

The Relationship of Administrative Behaviors and Characteristics with Teachers' General and Personal Efficacy

Dennis M. Szal
Central Washington University

Background

A great deal of discussion and debate concerning improving education has taken place in recent decades. The United States was put on alert with the publication *A Nation at Risk* (1983). According to the report, "If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might as well have viewed it as an act of war" (p.5). This widely discussed report forecast a dim future for the United States if immediate and sustained efforts to improve education were not undertaken. More recently, Friedman (2004) describes the efforts of former technologically underdeveloped countries making tremendous strides to match and surpass the United States in the economic and intellectual world arena.

Since then, educators in many states have taken steps intended to meet the needs stated in this report. A number of these states have had legislators who have tried to address these concerns through lengthening the school day, broadening school governance, improving teaching techniques, and increasing accountability for educators.

Many of these initiatives have come and gone. The reason for these failures may be traced back to a reaction to the *Nation at Risk* (1983) report that stunned America, combined with an unclear vision of what the genesis for school improvement is. One positive aspect that emerged from the response to these initiatives may be found in the continued research focusing on specific and measurable results in school improvement.

Any school improvement efforts should consider the leadership of the organization. The importance of considering this facet of the organization cannot be overemphasized if substantive changes are to occur. Since both the largest and the smallest unit for school improvement is the individual school, the main leadership responsibilities fall upon the shoulders of the building principal. Barth (1986) clearly identified the building principal as the person who really causes schools to be the way they are. He goes even further in stating that it is not the central office personnel, university people or anyone else who is responsible for the ways a school functions; it is the building principal.

In 1986, the work of Blumberg and Greenfield further underscored the importance of the building principal in creating an attitude of concern for students. They found that, although the results of the principal's work cannot always be seen, it is evident in the attitudes of the members of the organization. Essentially, they suggested that the school reflects the beliefs, behaviors, and characteristics of the building principal.

Since it is critically important that the individual school improvement efforts stem from the building principal's leadership, what part does the principal play in improving instruction? The answer may be found in the examination of teachers' beliefs that are essential to the improvement process coupled with the part leadership plays in forming these beliefs. While academic emphasis, morale, teacher experience, and educational level contribute to personal teaching efficacy, Hoy and Woolfolk (1993) found, "Leadership variables contributed an additional significant increase in the explanation of personal teacher efficacy variance; principal influence was the most important variable" (p. 365).

While teacher efficacy has been found to impact student learning, little is known about the influence administrators may have on teachers' efficacy. If the relationship between teachers' efficacy and administrative behaviors and characteristics can be distilled, it may be possible for administrators to adopt and model actions.

According to Tschannen-Moran, et al. "A greater understanding of the factors that facilitate or inhibit development of efficacy beliefs among teachers across stages of their careers would be valuable...research could explore what events and influences teachers attribute to the development of their efficacy beliefs...Much work remains to be done, but a construct that is related to teachers' motivation to persist in the face of setbacks and their willingness to work to overcome difficulties is worth the effort. The list of positive outcomes related to a strong sense of teacher efficacy is impressive". (1998, p.242)

In 1976 RAND published a study that examined the difference in levels of success of various reading programs (Armor, et al., 1976). Researchers concluded teacher efficacy was a determining factor in reading achievement among minority students. In the RAND study, researchers found that scores on only two items, was found to be strongly related to variations in reading achievement among minority students.

The first RAND item was: *When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment.* A teacher who expresses strong agreement with this statement indicates that environmental factors overwhelm any influence that teachers can exert in the school. The RAND researchers labeled these teachers low in efficacy. Teachers with low efficacy ratings who agree that the influence of the environment overrides a teacher's ability to impact student learning, exhibit a belief that reinforcement of their teaching efforts lies outside their control, or is external to them.

The second RAND item was: *If I really try hard, I can get through to even the most difficult or unmotivated student.* Teachers who agree with this statement indicate confidence in their abilities to overcome factors or obstacles that could make learning difficult for students. RAND researchers labeled these teachers high in efficacy. Teachers who express confidence in their ability to teach difficult or unmotivated students believe that reinforcement of teaching activities lies within the teacher's control, or is internal.

According to Bandura (1977), efficacy is a belief in one's ability to accomplish a given task. Bandura theorized that individuals vary in the degree to which they believe they have the power within themselves to bring about desired results. This degree of belief can be measured in a way that allows researchers to determine if an individual has a high degree or low degree of efficacy. It is a belief system not unlike locus of control, in which and individual feels in control of given circumstances. Self-efficacy is a belief in one's capability to execute the actions necessary to achieve a particular level of performance.

