# Teacher Efficacy Influences
## Job Satisfaction, Stress, and Burnout

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## Abstract

This review puts forward a concise examination of the early work of Bandura and his social cognitive theory as it infuses current notions of teacher self and collective efficacy. The foremost theme of individual and collective efficacy in the context of education is raised herein to develop and demonstrate the direct relationship between teacher efficacy, both individual and collective, and its effect on student achievement, discipline, school leadership, climate, and structure. Teacher stress, burnout, and job satisfaction, as factors underpinning the educators' sense of efficacy, are detailed within the landscape of self and collective efficacy research.

## Teacher Efficacy Influences: Job Satisfaction, Stress, and Burnout

Throughout our rural Ontario (Canada) secondary school teaching careers we have attempted to improve teaching praxes in order to facilitate student achievement and engagement. In doing this, we have been fortunate enough to have been a part of a reciprocal circle of influence among educators who have witnessed much growth in our respective professional practices. Our collective biases surface within the text as a belief that a teacher's sense of efficacy does impact student achievement. We have personally realized that as we became more confident in our praxes, our sense of agency increased, which resulted in improved student learning, engagement, and achievement. We believe that this influenced the collective sense of efficacy among our fellow professional colleagues.

It is through our rural teaching experiences that we have become somewhat intrigued by the possible benefits that increased teacher efficacy could have on

student achievement. Furthermore, we have begun to explore some of the barriers that might be hindering educators from fully achieving this sense of self-development within collective efficacy. The following review of literature is directed at achieving a deeper understanding of three main research questions: What impact does a teacher's sense of efficacy have on student achievement? Second, to what degree does stress, burnout, and job satisfaction influence teacher efficacy? Third, what barriers hinder educators from fully attaining self-efficacy?

## Background and Rationale

Fluctuating levels of student achievement continue to be an ongoing concern in education and there has been a plethora of attention given to the identification of factors that are thought to increase student engagement and achievement. Marzano (2007) concluded that, "among elements such as a well articulated curriculum and a safe orderly environment, the one factor that surfaced as the single most influential component of an effective school is the individual teachers within that school" (p. 1). Many studies (Marzano, 2007; Nye, Konstantopoulos, & Hedges, 2004) have quantified the influence an effective teacher has on student achievement that is relatively independent of anything else that occurs in the school. Many of the terms in the following discussion, such as efficacy, collective efficacy, burnout, and job satisfaction, need attention from the outset; therefore, our definition of key terms follows.

## Definition of Terms

We understand *efficacy* as having the knowledge and capacity to produce necessary or desired results (McTighe, 2008). We perceive *self-efficacy* as a cognitive process in which an individual constructs beliefs regarding one's abilities to organize and execute courses of action required to realize an accomplishment (Bandura, 1997). In addition, we embraced Skaalvik and Skaalvik's (2010) belief that "based on social cognitive theory teacher self-efficacy may be conceptualized as an individual teacher's belief in their ability to plan, organize, and carry out activities that are required to attain given educational goals" (p. 1059).

*Collective efficacy* is herein understood as the notion that people do not work as social isolates and thereby form beliefs about the collective abilities from within a group in which they belong. This was extended to include the following suggestion that,

> a group's shared belief in its conjoint capabilities to organize and execute the course of action required to produce given levels of attainments . . . similar to self-efficacy, collective efficacy beliefs affect group performance in diverse fields of functioning such as business, sports, politics, and education. (Bandura, 1997, p. 477)

Performance, especially in education while working alone or with others, can be a source of *job satisfaction*. We understood this term as: "an aspect of work often related to well-being. It is defined as a positive or negative evaluative judgment one makes about one's job" (Moè, Pazzaglia, & Ronconi, 2010, p. 1145). *Burnout* is to be understood as,

> a function of the many stresses felt by individuals in both their social life and their work experiences; a progressive loss of idealism, energy, purpose and concern as a result of work; and a syndrome of emotional exhaustion, depersonalization, and reduced accomplishment which is a special risk of individuals who work with other people in some capacity. (Ozdemir, 2007, p. 256)

Also, we embraced the words of Byrne (1998) who explained:

> Where teachers are concerned burnout was experienced as feelings of powerlessness in attempt to educate students and make school pleasant for students, lack of enthusiasm to prepare lessons, difficulty in motivating themselves to come to work, loss of energy, loss of memory and lack of interest in the subject. (p. 86)

Teacher stress, burnout, and job satisfaction are interrelated. As a result, we delve into the educators' sense of efficacy, which is constructed within a conception of self and collective efficacy.

