A comparative study of teachers' sense of efficacy in low-and high-decile schools

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Abstract

Closing the gap in education between the extremes on the socioeconomic scale is the subject of much research and debate. Great emphasis is placed on the role of teachers. Teachers' feelings of self-efficacy can be a powerful driving force behind the motivation to strive for student achievement. Various teacher and contextual variables can influence the level and stability of this efficacy. Successful experiences against challenge are known to contribute toward improving beliefs in efficacy. The concern however is the effects of unsuccessful teaching experiences and implications for student achievement. Researchers recommend a greater understanding of the contextual effects on teacher efficacy, particularly in lower socioeconomic teaching environments. Previous research has commonly investigated the effects of teacher experience, teacher attributes, and student socioeconomic status on teaching efficacy. This study positioned the classroom teacher as a participant within an educational process which functions systemically and involves various other participants. Level of teacher efficacy is viewed as an outcome of the nature of the relationships and engagements within the educational process and system. This study compared teacher efficacy beliefs and experiences between low- and high-socioeconomic teaching contexts. The qualitative data from teacher responses to open-ended questions were analysed to investigate how the variables involved in forming teacher efficacy beliefs operate and function. Convincing evidence was found to support the assertion that low teacher efficacy may be the result of system failures or shortcomings. In general teachers tended to attribute the reasons for school problems to students or factors outside the classroom. Data analysis revealed states of teacher "helplessness" against challenge which can be linked to poor

relationships and communication with sources of support. Evidence was found in support of more collaborative partnerships for higher teacher efficacy and resilience against challenge.

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Chapter 1. Introduction and research questions

A number of interacting factors influence levels of school achievement and student academic performance. Educational research has long established the crucial interaction between teacher and contextual variables in creating the classroom climate necessary for effective teaching and learning. According to Bandura (1977), high teacher efficacy beliefs are a powerful motivational force which can overcome obstacles such as environmental constraints because teachers will feel self-motivated to achieve with their students. Of concern are the factors which can affect the relationship between teacher and context and which can result in low teacher efficacy. Low teacher efficacy has been directly associated with unproductive classrooms, poor academic achievement, and increased stress levels.

Pajares and Urdan (2006) note that, for Bandura, none of the mechanisms of human agency was more central or pervasive than beliefs of personal efficacy. When a teacher has strong beliefs about personal efficacy, the teacher will remain motivated and resilient against any challenge to efficacy (Bergsmann, Van De Schoot, Schober, Finsterwald, & Spiel, 2013; Kowal & Brinson, 2011; Ozturk, 2012; Wachira, Hall, & Pourdavood, 2003). Efficacious teachers are driven to implement highly effective classroom practices (e.g. instructional strategies, motivating styles, pedagogical beliefs, effort), which in turn affect student outcomes such as expectations, student motivation, and achievement (Duffin, French & Patrick, 2012).

Many interacting contextual variables affect teachers' sense of efficacy. According to

Bandura (1977), teachers who enjoy successful experiences in their jobs are more likely to grow in efficacy and beliefs about their capabilities. However, as a construct subject to contextual influences, low efficacy can result from demotivating teaching experiences (Bandura, 1977; Tschannen & Woolfolk Hoy, 2007). Bandura states that the degree of self-efficacy reflects the level of difficulty individuals believe they can surmount (Bandura, 1982). Low teacher efficacy and student learning problems have been most commonly associated with the challenges and demands of low-socioeconomic teaching conditions (Barbee, 2010; Ross, Romer & Horner, 2012; Sandoval, 2010). However, even in these conditions Bandura (1977) states that when teachers are able to successfully overcome contextual challenges their learned mastery experiences will improve beliefs in future efficacy. Bandura (1986, 1997) postulates mastery experiences as the most powerful source of teacher efficacy. A number of researchers have argued that to improve and maintain higher efficacy beliefs the sources of teacher efficacy need to be explored and well understood (Bandura, 1986, 1997; Mansfield & Woods, 2012; Mohamadi & Asadzadeh, 2012).

Numerous contextual variables affect teachers' classroom experiences, efficacy, and resilience (Labaree, 2000; Stipek, 2012). Stipek states that teacher efficacy is best understood as part of a set of interrelated contextual and perceptual variables that involve parents as well as the school context. Understanding efficacy then requires a greater understanding of how the variables which produce efficacy operate and interact with each other. Bandura's (1977) social cognitive theory offers a framework which explains efficacy as an outcome of processes involving various participants and their relationships with each other.

The framework postulated by Bandura (1977) guides this study and presumes that efficacy can be understood and explained by investigating the reciprocal relationships between the variables which produce that efficacy. This study considered and discussed the influences on efficacy by schools, teachers, students, and parents. Each of these participants form part of the contextual environment of learning and in many ways also define the very contextual elements which affect the stability of efficacy in teaching. Theoretically, Bandura's (1977) social cognitive theory of efficacy intimates that the beliefs and actions of each of these participants need to cohere to mutually affect each other before efficacy can result.

