious learning experiences for schools to change their culture and enhance collective efficacy especially in reference to the efficacy of novice teachers. Research that determines what methods, programs, and strategies would be the best sources for teachers to use to encourage the further development of the school's collective efficacy is needed.
- No research was found that explains how a school's collective efficacy is affected when there are numerous administrative changes. Research that examines the relationship between stability of leadership and collective efficacy of teachers is needed.
- Teachers' gender and ethnicity in regard to collective efficacy needs further examination. Research on these two variables was limited.
- Research has determined that empowering teachers to participate in school level decisions is one method that aided in the development of collective efficacy beliefs. The literature on this topic was limited.
- Additional research needs to be conducted on the collective efficacy beliefs of experienced teachers. Results of studies have been varied.

- Teacher's level of education in regard to collective efficacy also needs to be examined. Very little research has been conducted on this variable.

### **Closing Remarks**

The No Child Left Behind Act of 2001 has yet to complete its timetable, and there are still opportunities for additional research on how to best close achievement gaps and increase student achievement. By implementing the promising results of research that has already been conducted on both teacher efficacy and collective efficacy, the goal of not leaving a child behind just might be attainable. It was the intent of this study to support this attainment of the NCLB goals by exploring the collective efficacy of middle school teachers and how the variables of a teacher's gender, ethnicity, highest degree obtained, and years of teaching experience affected the perceived collective efficacy of the teachers and to add to the limited body of literature on the relationship between collective efficacy and the six variables.

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**APPENDIX A**  
**REQUEST AND PERMISSION TO USE COLLECTIVE**  
**EFFICACY SURVEY**

**Luisa Naumann**

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**From:** "Roger Goddard" <rgoddard@umich.edu>  
**To:** "Luisa Naumann" <linaumann@satx.rr.com>  
**Sent:** Monday, March 26, 2007 8:49 AM  
**Subject:** Re: Collective Efficacy Survey

Dear Luisa,

You may use the scale for the purpose you described below. If you google Wayne K Hoy, you will find that he has both the original and short collective efficacy scale available at his website. Whichever you use, the journal in which it originally appeared will require that you cite that article. The references should also be at Hoy's site.

The only think I ask in exchange for this permission is an abstract of your dissertation findings when you finish. Can you do that?

Roger Goddard

Quoting Luisa Naumann <linaumann@satx.rr.com>:

> Dear Dr. Goddard,  
 >  
 > My name is Luisa Maria Naumman and I am presently a doctoral student  
 > attending Texas A&M University in College Station, Texas. My record  
 > of study is titled "Collective Efficacy as Perceived by Teachers at  
 > Heritage Middle School in the East Central ISD in San Antonio, Texas.  
 > I would like to ask your permission to use the Collective Efficacy  
 > Survey you created for my record of study. I'm not making any money  
 > out of this, I just need to get my paper done. May I have your  
 > permission to use the survey?  
 >  
 > If you need further information, I will gladly provide it! If you  
 > agree, I need to know how to access it. Will try and reach you by  
 > phone so you can hear the desperation in my voice.  
 > Many thanks, Luisa  
 >  
 >  
 >  
 >

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Roger D. Goddard, Ph.D.  
 Associate Professor of Education  
 University of Michigan School of Education  
 Rm. 4111  
 610 E. University Avenue  
 Ann Arbor, MI 48109-1259

**APPENDIX B**  
**COLLECTIVE EFFICACY SURVEY**



## Collective Efficacy

Directions: Indicate your level of agreement with each of the following statements from STRONGLY DISAGREE (1) to STRONGLY AGREE (6)

	Strongly Disagree 1	2	3	4	5	Strongly Agree 6
1. Teachers in this school are able to get through to the most difficult students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Teachers here are confident they will be able to motivate their students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. If a child doesn't want to learn teachers here give up.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Teachers here don't have the skills needed to produce meaningful learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Teachers in this school believe every child can learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. These students come to school ready to learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Home life provides so many advantages that students here are bound to learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Students here just aren't motivated to learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Teachers in this school do not have the skills to deal with student disciplinary problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. The opportunities in this community help ensure that these students will learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Learning is more difficult at this school because students are worried about their safety.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Drug and alcohol abuse in the community make learning difficult for students here.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Feel free to make any additional comments regarding your perception of your campus' ability to effectively teach students. Please refrain from using the name of your principal or students' names.						
Please check the box that answers these questions.						
14. I am a: <input type="radio"/> Female <input type="radio"/> Male						
15. Including this year, how many total years of teaching experience have you had here at Heritage?						
16. How many years of teaching experience have you had in the East Central ISD?						
17. How many years of teaching experience do you have?						
<input type="radio"/> Beginning teacher (within your first year of teaching)						
<input type="radio"/> 1 – 5 years experience						
<input type="radio"/> 6 – 10 years experience						
<input type="radio"/> 11 – 20 years experience						
<input type="radio"/> Over 20 years experience						
18. I am:						
<input type="radio"/> African American						
<input type="radio"/> Hispanic						
<input type="radio"/> European American (White)						
<input type="radio"/> Native American						
<input type="radio"/> Asian/Pacific Islander						
19. How many years of experience do you have in teaching overall?						
20. Highest degree earned. <input type="radio"/> Bachelors <input type="radio"/> Masters <input type="radio"/> Doctorate						