## Dimensions of Individual Efficacy

Since Bandura's (1977) earliest research on social cognitive theory, there has been an accumulation of evidence suggesting that there is a strong relationship between a teacher's belief in his or her capability to impact student motivation and achievement of the desired outcomes (Emmer & Hickman, 1991; Goddard, 2002; Goddard, Hoy, & Woolfolk Hoy, 2000; Goddard & Skrla, 2006; Labone, 2002; Leithwood, 2008; Tschannen-Moran & Woolfolk Hoy, 2007; Watson, Chemers, & Preiser, 2001). It has been argued that an individual with a high sense of efficacy will be more successful in obtaining desired educational results than someone with a lesser sense of efficacy (Bandura, 1994; Steinberg, 2008). In terms of education, Emmer and Hickman (1991) concluded, "teacher's beliefs about their ability to influence student outcomes have been identified as predictors of teacher effort, attitudes and perceptions, and of teacher success in promoting student achievement" (p. 756). Beliefs are indeed powerful. Pajares (2002) and Labone (2004) examined teacher beliefs within overviews of social cognitive theory and self-efficacy and identified a number of major influences on teacher's

self-efficacy beliefs that related to enactive mastery, vicarious experience, social/ verbal persuasion, and affective states.

## Enactive Mastery

Enactive mastery experience refers to efficacy information gained from an individual's performance on a particular task. Of the four sources of efficacy information, enactive mastery is considered to be the most powerful source because it provides authentic evidence of one's performance on a task (Bandura, 1997). Successful performance might lead to increased efficacy, and failure might lead to decreased efficacy. However, changes in efficacy resulting from mastery experiences are not related to the performance per se, but result from the cognitive processing of the diagnostic information provided by the performance (e.g., feedback, self-reflection; Schunk & Meece, 2006).

## Vicarious Experience

Vicarious experience refers to efficacy information gained from observing models that perform a particular task including self-modelling (Bandura, 1997). Under certain conditions, vicarious experience or modelling also might influence the development of personal efficacy beliefs, particularly when individuals have limited prior experience on which to base efficacy beliefs. Modes of modelling include both observations of others' performances, as well as self-modelling in which the observer observes himself/herself engaging in tasks and behaviors (Labone, 2004; Pajares, 2006).

## Verbal Persuasion

Verbal persuasion refers to efficacy information gained from positive talk about an individual's capability to perform a specific task (Pajares, 2002). Verbal persuasion, while recognized to be limited on its own in its effectiveness in enhancing efficacy, may be useful for mobilizing greater effort and persistence. Various factors influence the effectiveness of verbal persuasion. These include how the performance feedback is framed, the perceived expertise and credibility of the persuader, and the degree of disparity between the potential implied by the persuader and the recipients' perceptions of their current level of performance (Labone, 2004).

## Physiological and Affective States

Physiological and affective states refer to efficacy information gained from physiological and emotive reactions to a particular task. Tschannen-Moran and Woolfolk Hoy (2007) maintain, "the feelings of joy or pleasure a teacher experiences

from teaching a successful lesson may increase the sense of efficacy, yet high levels of stress or anxiety associated with a fear of losing control may result in lower self-efficacy beliefs" (p. 945).

Even with several sources of efficacy, not all teachers feel equally efficacious for all teaching situations. Goddard et al. (2000) maintain, "teacher efficacy is context specific. Teachers feel efficacious for teaching particular subjects to certain students in specific settings, and they can be expected to feel more or less efficacious under different circumstances" (p. 482). Therefore, the multiple sources of efficacy beliefs are not generalized expectations but rather are context-specific and can be impacted by school-level variables such as climate and structure of the school and the leadership of the principal.