The teaching contexts selected for the present study are associated with broad differences in socioeconomic status (SES). With regard to the New Zealand school decile rankings used in this study, deciles 1, 2, 3 and 8, 9, 10 represent the two extremes on the socioeconomic scale. The teaching challenges faced in some lower decile schools (deciles 1, 2, and 3) have been linked to problems associated with ethnic diversity and lower SES (Prochnow & DeFronzo, 1997). Bandura (1977) asserts that experience in challenging conditions can improve efficacy beliefs. With reference to lower decile schools in New Zealand, Rubie-Davis, Flint, and McDonald (2012) assert that these schools may have many highly efficacious teachers. If many highly efficacious teachers share the same context with less efficacious teachers then that context contains the elements and the potential for more efficacious teaching practices.

In a more recent work Bandura (2008) states that self-efficacy can be affected by both positive and negative factors in the teaching environment. As teaching tasks are embedded within contexts which vary in difficulty and influences, teachers assess their

contextual situations before forming beliefs about whether they “can” or “cannot” perform tasks (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). Of importance for teacher efficacy then are the conditions in the teaching context which affect their assessments of their classroom and working situations. This study investigates these assessments which influence efficacy beliefs with a view to identifying the variables related to low and high teacher efficacy.

Research Questions

The study aims to address the following research questions:

a. How different are the contextual challenges faced by teachers teaching in low- and high-socioeconomic environments?
b. Do socioeconomic differences in the teaching context affect teacher beliefs in efficacy?
c. How reliable is teaching experience as a predictor of teaching efficacy?
d. How stable are teacher efficacy beliefs across teaching contexts?
e. What are the factors which contribute to the formation of beliefs about teaching efficacy?
f. Can the factors which form beliefs about efficacy be manipulated?

Structure of this research project

This research project is organized into six chapters. After this introductory chapter, Chapter 2 conducts a review of the literature on low and high teacher self-efficacy. In Chapter 3 the researcher discusses the methodology and instruments used to collect the data used to compare teacher efficacy in low and high decile schools. The data is also presented in this chapter. The results and findings in Chapter 4 provides an analysis of the data while drawing comparisons between teacher efficacy in low and high decile schools. In chapter 5 the researcher draws together the different strands of this project to

answer the research questions. In Chapter 6 the researcher concludes this thesis by accentuating the underlying implications of this project for teacher efficacy.

Chapter 2. Review of the literature

2.1. Definitions of teacher efficacy

Definitions of efficacy explain efficacy beliefs in relation to context. Bandura (1977) defined self-efficacy as belief in one's abilities to complete desired tasks in a particular situation. According to Bandura, this self-efficacy evolves from the self-concept and consists of one's beliefs and judgement regarding the planning and arranging of the required actions when faced with a probable situation and how well he/she will manage and realize the plan of action/s. Efficacy expectations indicate whether or not one believes that one has the abilities to affect desired outcomes. Tschannen-Moran et al. (1998) define teachers' sense of efficacy as "the teacher's belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context" (p. 233). Knoblauch and Woolfolk Hoy (2008) state that in order to be effective, teachers need more than content and pedagogy knowledge. Motivation and a sense of efficacy need to be felt before the teacher can apply themselves.

In summary, teacher efficacy can be defined as "the extent to which the teacher believes he or she has the capacity to affect student performance" (Berman, 1977, p. 137). Teacher efficacy is thus a variable construct which fluctuates in accordance with what the teacher believes can be achieved in a particular context.

2.2. Theoretical framework of teacher efficacy

Theories on efficacy postulate that efficacy is not a trait or an inherent ability, but rather a construct subject to changes, variations, and fluctuation in given contexts (Bandura, 1977).The preconception of success before a task can increase the prospect of a chosen task being successfully concluded (Bandura, 1997). It is this relationship between the individual and the context which can either result in efficacy and success, or withdrawal and failure in task completion. Efficacy therefore is the outcome of a dynamic reciprocal relationship between variables. Far from operating in isolation, variables are entwined in the relationships between the participants in the education system. Bronfenbrenner's (1979) ecology of human development theory describes the interconnected, interdependent nature of the participants and systems involved in creating learning climates for children**.** Each participant and subsystem has an important role to play. The teacher is but a single participant in this process of learning.

Bandura's (1977) social cognitive theory postulates that human achievement is shaped by the interaction of three key variables: behaviour , personal, and environmental factors. To explain how efficacy beliefs are formed, Bandura posited a model of reciprocal causation (or reciprocal determinism), stating that the relationship between self-efficacy, the environment, and behaviour is likely reciprocal, meaning that teachers' effective teaching behaviours within a context act on raising teachers' self-efficacy beliefs about their efficacy. The above assumption for the formation of efficacy implies that teacher efficacy levels are different in different contexts. According to Bandura, self-efficacy has been conceived as a situationally bound construct based on information which is being drawn from a particular context (Bandura, 1986, cited in Jamil, Downer, & Pianta, 2012).

Tschannen-Moran et al. (1998) state that teacher beliefs about task achievement are the outcome of the teacher's assessment and judgement of a teaching context. Self-efficacy judgements are the result of the teacher's assessment of personal competence in light of the perceived demands for a particular teaching task. These researchers identified three interacting components for efficacy to develop, which are teacher attributes, the elements in the teaching context, and the reciprocal interaction between these two components. Each component is subject to change and variation which influence outcomes.