The definition of efficacy has undergone continuous revision, leading to Guskey and Passaro's definition: "In general, efficacy is perceived as teachers' belief[s] or conviction[s] that they can influence how well students learn, even those who may be considered difficult or unmotivated" (1994, p. 628). Research is abundant in supporting teacher efficacy having a strong positive correlation with student achievement. Essentially, teachers produce results that mirror their beliefs. In 1976, RAND published a study that examined the difference in levels of success of various reading programs (Armor et al., 1976) Researchers concluded teacher efficacy was a determining factor in reading achievement among minority students. Another RAND study of federal programs supporting educational change also found that a teacher's sense of efficacy was strongly associated with increased student learning (Berman et al., 1977).

Ashton, Webb, and Doda (1983) noted the impact of teacher efficacy on relationships among teachers, student-teacher interaction, and student achievement. Highly efficacious teachers maintain higher academic standards, concentrate more on academic instruction, monitor student behavior more often develop warm supportive classroom environments, and have their students score higher as a whole on achievement tests when compared to teachers with lower levels of efficacy.

In 1984, Gibson and Dembo compared four teachers identified as highly efficacious with four teachers demonstrating low efficacy beliefs. They found the low efficacious teachers criticize students more often,

while the highly efficacious teachers were more likely to continue to work with students who encountered difficulty in their learning. Gibson and Dembo also found that highly efficacious teachers repeated questions and provided more prompts than low efficacy teachers.

Many factors seem to influence individual teacher's efficacy. As early as 1984, researchers began to recommend the careful examination of variables that might influence teachers' efficacy. Gibson and Dembo (1984) suggested "relationships with situational and organizational variables should be investigated because teacher efficacy is likely to be situation specific and may not generalize from one setting to another" (p.579). The importance of these factors influencing teachers' efficacy cannot be overstated. Newman, Rotter, and Smith (1989) explored the effects of organizational improvements on the alienation of teachers using a random sample of 353 public schools. They found that organization features (such as orderly student behavior, encouragement of innovations, and teachers' influence in decision making) had a much greater impact on teachers' sense of efficacy than did background features (such as urban/city, and school size).. This work underscores the importance of organizational factors impacting teachers' efficacy.

According to Schein (1985), principals can positively influence teachers' efficacy through various means. Schein maintains that administrative behaviors such as modeling, inspiring with purpose, and rewarding congruent behaviors send powerful messages to teachers and positively impact teachers' efficacy. Schien contends that principals' leadership behaviors influence their staffs much more than their words do.

Principals seem to be able to control or strongly influence most of the factors that influence teachers' efficacy. Lortie (1975) found that principals are perceived as being a greater resource than are parents or colleagues in creating the conditions needed to develop teachers' sense of efficacy.

The present study was designed to examine the relationship between teachers' efficacy and their perceptions of their building administrator's characteristics and behaviors. Although a great deal of information concerning the impact of efficacy beliefs on student achievement has been researched, little can be found concerning building administrator's impact on teachers' efficacy. This study is intended to add to the present body of knowledge on teacher efficacy and the part administrators may play in developing these beliefs.

Method

Public school teachers, kindergarten through twelfth grade, and public school administrators in Ogden, Utah were invited to participate in this study. The district has 15 elementary, four middle and three high schools. The Ogden City School District was chosen because it is a near-minority majority district, more closely reflecting the changing demographics of American public schools. Of the 12,520 students in the district about 40% were Pacific Islander, American Indian, Asian, Black, or Hispanic. Caucasians comprise the remainder of the enrollment.

Two instruments were used to gather data for this study. The Teacher Efficacy Scale (Gibson & Dembo, 1984) was used to measure teachers' perceived general efficacy and personal teaching efficacy. Gibson and Dembo developed this instrument using 208 elementary teachers to provide data for reliability and validity. Their work supported Bandura's 1977 two-factor model of efficacy. According to Bandura, one factor reflects the teachers' sense of personal responsibility in student learning. A second factor represents the teacher's ability to impact student learning significantly despite the external factors affecting the student. Analysis of Gibson and Dembo's Teachers Efficacy Scale yielded internal consistency reliabilities (Cronbach alpha coefficients) of 0.78 for personal efficacy factor, and 0.75 for general efficacy factor.

Leithwood and Jantzi's (1997) Leadership and Management of Schools instrument was used to determine teachers' perceptions of their building administrators' behaviors and characteristics. The authors divided this instrument into two subscales. The instrument contains 270 items measuring the perceived extent to which leadership practices are evident. Researchers who used this instrument collected data concerning six leadership subscales and four school management strands derived from Leithwood and Jantzi's model of transformational leadership. Reliabilities for the six factors ranged from 0.79 to 0.95.

The School Management portion contains 21 questions within four subscales. The subscales in the School Management section are; establishes effective staffing practices; provides instructional support; monitors school activities; and provides a community focus. A five-point Likert scale spanning from strongly disagrees to strongly agree was used to elicit teachers' responses. Analysis of internal consistency reliabilities yielded Cronbach alpha coefficient of 0.93 for the School Management portion of this instrument. Their factor analysis done for both sections of this instrument support the validity.