## School Climate and Structure

The nature of the environment in which one works has the potential to positively or negatively impact a teacher's efficacy beliefs. It should not be surprising that a supportive, positive school climate with a strong sense of community would be a positive force in shaping desirable teacher efficacy beliefs. Conversely, a school wrought with negativity and alienation may diminish teacher efficacy beliefs. Tschannen-Moran and Woolfolk Hoy (2007) add,

> Stronger self-efficacy beliefs have been found among teachers who perceived a positive school atmosphere . . . and a strong press for academic achievement among the staff in their schools. . . . Moreover, sense of community in school was the single greatest predictor of teachers' level of efficacy. (p. 946)

Over 20 years ago, Ashton's (1984) study of 48 high schools involved intensive interviews with teachers, and concluded:

> Current conditions in schools—the isolation, the difficulty in assessing one's effectiveness as a teacher, the lack of collegial and administrative support, and the sense of powerlessness that comes from limited collegial decision-making—make it difficult for teachers to maintain a strong sense of efficacy. (p. 28)

Today these same perceptions can surface within,

> teachers in a school characterized by a low level of collective efficacy [who] are less likely to accept responsibility for students' low performance and more likely to point to student risk factors, such as poverty and limited knowledge of English, as causes. (Protheroe, 2008, p. 44)

Recently, Tschannen-Moran and Woolfolk Hoy (2007) examined teachers' levels of efficacy across subject and academic pathways and found that "teachers reported lower self-efficacy for non-academic track classes as compared with academic and honours classes" (p. 947). The authors concluded, "teaching context is perceived by teachers to be more specific than the school or general population served by the school, although school-level variables also appear to influence self-efficacy beliefs" (p. 947). In other words, what you teach and at what level may play a role in your individual perception of self-efficacy. Protheroe (2008) found, "teachers in a school characterized by a can-do, 'together we can make a difference' attitude [were] typically more likely to accept challenging goals and be less likely to give up easily" (p. 44). It is neither a top-down nor bottom-up attitude; instead, it is a school community attitude. We may venture to conclude that teacher efficacy could be concurrently linked to both a context and attitude.

## Principal Leadership

The stronger the self-efficacy of an individual, the longer their persistence, and this can be transferred to the many roles within education. Watson, Chemers, and Preiser (2001) reflected upon educational leadership and suggested,

> Leadership theory suggests that exceptional leaders influence their followers' sense of collective efficacy. . . . Leadership is critical to collective efficacy for several reasons. First, effective leadership can contribute to a sense of smooth functioning of groups through behaviours aimed at effective coordination and removing obstacles to effective performance. . . . Furthermore, leaders who model positive attitudes and behaviours may have an important social influence on collective efficacy. (p. 1059)

Similarly, Leithwood (2008) revealed the contributions of positive efficacy beliefs of school leaders and the factors that influence their capacity by suggesting,

> leader confidence or self-efficacy is likely the key cognitive variable shaping leaders' functioning in the dynamic environment of their schools . . . every major review of the leadership literature lists self-confidence as an essential characteristic for effective leadership. (p. 1)

This research made known that factors such as leader gender, years of experience, and level of school administrated seemed to have an insignificant contribution to leader efficacy. The most notable influence on school leader's efficacy was the "district's focus on student learning and the quality of instruction, as well as district culture" (Leithwood, 2008, p. 3).

Tschannen-Moran and Woolfolk Hoy (2007) concluded that principal leadership is closely linked to teachers' sense of self-efficacy, and,

> schools where the principal was able to inspire a common sense of purpose among teachers and where student disorder was kept to a minimum were schools in which teachers felt a greater sense of efficacy. In addition, principals who used their leadership to provide resources for teachers and to buffer them from disruptive factors but allowed teachers flexibility over classroom affairs created a context that allowed strong self-efficacy beliefs to develop. (p. 947)

When principals model efficacious forms of leadership and are confident in their roles, school communities thrive. However, is it really traced to the collective or individual?