2.3. Teaching and learning contexts

In terms of the theoretical framework underpinning efficacy, the context constitutes a mix of interacting, reciprocally related variables of which the teacher is a part and a participant. The variables within contexts influence efficacy in different ways. Efficacy is therefore not stable across contexts (Bandura, 1977). A number of researchers state that greater understanding of how contextual variables affect teacher efficacy could provide guidance about how to increase teacher beliefs in their ability to succeed with students (Bandura, 1977, 1997; Mansfield & Woods, 2012; Stipek, 2012). The emphasis on context therefore indicates that efficacy growth depends on more than the teacher's potential alone. Having the will and skills to accomplish a task does not necessarily mean that the task will be accomplished (Bandura, 1989; Tschannen-Moran & Woolfolk Hoy, 2007). According to Labaree (2000), teaching "is always contingent on a vast array of intervening variables that mediate between a teacher's action and a student's response" (p. 231).

Efficacy growth may therefore be influenced by more than the teacher or any other single variable in the process of education. The teacher cannot be separated from the context to be analysed or examined in isolation. In his ecology of human development model, Bronfenbrenner describes the context of learning as involving more than a single participant, relationship, or environment. Within the layers of Bronfenbrenner's (1979) ecosystem participants are connected by purpose and function. Leonard (2011) states that teachers are nestled in the inner circle which Bronfenbrenner calls the *microsystem* Within this system the child has direct, face-to-face relationships with significant people such as parents, friends, and teachers who are participants of other systems responsible for the child's development. Teaching contexts are thus social environments. Contextual teaching challenges are therefore embedded in the relationships which define the boundaries of the teaching environment.

2.4. An evaluation of experience as a source of teacher efficacy

According to Bandura (1997), for experienced teachers for whom an abundance of mastery experiences is often available, contextual factors play a far less important a role in their self-efficacy beliefs. In the presence of challenge then, Bandura maintains, experienced teachers should be equipped to face those challenges.

Bandura (1986, 1997) proposed four sources of efficacy: mastery experiences, vicarious experiences, verbal persuasion, and physiological arousal, with mastery experiences postulated as the most important source. According to Bandura (1977), mastery experiences are most influential because this provides proof of one's capabilities through the actual performance of skills. When experiences result in improved mastery of tasks, teachers tend to be happier and gain a sense of job satisfaction (Tschannen-Moran & Woolfolk Hoy, 2007). Bandura states that for most teachers this comes from

actual teaching accomplishments with students. Efficacy beliefs are raised if a teacher perceives her or his teaching performance to be a success, which then contributes to the expectation that future performances will likely be as proficient. Efficacy beliefs are lowered if a teacher perceives the performance a failure, contributing to the expectation that future performances will also fail.

In many teaching environments, particularly in schools serving lower socioeconomic communities, the context will pose challenges for teacher efficacy levels. These types of teaching environments offer opportunities for learning how to cope with future challenges (Bandura, 1977; Rubie-Davies et al., 2012). This is where resilience and efficacy become established.

While experience may improve efficacy, researchers also argue that student stressors could completely mediate the relationship between teacher efficacy, student engagement, and job dissatisfaction (Sass, Seal, Andrea, & Martin, 2011). Raudenbush, Rowan, and Cheong (1992), in commenting about teacher preparedness to face classroom uncertainties, state that even the most experienced teacher may not be able to anticipate the challenges of teaching. Researchers stress the importance of continuous mentoring, staff development, and training to promote more stable and resilient beliefs in efficacy against challenge (Calik, Sezgin, Kavgaci, & Cagatay Kilinc, 2012; Ghamrawi, 2011; Van Maele & Van Houtte, 2011). For this to occur staff collegiality involving sound, supportive relationships is crucial for teacher efficacy.

In examining the key factors that might contribute to an analysis of the teaching task, social cognitive theory purports that teachers who do not expect to be successful with

certain students are likely to put less effort into preparation and delivery of instruction, and to give up easily at the first sign of difficulty, even if they actually know of strategies that could assist these students (Bandura, 1977). Self-efficacy beliefs can therefore become self-fulfilling prophesies, validating beliefs either of capability or of incapacity.

Career stage experience and context reciprocally interact to create efficacy states (Day & Gu, 2009). Bandura (1997) asserts that the trajectory of self-efficacy through adulthood may not be uniform. In their study, Day and Gu (2009) found that late-career teachers begin to face more intensive challenges to sustained motivation and commitment in comparison to early and mid-career teachers due to stress from deteriorating student behaviour, resentment stemming from reform and new initiatives, and stock-taking about career and life accomplishments. These researchers state that there exists a strong theoretical and empirical base to show that work beliefs and attitudes, and specifically self-efficacy and commitment, may show differences between novice and experienced teachers.