Each individual school supplied a roster of their teachers. Ten teachers from each building were randomly selected, to participate in the study. Both survey instruments and a letter of introduction explaining the study were mailed to the Superintendent of Ogden City Schools who distributed them to building principals. The building principals distributed them to the participants who chose whether or not they wanted to participate. If a selected participant declined to participate, alternates were contacted. After the instruments were completed, they were returned to the building principal in a sealed envelope, forwarded to the superintendent, and then collected by the researchers. Ninety-six of the instruments were returned for a response rate of 90%.

The statistical program SPSS was used to analyze the responses received from teachers using regression to explain the variability in teacher efficacy that is accounted for by administrators' behaviors and demographic variables. The intent of the analysis was to scrutinize the relationship between teachers' beliefs and administrator's practices that may impact teacher's **beliefs**.

Results

Demographic data were used to describe the sample. The following demographic categories were used to disaggregate the data: gender; years of teaching experience; last degree earned; level of grade taught; and years worked with current building administrators.

(See Table 1)

Total scores for general teacher efficacy and personal teacher efficacy were the criterion variables in this study. The total scores from the leadership and management of schools instrument were used as the predictor variables. Correlations were found between each individual subscale in the nature of school leadership section and the school management section with general teacher efficacy and personal teacher efficacy data for the sample.

Linear regressions were performed with general teacher efficacy and personal teacher efficacy as criterion variables. Demographic variables and subscales of the Leadership and Management of Schools survey were used as predictor variables. Demographic variables included years of teaching experience, gender, years worked with current principal, and last degree earned. Six subscales totals from the Nature of School Leadership and four subscale totals from the School Management section were also used. Table 2 shows that one subscale, symbolizing good professional practices, accounts for 20.8% of the variability in general teacher efficacy. The largest R^2 , based upon a combination of six subscales of school leadership, was found to be 37.9%, explaining the most variability in general teacher efficacy.

(See Table 2)

Table 3 describes the individual and combined subscales accounting for the most variability in personal teacher efficacy, based on the nature of school leadership subscales and demographic data. The largest R^2 , based upon a combination of seven subscales of school leadership, was found to be 40.3%, explaining the most variability in personal teacher efficacy.

(See Table 3)

Table 4 describes the individual and combined subscales accounting for the most variability in general teacher efficacy based on the management subscales and demographic data. The largest R^2 , based upon a combination of four subscales of school management, was found to be 20.4%, explaining the most variability in general teacher efficacy.

(See Table 4)

Table 5 describes the individual and combined subscales accounting for the most variability in personal teachers' efficacy based on the school management subscales and demographic data. The largest R^2 , based upon a four subscales of school management, was found to be 32.2%, explaining the most variability in personal teacher efficacy.

(See Table 5)

Discussion and conclusion

Variability in general efficacy and personal efficacy can be accounted for by perceptions of specific administrator behaviors and teachers' characteristics.

The results of the data suggest that 37.9% of the differences in general teacher efficacy can be accounted for by teachers who perceive their building administrator as a person who symbolizes good professional practices, develops a collaborative decision-making structure, provides individual support, holds high expectations and fosters development of vision and goals combined with demographic data. Furthermore, 40.3% of the variance in personal teacher efficacy can be accounted for by teachers who perceive their building administrators as symbolizing good professional practices, developing a collaborative decision-making structure, providing individualized support, providing intellectual stimulation, holding high performance expectations and fostering development of vision and goals, combined with demographic data.

The data further suggests that 20.4% of the variances in general teacher efficacy can be accounted for by teachers who perceive the building administrator as a person who establishes effective staffing practices, provides instructional support, monitors school activities and provides a community focus combined with demographic data. Furthermore, 32.2% of the variances in personal teacher efficacy can be accounted for by teachers who perceive their building administrator as a person who establishes effective staffing practices, provides instructional support, monitors student activities, and provides a community focus combined with demographic data. The data yielded by this research lends itself to specific summations, conclusions and recommendations.

From the statistical analysis of responses received from teachers participating in this study, several finds became evident. From multiple regression analyses the following conclusions were made. Variance in personal teacher efficacy can be accounted for by teachers' perceptions of their building principal's behavior and characteristics when combined with teachers' demographic characteristics. The results suggest that 37.9% in general teacher efficacy can be accounted for by teachers' perceptions of their building administrator's behaviors and characteristics, when combined with teachers' demographics. Furthermore the results suggest that 40.3% of the variance in personal teacher efficacy can be accounted for by teachers' perceptions of their building principal's behaviors and characteristics, when combined with teachers' demographics.