## Collective Efficacy

The formation of collective teacher efficacy has been built on the foundation of the individual teacher efficacy model of Bandura's (1997) social cognitive theory. Within an organization, collective efficacy is the shared perceptions of group members to bring about desired ends (Goddard, 2002; Goddard et al., 2000; Goddard & Skrla, 2006; Leithwood, 2008; Newman, Rutter, & Smith, 1989; Tschannen-Moran & Woolfolk Hoy, 2007). Goddard and Skrla (2006) go on to suggest:

> Findings confirmed that, even after accounting for the effects of student gender, race, socioeconomic status, and prior academic success, perceived collective efficacy is a strong predictor of differences among schools in student achievement. A robust sense of collective efficacy fosters student achievement by creating a school culture characterized by a norm of, and an expectation for, sustained effort and resiliency in the pursuit of schools for student growth and development, particularly academic achievement. (p. 221)

Just as teacher efficacy is a strong predictor of student success, collective efficacy has been shown to make a difference between schools and in school achievement (Goddard, 2002; Goddard et al., 2000; Goddard & Skrla, 2006). Goddard et al. (2000) claim:

> Just as individual teacher efficacy may partially explain the effect of teachers on student achievement, from an organizational perspective, collective teacher efficacy may help to explain the differential effect that schools have on student achievement. Collective teacher efficacy, therefore, has the potential to contribute to our understanding of how schools

differ in the attainment of their most important objectives—the education of students. (p. 483)

The four sources of efficacy belief for individual efficacy (i.e., enactive mastery experiences, vicarious experiences, social/verbal persuasion, and affective states) also are the basis for collective efficacy. Mastery experiences are important to collective efficacy since teachers, as a group, experience successes and failures. School successes foster a sense of efficacy while failures undermine it. Vicarious experiences offer examples of efficacious schools that can promote a model of positive organizations. Organizations learn by observing other organizations. Social/verbal persuasion can encourage staff to give the extra effort that leads to success. Persuasion can support persistence that could lead to productive problem-solving within an organization. Affective states of an organization have much to do with how challenges and stresses are handled by the school. Strong emotional reactions can either support or undermine an organization/school when faced with a crisis.

School consensus is a significant factor affecting a school's sense of collective efficacy. Newman, Rutter, and Smith's (1989) study indicated that consensus was the strongest variable on a school's collective efficacy. They suggest:

When teachers within a school vary considerably in their sense of efficacy, these disparities may have the negative impact of reducing the efficacy in the school as a whole. Whereas if teachers tend to perceive similar levels of efficacy, this perception may reinforce a sense of community that tends to boost the overall sense of efficacy. (p. 234)

## Job Satisfaction, Stress, and Burnout: A Global View

Teaching is a global profession that has witnessed high levels of teacher attrition, burnout, and emotional exhaustion (Hakanen, Bakker, & Schaufeli, 2006; Maslach, Schaufeli, & Leiter, 2001). The daily events of teaching are often marked by a myriad of activities that limit quality time for reflection and adult interaction (Ryan, 2005). Teacher isolation does little to address ongoing feelings of frustration and monotony, which may perhaps lead to increased anxiety (Fullan, 2001). This could contribute to teachers feeling drained intellectually as well as emotionally when faced with the prospect of dealing with student misbehaviors (Chang & Davis, 2009). Not only does teacher stress have internal negative effects, it also can be seen to have harmful external effects that impact students in the classroom environment and school culture within a building (Olivier & Venter, 2003). Chang's (2009) study of teacher burnout and emotional responses suggested that teachers experience an unparalleled level of emotional stress and workload compared to other professions (p. 188). Chang (2009) further noted:

The habitual patterns in teachers' judgments about student behavior and other teaching tasks may contribute significantly to teachers' repeated experience of distinct unpleasant emotions and may eventually lead to certain degrees of burnout . . . teachers who experience higher levels of burnout tend to withdraw from student–teacher relationships and tend to feel inefficacious about their teaching tasks. . . . As a result, they may face more problems in classroom management with regard to students' behaviors. (p. 194)

Withdrawal is not an answer; it is a symptom that if recognized can be dealt with by all who sense this behavior and, above all, by those who care.