Research on teacher withdrawal and attrition has found that even experienced teachers fail to remain resilient against the challenges of teaching (Ages, 2011; Green, Alejandro, & Brown, 2009; Rice, 2010). According to Rice (2010), teachers show the greatest productivity gains during their first few years on the job, after which their performance tends to level off. Ages (2011) states that many teachers do not stay in the profession long enough to become experienced in the classroom, which means many students do not gain the benefit of learning from an experienced teacher. Among the many variables investigated are the psychological processes found especially in pre-

service teachers which may underlie teacher persistence and longevity (Tschannen-Moran & Woolfolk Hoy, 2007, cited in Jamil et al., 2012). It is thought that new teachers may show higher levels of efficacy in their initial years of teaching due to recent supports, training, and intrinsic motivation for joining the profession (Sundipp, 2009). According to Jamil et al. (2012) teachers are all unique and different individuals with their own histories, personalities, and ideas, and they enter a very demanding and stressful career. These studies and those by Briley and Plaza (2012) and Pendergast, Garvis, and Keogh (2011) have found evidence to support a focus on teacher mentoring, development, and training to retain and assist teachers in developing more stable and resilient skills which prepare them for the challenges ahead. This involves the teacher's relationship, engagement, and collaboration with other partners in education.

Researchers warn against the possible negative and serious impact of classroom challenge on all teachers who are not adequately prepared for classroom reality (Pendergast et al., 2011). According to Bandura (1997), workers may reappraise self-efficacy beliefs in mid-life, with a retrenchment of aspirations and work-based self-efficacy beliefs. Occupational transitions, such as from pre-service to practicing teacher, present new competency demands. Bandura states that the confidence people hold about their capabilities to produce desired results may vary throughout the life cycle.

2.5. The classroom climates of efficacious teachers

Three domains for effective classroom practice are considered important by many researchers in education: (1) student engagement; (2) instructional strategies and methods; and (3) classroom management (Eslami & Fatahi, 2008; Vesely, 2009). The widely used Teacher Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) was developed to measure teacher beliefs in each of these three domains.

1. Student engagement

Studies have demonstrated that positive school environments lead to positive outcomes across students of all ages (e.g. McMahon, Wernsman, & Rose, 2009). Well-defined organizational structures in the classroom promote student engagement, positive self-concept, and adaptive behaviour (McMahon et al., 2009).

Stipek (2012) states that although teachers' expectations for student success are not the same as teachers' self-efficacy, they are related in that students' success is to some degree a consequence of teachers' ability to produce positive learning outcomes. Efficacious teachers are usually more experienced teachers who are confident in their abilities to use various strategies to build relationships and engage students in a supportive learning climate. In their interviews with teachers and students, Peterson et al. (2011) found evidence to support the value placed on relationship building by both students and teachers, with teachers in particular endorsing the importance of teacher–student relationships. Lloyd (1995) gave students with learning problems an opportunity to respond to a question about what they would like done to make things easier for them. Results indicated that the impact that teachers make on many students with learning problems is related to the personal relationship they develop with the student. The teacher who takes time to encourage or the teacher who gets frustrated because a student is slow in completing work has a major impact on how students feel about themselves and about their work in general. Such teachers are able to use creative ways to motivate students and instil a sense of pride in students as they succeed at tasks. In addition to emotional security, the classroom environment should contribute to children's physical, cultural, and socioemotional well-being (Kangas, 2010). In creating

such an environment, especially in challenging circumstances, the teacher's own personal abilities may be tested. Doubts about self-efficacy in such situations could render the teacher helpless.

Rubie-Davis (2006, cited in Rubie-Davies et al., 2012) showed how the pedagogical beliefs and self-reported practices of high and low expectation teachers differed in substantive ways. High-expectation teachers appeared to value the social climate of the classroom (Rubie-Davies, 2007). These teachers actively and directly engaged with students and promoted cooperative learning. They reported encouraging their students to work with a variety of their peers. Teachers believed that while students should be given some ownership for their learning, teachers should monitor their progress closely, provide them with feedback about their learning, and set clear learning goals with students. High expectation teachers ensured that the tasks students completed were exciting and interesting.

Teachers with a strong sense of efficacy have been found to be less critical of student mistakes (Ashton & Webb, 1986); to work harder with struggling students (Gibson & Dembo, 1984); and to be persistent and more willing to take risks, such as employing new strategies because of a reduced fear of failure (Gebbie, Ceglowski, Taylor, & Miels, 2012; Ross, Bradley Cousins, & Gadalla, 1996). In similar situations teachers with low self-efficacy are more likely to refer difficult students for special education services (Woolfolk Hoy & Hoy, 1990). Gebbie et al. (2012) suggest that teachers do need to hold high efficacy beliefs to remain determined and persistent against challenge. Students of efficacious teachers exhibit higher achievement (Ashton & Webb, 1986),

motivation (Midgley, Feldlaufer, & Eccles, 1989), and self-efficacy (Anderson, Greene, & Loewen, 1988) than students of less efficacious teachers.

2. Instructional strategies and methods

Teacher efficacy for effective instruction involves the ability to plan, design, and deliver academic instruction which results in appropriate learning environments (Pas, Bradshaw, & Hershfeldt, 2012). Pas et al. state that teacher efficacy has been shown to be positively correlated with effective instruction, proactive and positive classroom management, and student academic achievement. When efficacy for teaching is high, teachers tend to utilize a variety of instructional strategies drawn from their repertoire that are autonomy-supportive and positive for student engagement and achievement outcomes, even when faced with challenging situations.