**APPENDIX C**  
**LETTER REQUESTING APPROVAL**  
**FROM PRINCIPAL**

April, 2007

Principal's Name

I would like to conduct a study on the collective efficacy as reflected by the teachers here at Heritage Middle School for my doctorate at Texas A&M University. The purpose of the study is to investigate the perceived collective efficacy as reported by the teachers at Heritage Middle School, and to determine the relationship between selected demographic variables and teachers' collective efficacy. The variables will include the teachers' age, gender, ethnicity, the highest degree earned, the years of experience in the school, the district and years in the teaching field.

Each teacher's response will remain anonymous. Participation is voluntary, but in order for the survey to be effective and meaningful, I would need the input of the majority of the teaching staff. I would greatly appreciate your participation and support in encouraging the teaching staff to complete the survey.

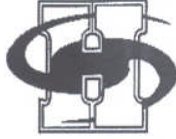
The survey that will be used was designed by Dr. Roger Goddard of the University of Michigan and has proven to be an effective tool in investigating the perceived collective efficacy of a group.

Again, all participating teachers will remain anonymous.

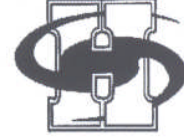
Thank you for your time and consideration.

Luisa Naumann  
Resource Math Teacher  
Heritage Middle School

**APPENDIX D**  
**LETTER FROM PRINCIPAL GRANTING APPROVAL**  
**TO CONDUCT COLLECTIVE EFFICACY SURVEY**



**E.C. Heritage Middle School**  
8004 New Sulphur Springs Rd.  
San Antonio, Texas 78263  
210-648-4546 phone 210-648-3501 fax  
[www.ecisd.net/heritage](http://www.ecisd.net/heritage)



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Ashley Chohlis, Asst. Principal  
Robert Kosub, Asst. Principal

**Roland Toscano, Principal**

Kelly Mendoza, Academic Dean

April 20, 2007

To whom it may concern:

I am granting permission for Mrs. Luisa Maria Naumann to conduct a survey on our campus. She may utilize any data collected for the purposes of completing requirements for a record of study towards an EdD from Texas A&M University, College Station.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Toscano'.

Roland Toscano  
Principal, East Central Heritage Middle School

**APPENDIX E**  
**LETTER TO FACULTY, INFORMATION SHEET, AND**  
**INSTRUCTIONS FOR COMPLETING SURVEY**

Dear \_\_\_\_\_

I am conducting a survey on collective efficacy as identified by teachers at Heritage Middle School for my doctorate at Texas A&M University. The purpose of the study is to investigate the perceived collective efficacy as reported by you, the teachers at Heritage Middle School, and to determine the relationship between selected demographic variables and teachers' collective efficacy. The variables will include the teachers' age, gender, ethnicity, the highest degree earned, the years of experience in the school, in the ECISD district and overall years in the teaching field.

*Principal's Name*, principal, has approved and given me permission to conduct the survey.

Each teacher's response will remain confidential. Should you be willing to participate, I ask that you complete the attached survey that was designed by Dr. Roger Goddard of the University of Michigan. I would greatly appreciate everyone's input since in order for the study to be effective and meaningful; I need the input of the entire teaching staff. Please, I would like and need everyone's participation.

Once you have completed the survey, please return it using the enclosed stamped envelope that is addressed to my home.

Again, all information will remain confidential. If you need further information, you may contact me in person or email ([luisa.naumann@fc.ecisd.net](mailto:luisa.naumann@fc.ecisd.net) or [linaumann@satx.rr.com](mailto:linaumann@satx.rr.com)).

Thank you for your time and consideration.

Sincerely,

Luisa Naumann

## Information Sheet

### **Title of Study: Collective Efficacy as Identified by Teachers at Heritage Middle School, East Central Independent School District, San Antonio, Texas.**

You have been asked to participate in a research study on the perceived collective efficacy as reported by teachers at Heritage Middle School in the East Central Independent School District in San Antonio, Texas. You were selected to be a possible participant because you are presently employed as a teacher at Heritage Middle School. A total of approximately 100 people have been asked to participate in this study. The purpose of this study is to investigate the perceived collective efficacy as reported by teachers at Heritage Middle School and determine the relationship between selected demographic variables and the teachers' collective efficacy. The variables will include age, gender, ethnicity, the highest degree earned, the years of experience at Heritage Middle School, the district and the overall years in education as a teacher.

If you agree to be in this study, you will be asked to complete a survey instrument. *Principal's Name*, principal, has already granted permission for me to conduct the survey. Your participation is voluntary. The survey will be placed in the teachers' mailbox with careful instructions on how to complete it. Upon completion, please enclose the survey in the stamped addressed envelope to be mailed to my home. This study will take approximately 20 minutes to complete. Once the survey is completed, you will not be imposed upon again. The risks associated with this study are minimal and unlikely to occur. The associated risk is discomfort due to length of survey. There are no direct benefits to this research.