Caprara, Barbaranelli, Steca, and Malone's (2006) study of 2,000 Italian junior high school teachers examined their self-efficacy beliefs as determinants of their job satisfaction as well as student achievement. This study was aligned with Bandura's social cognitive principles and the teachers completed self-report questionnaires to assess their self-efficacy beliefs and job satisfaction over a two-year period. This study further associated the contribution of teachers' self-efficacy beliefs upon their level of job satisfaction (Caprara, Barbaranelli, Borgogni, Petitta, & Rubinacci, 2003; Caprara, Barbaranelli, Borgogni, & Steca, 2003). This work attested to the influence that their perceived self-efficacy had on their ability to handle various tasks, obligations, and challenges, which were related to their professional role (p. 484).

This analysis supports and confirms earlier research (Allinder, 1994) indicating that teachers with a strong sense of efficacy tend to have high levels of planning and organization, are open to new ideas, and are more willing to experiment with new methods to better meet the needs of their students. These strong beliefs of self-efficacy also contribute to teachers' ability to create the conditions that promote interpersonal network, which in turn nourish and sustain their work satisfaction. The authors hypothesized that teachers' job satisfaction and student achievement might have a positive reciprocal relationship. Their results found this to be false, indicating that high-achieving students did not contribute to teacher job satisfaction nor did job satisfaction contribute to increased student achievement.

Ozdemir's (2007) research examined the influences of classroom management efficacy, marital status, gender, and teaching experience on teacher burnout. Over 500 Turkish primary teachers, male and female, completed inventories that rated teacher burnout in terms of emotional exhaustion, depersonalization, and personal accomplishment. The results of this study indicated that classroom management efficacy, marital status, and experience significantly affected emotional exhaustion. The study suggested, "teachers who are single, who doubt their classroom management efficacy, who are experienced tend to experience more emotional burnout" (p. 259). Also, it was found that classroom management efficacy and marital status were predictors of depersonalization established,

"teachers who are single, and who have low classroom management efficacy appear to experience more depersonalization" (p. 259). Finally, this research indicated that classroom management efficacy, gender, and experience proved to be the significant predictors of self-concept beliefs. This suggests that as teachers' classroom management efficacy scores and years of experience increase, they feel more personal accomplishment, which impacts self-concept.

Skaalvik and Skaalvik's (2010) subsequent study of teacher self-efficacy and burnout utilized a Norwegian scale for measuring,

> teacher self-efficacy and partly explore relations between teacher's perception of the school context, teacher self-efficacy, collective teacher efficacy, teacher burnout, teacher job satisfaction and teacher's beliefs that factors external to teaching puts limitations to what they can accomplish. (p. 1059)

Over 2,200 Norwegian primary and middle school teachers participated in this research. It yielded many results, the most notable being that teacher self-efficacy was strongly associated with teachers' relations with students' parents, whereas collective teacher efficacy was more strongly related to supervisory support. Through establishing positive relations with parents, teachers increase their belief of self-efficacy. The authors contend, "the results indicate that parents' evaluation of the teaching is an important frame of reference for teachers' self-evaluation and self-perception." (p. 1065). From this research, it was also found that collective teacher efficacy was positively correlated with relations to parents and teacher autonomy but most significantly it was strongly related to supervisory support. The authors explain:

> Supervisory support was in the study indicated by items tapping teachers' feeling of having cognitive and emotional support from the school leadership, that they could ask the school leaderships for advice, and that their relation to the school leadership was one of mutual trust and respect. Thus, compared to (individual) teacher self-efficacy, collective efficacy seems to be more dependent on the functioning of the school leadership or the school principal. (p. 1065)