High efficacy teachers believe that they are able to successfully design instruction and teach children who are at risk of school failure because of their behaviour, family background, or other external factors (Gibson & Dembo, 1984, cited in Pas et al., 2012). In achieving this, high efficacy teachers are more likely to learn and implement new teaching approaches and strategies, accommodating also for individual students to understand what is being taught.

Professional learning opportunities where teachers have ample time to explore their beliefs and practices regarding student diversity have an important part to play in helping teachers to develop such effective classroom practices (Dilworth & Brown, 2001; Seidl, 2007, cited in Buxton, Salinas, Mahotiere, Lee, & Secada, 2013). Evaluation and reflection during training and staff development programmes are

components of learning and experience that help high efficacy teachers keep ahead, pre-empting problematic situations that can negatively affect teacher efficacy and student achievement (Duffin et al., 2012).

3. Classroom management

The most effective classroom management comes in the form of strategies which can prevent challenging behaviour acting out before this occurs (Andreou & Rapti, 2010). Brouwers and Tomic (2000) emphasize that classroom management is one of a number of important skills and responsibilities teachers require to meet the educative purposes of schooling. Doyle (1986, cited in O'Neill & Stephenson, 2010) suggests that establishing and maintaining order and control in the classroom is one of two major task structures in classrooms, the other being that of learning or instruction. According to Dibapile (2012), teachers who are able to manage their classrooms in the face of challenge become expert classroom managers.

For various reasons, not all children will enter a classroom equipped and prepared for learning in the same way as some may be. Due to adverse circumstances, children living in and affected by poverty and related situations are at greater risk of developing disruptive behavioural problems (McClowry, Snow, Tamis-LeMonda, & Rodriguez, 2010). To be effective teachers must be able to employ different strategies to control disruptive behaviours in the classroom (Dibapile, 2012). Liu, Jack, and Chiu (2008) state that teachers with high self-efficacy will work harder and persist longer when teaching difficult students, in part because of their belief in their teaching abilities and because of their belief in the students' abilities. They use positive management strategies which they know have worked before; provide assistance to low-achieving students; increase student academic self-efficacy; set attainable goals for their students;

and persist when faced with student failure. Encouraging student participation and promoting engagement are key factors. Teacher practices which have been found to reduce discipline problems are instructional activities and tasks which gain students' attention and involve all in participatory learning (Parsonson, 2012).

The safe, secure, and welcoming learning climates created by efficacious teachers result in reduced discipline problems, increased student engagement, and higher academic achievement (Andersen, Evans, & Harvey, 2012; Mitchell, Bradshaw, & Leaf, 2010). Cleve (2012) reported that it is not merely the rules which need to be implemented when teaching; it is about finding out what will promote engagement at different levels. Researchers emphasize the importance of getting to know students as individuals when designing appropriate instructional activities which can enhance engagement (Cleve, 2012; Dibapile, 2012; McClowry et al., 2010). In such learning climates children are generally happy and engaged, enjoy being in the class, and feel emotionally secure and safe (Andersen et al., 2012).

There are a number of classroom variables which can create behaviour management problems. Researchers emphasize that the knowledge gained from training and staff development initiatives will prepare teachers for effective classroom management and will increase the likelihood of students engaging and learning in the classroom (Johansen, Little, & Akin-Little, 2011; Parsonson, 2012). An important step toward preparing teachers for disruptive classrooms is effective training to help teachers learn the skills necessary to cope with problems (Brouwers & Tomic, 2000).

2.6. Challenging classroom climates

For various reasons, classroom and school climates may not be conducive to teaching and learning. The level of challenge may affect teacher beliefs about their efficacy in such situations. Bandura (1997, cited in Duffin et al., 2012) states that teachers' sense of efficacy is not necessarily invariable across different subject areas or student groups, or uniform across school settings. Teachers may therefore feel more or less efficacious in different circumstances.

Studies on school problems and teacher attrition indicate that the role of the teacher is becoming increasingly more demanding and challenging, especially in schools experiencing very high levels of behavioural problems (Aitken & Harford, 2011; Atkin & Massey, 2004, cited in Agarwal, 2011). High student discipline and behavioural problems, aversive student–teacher interactions, classroom management difficulties, and problems associated with student ethnic and cultural diversity have been found to be more prevalent in schools serving lower socioeconomic communities (Rubie-Davis, Hattie, & Hamilton, 2006; Vaezi & Fallah, 2011). Researchers purport that compared to the general population, teachers in challenging teaching contexts are most at risk for higher levels of psychological distress and lower levels of job satisfaction (Travers & Cooper, 1996; Vaezi & Fallah, 2011). Recent studies on teacher attrition rates indicate that challenging work environments reduce teacher efficacy beliefs and motivation and are quoted as the main reason for teacher attrition (Alliance for Excellent Education [AEE], 2004; Guy, 2010; Jamil et al., 2012; Johnson, 2010; McClowry et al., 2010; Swanson, 2012). AEE (2004) in the United States found that more than 50% of teacher attrition occurs in lower socioeconomic school areas. The primary reason found by these researchers is the lack of support and the poor working conditions when working

in more challenging school environments. Prather-Jones (2011) states that support for teachers was critical throughout their careers. Prather-Jones found that level of support teachers perceived from school leaderships made the difference between teacher retention and attrition.