You will receive no monetary compensation.

This study is confidential and no names will and should be mentioned. Surveys will be numbered to assist me in accountability. The records of this study will be kept private. No identifiers linking you to the study will be included in any sort of report that might be published. Research records will be stored securely and only by me as the researcher will have access to the records. Your decision whether or not to participate will not affect your current or future relations with Texas A&M University or East Central Independent School District. If you decide to participate, you are free to refuse to answer any of the questions that may make you uncomfortable. You can withdraw at anytime without your relations with the University, job benefits, etc., being affected. You can contact me in person or email ([luisa.naumann@fc.ecisd.net](mailto:luisa.naumann@fc.ecisd.net) or [lnaumann@satx.rr.com](mailto:lnaumann@satx.rr.com)) or with Dr. Virginia Collier, my co-chair at Texas A&M University with any questions about this study. Dr. Collier's e-mail address is [vcollier@tamu.edu](mailto:vcollier@tamu.edu).

This research study has been reviewed by the Institutional Review Board - Human Subjects in Research, Texas A&M University. For research-related problems or questions regarding subjects' rights, you can contact the Institutional Review Board through Ms. Melissa McIlhaney, IRB Program Coordinator, Office of Research Compliance, (979) 458-4067, [mcilhaney@tamu.edu](mailto:mcilhaney@tamu.edu).

Please be sure you have read the above information, asked questions and received answers to your satisfaction. You may keep this information sheet for your records. Your participation will be greatly appreciated.

Sincerely,

Luisa Naumann



May, 2007

### **Instructions for Completion of Survey**

Dear Participant,

Directions: Indicate your level of agreement with each of the following statements from STRONGLY DISAGREE (1) to STRONGLY AGREE (6).

1. All items with the exception of item # 13 need to be answered since the survey relies on various variables. Please do not leave the other items blank.
2. Answer each item with little or no regard for previous answers. Each item should stand on its own.
3. Keep in mind that the statements refer to Heritage Middle School and its school population. Try and not compare to other schools or districts where you may have been employed.
4. Please feel free to make any additional comments in item #13. Your opinion matters. If you need further space, you may continue on the back.
5. Please refrain from using the name of your principal, fellow teachers or students' names.
6. Once the survey is completed, please enclose in the stamped envelope that is addressed to my home.

While your response is voluntary, it is important that surveys are completed.

Sincerely,

Luisa Naumann

**APPENDIX F**  
**REMINDER TO FACULTY**

July, 2007

Dear Faculty Member,

I have yet to receive your survey and hopefully it is still being considered or in the mail.

This is just a friendly reminder that to make this survey meaningful, I would need to have as close to 100% response.

This is voluntary on your part and I realize that I'm imposing during a busy time of the year, but if you still have the packet and self-addressed envelope, it's not too late to respond.

If you chose to participate and do not have the survey, we can do it over the phone (216-9241...I will bubble your answers) or you can fax me the form at 223-5733. This is still a confidential document...your name will never be mentioned.

This is the last time I will impose on you and if I do not hear from you I will assume you chose not to participate. Please consider helping me. I will be forever grateful.

Hope you have a restful summer and hope to see you in August.

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## VITA

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### EDUCATIONAL HISTORY

2008	Ed.D., Educational Administration Texas A&M University, College Station, Texas
1978	M.A., English as a Second Language and Bicultural- Bilingual Studies, The University of Texas at San Antonio
1966	B.A., English and Art Incarnate Word College, San Antonio, Texas

### EMPLOYMENT HISTORY

1997-Present	Teacher, Resource Math, Heritage Middle School East Central Independent School District, San Antonio, Texas
1993-1997	Teacher, English as a Second Language, Agency for National Security Planning, Seoul, Korea
1992-1993	Teacher, English, Seoul American High School, Department of Defense Schools, Yongsan, Korea
1991-1992	Librarian, Harlandale Independent School District, San Antonio, Texas
1989-1991	Teacher, English as a Second Language, San Antonio Independent School District, San Antonio, Texas
1987-1989	Teacher, English as a Second Language, Panama Canal College, Department of Defense Schools, Panama
1984-1987	Teacher, Language Arts, Special Education, San Antonio Independent School District, San Antonio, Texas
1984-1984	Teacher, English as a Second Language, San Antonio Independent School District, San Antonio, Texas
1980-1983	Teacher, ESL, Math, Reading (Basic Skills Ed. Program), Temple University & Big Bend College, Germany
1974-1980	Teacher, Math, Reading, Language Arts (Special Education.), San Antonio Independent School District, San Antonio, Texas
1970-1974	Personnel Interviewer and Secretary, HEB Grocery Company Austin and San Antonio, Texas
1968-1970 & 1966-1967	Teacher, English, San Antonio Independent School District San Antonio, Texas

This record of study was typed and edited by Marilyn M. Oliva at Action Ink, Inc.