Another global investigation undertaken by Klassen, Usher, and Bong (2010) considered teachers' collective efficacy, job satisfaction, and job stress in a cross-cultural context. They gathered multivariable data from over 500 primary and middle school teachers from Canada, Korea, and the United States. The study examined how teachers' cultural values and work-related beliefs operated in three countries and focused specifically on the differences between an individualist (i.e., Canada and the United States) versus a collectivist (i.e., Korea) culture. The authors found that teacher collective efficacy related positively with job satisfaction across settings. Also, they confirmed that teachers' collectivism beliefs were more strongly

associated with job satisfaction for Koreans (i.e., collectivist culture). They concluded that job stress was not significantly associated with job satisfaction across the three studied locales. Korean teachers found themselves experiencing higher levels of job stress when surrounded by highly competent colleagues.

## Summary

In summary, teachers' sense of self-efficacy and collective efficacy have a significant impact on student achievement (Emmer & Hickman, 1991; Goddard, 2002; Goddard et al., 2000; Goddard & Skrla, 2006; Labone, 2002; Leithwood, 2008; Tschannen-Moran & Woolfolk Hoy, 2007; Watson, Martin, & Preiser, 2001). These studies help educational organizations understand that the basic factors that contribute to increased levels of teacher efficacy in turn increase student efficacy and autonomy. The suggestion of this relationship has implied that school administrators need to take the time to provide teachers with the opportunity to pursue activities that will increase social and verbal persuasion to build collective efficacy amongst their staff (Goddard et al., 2000). This could be as simple as district pairing and sharing of practices among demographically similar schools or a sharing of effective practices in a family of schools.

Furthermore, school and district administration need to be aware of the potential that social cognitive theory has on the minds of teachers. If the dimensions of efficacy are recognized and fostered, this could support teachers to successfully meet the challenges they face. Also, it could help them become members of a faculty that is competent, while believing in their capacity to positively affect student achievement.

This review demonstrates that stress, job satisfaction, and burnout influence teachers' sense of efficacy, individually and collectively (Caprara, Barbaranelli, Steca, & Malone, 2006; Klassen, Usher, & Bong, 2010; Moè, Pazzaglia, & Ronconi, 2010; Ozdemir, 2007; Skaalvik & Skaalvik, 2010). Caprara, Barbaranelli, Steca, and Malone (2006) revealed that social cognitive theory provides a solid framework that correlates job satisfaction with self-efficacy beliefs. This study provides a theoretical foundation that can lead to interventions to encourage teacher well-being as well as student achievement. The author's state:

> We believe that the beliefs teachers have in their capacity to master their profession, namely, to cope effectively with the variety of interrelated tasks and circumstances it may carry, are ultimately decisive in supporting children's academic achievement. Academic achievement does not rest only on learning, but as much on behaving appropriately with others—on interpersonal skills less than on cognitive skills. To this aim, efficacious teachers not only promote learning but also promote personal development, enthusiasm, and responsibility while serving as models of appropriate and successful behaviours. (p. 487)

Klassen, Usher, and Bong's (2010) study enables the reader to understand the complexities and influence of culture in the context of education. When looking at the influences of stress, job satisfaction, and burnout, one cannot generalize the effects cross-culturally. Societal influences and family belief systems are deeply imbedded in different cultures, and this ultimately affects how teachers will cope and experience stress or job satisfaction. While keeping this cultural component in mind, one could question the results of Ozdemir's (2007) study of Turkish teachers. In this research, such variables as gender and marital status were included in measuring a correlation to emotional exhaustion and personal accomplishment. We would be hesitant to generalize these results cross-culturally given that results of the Klassen, Usher, and Bong study strongly indicate that indeed there is a difference in perception and hence efficacy beliefs between cultures. If one acknowledges this, Ozdemir's research suggests some fascinating propositions. Perceived classroom management efficacy significantly correlated with teacher burnout. This would support the need for more research into this correlation so as to ensure lower attrition rates in education.