2.7. Factors which can influence low efficacy beliefs

a. Unsupportive school management and staff

Many scholars emphasize that teacher efficacy is primarily affected by the atmosphere within the school organization and by the extent of collaboration and support that they receive from their colleagues (TNTP, 2012; Tschannen-Moran, Uline, Woolfolk Hoy, & Mackley, 2000). In discussing teachers' expectations from school leaderships, Şişman (2011) states that school administrators are considered to be mainly responsible for providing effective school learning environments (Şişman, 2011a, cited in Kıranlı, 2013). According to Stipek (2012), self-efficacy is, like expectations for student success, higher under conditions of perceived administrative and parent support. In general, researchers intimate that schools which provide a low level of support for their teaching staff are associated with low levels of teacher self-efficacy, and teachers in these schools were less willing to find ways to cope with problems. Poor school leadership and teacher dissatisfaction have been directly related to low teacher efficacy and teacher attrition (Mota, 2010). Grissom (2011) associates principal effectiveness with teacher level of satisfaction and the probability that a teacher will leave a school within a year.

When teachers are aware that they are not achieving with children they may experience the low self-confidence which can accompany feelings of low efficacy (Blase & Blase, 2004; Deskins, 2010). If unsupported they may also feel intimidated and uncomfortable

about initiating contact with school management. According to Bandura (1997), perceived sense of efficacy, being context-driven, is important to a teacher's beliefs about capability. For teachers to feel confident about approaching their management or leadership there should be a level trust and collegiality. Those school principals who initiated interactions with teachers and who valued staff as future leaders were more successful at engaging staff in school matters (Drago-Severson, 2012; Glover, 2007). AEE (2004) found in their studies that the instructional leadership behaviours of school principals had a significant effect on teachers' self-efficacy. AEE reported that teachers require regular support in the form of mentoring and professional development.

Osher et al. (2012) state that children can only thrive in supportive learning environments built on sound relationships between those responsible for their education. Therefore school leaderships need to provide high quality professional development opportunities to enhance capacities which enable staff to use their learned skills. According to Osher et al., teachers and leaders need to have a deep knowledge of human development as well as the ability to apply that knowledge in their classrooms and schools. They need to have the social-emotional capacity to be able to deal with discipline and behavioural problems positively rather than punitively, as well as establish productive relationships with students and their families who may or may not meet their expectations.

Collegiality and levels of support and trust are closely linked and can affect teacher performance (AEE, 2004; Calik et al., 2012; Ghamrawi, 2011; Van Maele & Van Houtte, 2011). Collegial trust has been found to be lower in socioeconomically disadvantaged schools (Alzaidi, 2008). This is where there is a more dire need for

school leadership to play a role in maintaining higher teacher efficacy levels. Borrero, Lee, and Padilla (2013) state that collegiality involving teachers and other school structures combine to set the standards which create the resilience required to promote learning in challenging teaching conditions.

b. Barriers to effective instruction and engagement in the classroom

Teachers anticipate certain general requirements and conditions before classroom instruction can be effective and engagement can result. In their beliefs teachers may assume or anticipate that the teaching context will be receptive to their expectations. How well these expectations are met or how flexible and resilient the teacher is to difference and change will affect any growth in efficacy. Teachers could have one set of expectations for students (Regalla, 2013; Rubie-Davies et al., 2012) and another for the school, especially from school leaderships (Kıranlı, 2013) which could conflict with each other. Kıranlı refers to research which states that teachers expect school leaders to provide the necessary environments and conditions for effective learning and to support teachers in every possible way (Şişman, 2011a, 2011b, cited in Kıranlı, 2013). When these conditions are not met the presenting contextual constraints on efficacy then conflict with teacher efficacy expectations.

Generally the literature has linked school problems with the ills of socioeconomic decline. Common problems have been associated with the struggles and difficulties experienced by lower income groups which often include ethnic minorities and migrant people (Regalla, 2013; Rubie-Davies et al., 2012). Migrants tend to struggle with problems associated with relocation and resettlement and often display the effects associated with economic depravity (Li, 2010). Differences in culture, ethnicity, and

languages can result in misunderstandings and biased and prejudiced attitudes and attributions which in turn affect classroom relationships and teacher efficacy. When culture and language are different from the majority and when the teachers also do not share the same backgrounds, children who are considered different could be placed at a great disadvantage. Their behaviours and expectations may not be understood by others and this affects how they will relate and interact in a social gathering like the school or classroom. Furthermore, these children and their parents may not make sense of the school environment and expectations. Barriers to achieving the desired expectations then inculcate beliefs which can marginalize and disadvantage minority groups (Rubie-Davies, Peterson, Irving, Widdowson, & Dixon, 2010).