District administrators, and more specifically building principals, should understand the importance of the relationship between teacher beliefs and student learning, as evidenced in the 1976 RAND study. Principals should understand the overt and covert ramifications of their behaviors and teachers' characteristics and how these can account for the differences in teachers' levels of efficacy.

If we as practitioners of the teaching profession reflect upon our responsibilities it becomes critically important to question our beliefs. To accept anything but the best of ourselves and our students is to transgress the moral and ethical standards we should embrace.

References

- Armor, D., Conroy-Osgura, P., Cox, M., McDonnell, L., Pouly, E., Zellman, G. (1976). Analysis of the school preferred reading programs in selected Los Angeles minority schools (Rep. No. R-207-LAUSD). Santa Monica, CA: RAND. (Eric Document Reproduction Services n. 130243).
- Ashton, P.T., & Webb, R.B. & Doda, N. (1983). A study of teachers' sense of efficacy. Final report: Executive summary. Washington, D.C.: National Institute of Education.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Barth, R. S. (1986). The Principal and the Profession of Teaching. *Elementary School Journal*, 86 (4) 471-92.
- Blumberg, A., & Greenfield, W. (1986). *Effective principal: Perspectives on school Leadership*. Boston: Allyn and Bacon.

Friedman, T.L. (2005). *The World Is Flat: A Brief History of the Twenty-first Century*. New York: Farrar, Straus and Giroux.

Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, 76(4), 569-82.

Guskey, T.R. & Passaro, P.D. (1994). Teacher efficacy: A study of construct dimensions. *American Research Journal*, 31(3). 627-43.

Hoy, K. & Woolfolk A. (1993). Teachers sense of efficacy and the organizational health of schools. *Elementary School Journal*, 93(4), 355-372.

Leithwood, K., & Jantzi, D, (197). Explaining variations in teachers' perceptions of Principals' leadership. *Journal of Educational Administration*, 35(3-4), 213-31.

Lortie, D.C. (1975). *School teacher: A sociological study*, Chicago: University of Chicago Press.

Newman, F., Rotter, R., & Smith, M. (1989). Organizational factors that affect sense of efficacy, community and expectations. *Sociology of Educations*, 62, 221-38.

Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monograph*, 80, 1-28.

Schein, M.W. (1985). Student achievement as a measure of teaching effectiveness. *Journal of Science Teaching*.

Tschannen-Moran, M., Hoy, A., & Hoy, W. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*. 68(2), 202.

Table 1
Demographics of Sample

Gender					
	Male	Female			
Percent	25%	75%			
Number	24	72			
Years of Teaching Experience					
	1-5	6-10	11-15	16-20	20+
Percent	26.8%	18.5%	18.5%	15.4%	20.6%
Number	26	18	18	15	20
Last Degree Earned					
	Bachelor's		Master's		
Percent	71.6%		28.4%		
Number	63		25		
School Level Taught					
	Elementary		Middle	High	
Percent	64%		16.3%	19.8%	
Number	63		17	20	
Years Worked With Current Principal					
	1 -3 years	4-6 years	7- 9 years		
Percent	17.6%	10.1%	.03%		
Number	17	11	4		

Table 2
Summary of Regression Analyses for Nature of School Leadership Subscales that Account for the Largest Variances in General Teacher Efficacy

Variable	Predictor Variable Item Description	R ²
	Symbolizing Good Professional Practices Developing a Collaborative Decision-Making Structure Providing Individualized Support Providing Intellectual Stimulation Fostering Development of Vision and Goals Holding High Performance Expectations	37.9%

Table 3
Summary of Regression Analyses for Nature of School Leadership Subscales and Demographic Variables that Account for the Largest Variances in Personal Teacher Efficacy.

Dependent Variable	Independent Variable Item Description	R ²
	Symbolizing Good Professional Practice Developing a Collaborative Decision-Making Structure Providing Individualized Support Providing Intellectual Stimulation Holding High Performance Expectations Fostering Development of Vision and Goals	40.3%

Table 4
Summary of Regression Analyses for School Management Subscales that Account for the Largest Variances in General Teacher Efficacy

Dependent Variables	Independent Variables Item Description	R ²
	Establishes Effective Staffing Practices Providing Instructional Support Monitoring School Activities Providing a Community Focus	20.4%

Table 5
Summary of Regression Analyses for School Management Subscales that Account for
Largest Variances in Personal Efficacy

Dependent Variable	Independent Variable Item Description	R ²
Personal Teacher Efficacy	Monitoring School Activities	14.0%
	Providing Instructional Support	23.0%
	Monitoring School Activities	
	Establishes Effective Staffing Practices	29.7%
	Providing Instructional Support	
	Monitoring School Activities	
	Establishes Effective Staffing Practices	32.2%
	Providing Instructional Support	
	Monitoring School Activities	
	Providing a Community Focus	