Moè, Pazzaglia, and Ronconi's (2010) study enforced the notion that being an able teacher does not necessarily result in job satisfaction. They conclude:

> We found that being able does not guarantee satisfaction, if (despite the good practice) one fails to experience positive affect of feeling self-efficient. This leads one to very important practical implications: our findings can help in the planning of effective training designed to increase job satisfaction, with particular emphasis on self-efficacy beliefs and positive affect. (p. 1151)

This research has corroborated the idea that once beliefs are established, they are resistant to change. Moè et al. (2010) suggest that this job satisfaction can be significantly influenced via efficacy, mastery experience, vicarious experience, social/verbal persuasion, and affective states.

Finally, Skaalvik and Skaalvik's (2010) study produced some very practical and insightful results. Their research indicated that beyond the previously mentioned influence of relationships (e.g., teacher/parent) on teacher efficacy and supervisory support on collective efficacy, there were particularly strong relations found between time pressure and emotional exhaustion. The authors suggested:

> Teachers we have been talking with especially point out that the school-days have become more hectic, that the time they spend on paperwork and documentation is increasing and that parents more than before expect teachers to be available after normal working hours. It is therefore important that both local and central school leaders make an effort to reduce time pressure on teachers. (p. 1066)

## Conclusions

From the onset of this inquiry we sought to gain a deeper understanding of three main research questions: What impact does a teacher's sense of efficacy have on student achievement? Second, to what degree does stress, burnout, and job satisfaction influence teacher efficacy? Third, what barriers hinder educators from fully attaining self-efficacy?

In terms of the impact that teacher efficacy has on student achievement, the review of literature clearly demonstrated the impact of both individual and collective teacher efficacy beliefs on achievement, and the impact they have on organizational functioning, goal attainment, and student achievement. In Leithwood and Jantzi's (2008) study, the authors maintained,

> Considerable evidence has now accumulated about the significant contributions that positive efficacy beliefs on the part of those in many different roles make to such personal and organizational outcomes as job search success, increased task performance, improved attendance, and increased academic achievement (Prussia, Anderson, & Manz, 1998). In the case of teachers' increased individual efficacy beliefs, a small but impressive body of research indicates that it has large effects on both teacher performance and student outcomes. (p. 497)

At the school level, the literature reveals that the levels of efficacy held by teachers and administration affect all stakeholders. Based on this review, the belief that one has about his or her capacity to bring about a desired result needs to be strengthened and fostered in education. A school's structure and climate are directly affected by the levels of efficacy within its building. Furthermore, efficacious leadership at a district and school level can produce positive outcomes for the staff and students they lead. Collective efficacy beliefs hold the promise of nurturing collaborative work to improve the quality of teaching and learning in all schools.

To better understand teachers' overall well-being and feelings of competence, we considered the research of Moè et al. (2010) who concluded:

> Job satisfaction is especially crucial for teachers, not only because its lack is associated with burnout, but because demotivated teachers demotivate students through emotional contagion and their inability to satisfy their students' need for autonomy, competence and relatedness. Conversely, high satisfaction increases a teacher's motivation. Motivation or even enthusiastic teachers raise intrinsic motivation in students and promote their levels of vitality. (p. 1145)

From this review, it becomes evident that the stress related to teacher burnout is multi-faceted and complex in nature. Since this relates to teacher efficacy,

Moè et al. (2010) suggested, "it is plausible to expect a mutual relationship between teaching practice and self-efficacy. In particular, good teaching practice could be a predictor of a teacher's self-efficacy" (p. 1146). The research included in this review clearly points to the fact that, besides good teaching, we need teachers who are highly satisfied with their work with students. They need to feel capable and believe in themselves, as well as their colleagues, so that they can diminish the multi-dimensional stresses encountered in the teaching profession.

## Recommendations for Further Research

Each of the articles in this literature review identifies many areas for future research. These recommendations range from more longitudinal studies measuring the multiple variables connected to teacher efficacy, measuring the effectiveness of programs, or interventions helping produce more efficacious teachers. For our purposes, we would like to participate in the continued evaluation of the effectiveness of district initiatives and to see whether or not these have any impact on teacher efficacy as well as student achievement.

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