Research shows that most often teachers attribute student school problems to external factors rather than themselves or the quality of their practices (Brady & Woolfson, 2008; Cothran, Kulinna, & Garrahy, 2009; Kulinna, 2008) and thus do not accept responsibility that they may be an integral part of the causal factors which sustain problems. Kulinna (2008) found that teachers most commonly attributed student misbehaviour to home and student factors, not teacher or school factors. For students in schools in low-socioeconomic regions, there may be fewer local role models of academic success. Teachers may not realize that they are central to fostering academic ambitions for students (Oliver, Venville, & Adey, 2012). Teacher perceptions and interpretation of student behaviour have been linked to attributions which affect student–teacher interaction and classroom engagement (Woodcock & Vialle, 2010).

Research findings also suggest that teachers often base their impressions of and expectations on the surface characteristics which describe groups rather than individuals

(e.g. Bandura, 1997; Keogh, 2000; Muller, Katz, & Dance, 1999, cited in Rubie-Davis et al., 2006; Torff, 2011). Torff (2011) states that teachers mostly believe that disadvantaged students cannot use higher-order thinking skills or engage in challenging activities. Torff refers to research which posits that teacher expectancies for ethnic minorities seem to be based on generalized biased and prejudiced attitudes and beliefs rather than on achievement and individual student characteristics. In a study by Auwarter and Aruguete (2008), teachers rated students in low-socioeconomic status (SES) scenarios as having less promising futures than did identical students portrayed as having high SES. This finding concurs with other research showing that children from higher SES backgrounds are judged more favourably than are equally performing children of lower SES backgrounds (Hamilton et al., 1990; Jussim, 1986; Rist, 1970, cited in Auwarter & Aruguete, 2008). Teachers who believe that SES is a predetermining factor for students' achievement will likely feel ineffective when working with low SES students. These feelings of low efficacy may lead to fewer teaching efforts and therefore perpetuate low student achievement.

Similarly, general education classrooms are also becoming increasingly diverse and inclusive. Inclusive education poses challenges for teachers in mainstream classrooms which can affect teacher perceptions and consequent performance. Struggling students are denied individual attention due to teacher bias and generalized perceptions (Lyons, 2013; McClowry et al., 2010). Lane, Pierson, Stang, and Carter's (2010) examination of child-level descriptive studies provides evidence which suggests a relationship between SES estimates, student characteristics, and teacher expectations of students' performance. Similar findings by Alvidrez and Weinstein (1999, cited in Lane et al., 2010) indicate that teachers underestimate the academic performance levels of students

residing in low SES settings and overestimated the academic performance levels of students living in high SES settings, even after controlling for students' cognitive ability.

Sazak Pinar and Sucuoglu (2011) emphasize that regular classroom teachers generally lack information on the individual characteristics of students with disabilities. In addition, a combination of larger classes, socioeconomic challenges, and increased behavioural problems could affect and alter teacher perceptions of students and problems. The more broad the cultural, language, ethnic, and socioeconomic differences are within a single classroom the greater will be the demand and challenge for the teacher to individualize teaching efforts to remain efficacious. In these circumstances teachers are more likely to neglect the adaptations necessary to accommodate and cater for the special needs of students (Baker & Zigmond, 1995, cited in Sazak Pinar & Sucuoglu, 2011). The challenges of building student–teacher relationships and promoting classroom engagement necessary for effective learning are greater (Hirn, 2011; van Uden et al., 2013).

c. Difficulties in classroom management

Effective classroom management continues to be a major concern and challenge to many teachers (O'Neill & Stephenson, 2010). Brouwers and Tomic (2000) define a teacher's sense of efficacy in classroom management as "teachers' beliefs in their capabilities to organize and execute the courses of action required to maintain classroom order" (p. 242). Gottshall and Stefanou (2011) refer to the flip side of efficacy as learned helplessness, which occurs when classroom teachers find coping with challenges far too overwhelming.

Difficulties in managing student behaviour is cited as one of the leading causes of teacher attrition and dissatisfaction (Brouwers & Tomics, 2000). Wang, Haertel, and Walberg (1993) concluded that of a list of 28 identified classroom variables that can influence student learning, classroom management had the most influence on student achievement compared to other variables such as cognitive ability or school demographics. These researchers state that to effectively function as classroom managers, teachers must be able to possess knowledge and skills, but also believe in their capabilities to enact proactive and, when necessary, reactive decisions that maintain an environment conducive to effective learning. Morton, Vesco, Williams, and Awender (1997) conducted a study of 1,000 student teachers and found that classroom management was their second greatest source of anxiety.

At the expense of quality instruction time, teachers working in schools with high rates of poverty, student absenteeism, disruptive behaviour, and low achievement may focus much of their attention on expectations related to minimizing disruptions. Time spent on addressing behavioural challenges may interfere with effective instruction (Scott, Park, Swain-Bradway, & Landers, 2007). Expectations could therefore change which may not impact the teacher's ability but rather their attitude to task level and standards for achievement, given the reduction in instructional time.

d. Teacher perceptions of parental support

According to Stipek (2012), research has not confirmed that there is a direct link between teachers' efficacy and their views about parents' capacity to support their children's learning. It is likely that teachers view parents as relatively more involved

when they have cooperative relationships with them and when they are aware that parents support their actions for their children. Stipek identifies school administrators as having some control over persuading and promoting greater partnerships between teachers and parents. Stetson, Stetson, Sinclair, and Nix (2012) state that the importance of developing amicable teacher–parent relationships is irrefutable. The authors state that building those positive relationships with parents may not always be easy, but the rewards have consistently shown to be worth the effort.

Socioeconomic conditions have been shown to affect parental involvement in the school (Barbee, 2010; Wilson, 2009). Wilson (2009) states that lower income parents may suffer more psychological stress than those who earn higher incomes. According to Blank, Jacobson and Melaville (2012), research shows that low income families regularly experience economic and material hardship. Poorer parents may have to work longer hours and experience greater stresses in life. Missed rent, utility shut-offs, inadequate access to health care, unstable child care arrangements, and food insecurity are common experiences that inevitably affect students' readiness, attendance, performance, and completion rates at school (Blank et al., 2012). Adult supervision, especially of school work, may not always be present. Often, teachers place blame on parents and unaware to the unmotivated teacher, some children may seem uninterested in school or homework. Such children may not seem to want to engage in the classroom which may give teachers the impression that the parents care less about their children. Blank et al. (2012) state that by sharing a common vision and offering structured opportunities for engagement and dialogue relationships can be built on trust because all participants are involved and accountable. Referring to how community schools should operate, these researchers state that by sharing resources, expertise, and accountability,

community schools are able to address challenges related to economic hardship and create essential conditions for learning. The authors suggest that all schools should operate in the same way as community schools.

Due to poor or strained relationships communities may resist change (Brinson & Steiner, 2012). According to Brinson and Steiner, particularly in challenging teaching environments involving low-socioeconomic parents, building relationships takes time and effort in order to correct past misconceptions and distrust. The authors state that resisting control and sharing of responsibility will make everyone feel more involved and accountable for what happens to students.

Parental involvement also changes as children transition from lower grades at school. In most communities parental involvement in school is greater when children are younger and declines in the transition into higher school grades (Barbee, 2010). This may explain why it has been found that teachers of younger students have higher efficacy rates than those teachers who teach older children (Rubie-Davies et al., 2012). In comparison, Geving (2007) found that the severe misbehaviours of high school students increase their teachers' stress and burnout more than those of primary school students. Struggling teachers tend to perceive parent withdrawal or absence as an indication that parents are not interested in their children's school work (Stipek, 2012). According to Bempechat, Li, Neier, Gillis, and Holloway (2011), many teachers may not realize that lower income parents care deeply about their children even though their involvement may decrease as their children move into high school.

According to Carpenter (2004), currently in low-decile schools in New Zealand most

interaction is one way and inconsistencies exist between school and parent expectations. Teachers and researchers know very little about low-decile school parent opinions of teachers and schools. Carpenter asserts school professionals choose when, where, and how to interact with parents. Of all parents, those who are unemployed, receiving state benefits, or are Māori have the least contact with schools. Low income parents may feel uncomfortable in the school, or feel that the school alone has the responsibility of educating children. Survey questionnaire findings reveal that these groups are the people who most desire more contact (Wylie, 1999, cited in Carpenter, 2004). After interviewing parents, Carpenter (2004) concluded that while school professionals may value the importance of high expectations, the parents did not articulate the same sentiments. In this study very few parents spoke of high standards. More than half believed that order and control were essential for good teaching. Carpenter's study revealed that in low-decile schools it seems that one half of the 'partnership' in education, the parents, may have a different hierarchy of aspirations to those of many teaching professionals. According to Carpenter with a more equitable partnership, achievement levels for low-decile school children may improve.

e. Teacher perceptions and attributions about behavioural problems

The key variables identified by researchers which can affect teacher attitudes and classroom management are the teacher's perceptions and attributions about student behavioural problems (Johansen et al., 2011; Pang, 2012). With reference to previous studies, Rubie-Davies (2010) suggests that there may be beliefs among some New Zealand teachers which could stem from a personal biased and prejudiced belief system. As a result of such beliefs, teachers may not persist with certain children because they assume that these children are difficult and uninterested due to their different

backgrounds. Rubie-Davies refers to teacher perceptions in New Zealand which consider Asian students to be conscientious and industrious because of the importance their parents place on their children gaining a good education. Pacific Island students are believed to come from homes where there is strict discipline, where church and family are important, and where parents care about their children and their education. Māori students, on the other hand, are believed to come from families where education is not valued and where parents are not encouraging of teachers' efforts. A study by St. George (1983, cited in Rubie-Davies, 2010) revealed similar findings. Teachers in this study judged Polynesian students (most of whom were Māori) to come from less supportive home backgrounds than New Zealand European students. Rubie-Davies (2010) asserts that, in most cases, teachers had not even met the parents, let alone visited their homes, and hence such judgements were most likely made on the basis of ethnic stereotypes and staffroom conversations. The concern is that teachers may tend to overlook the numerous other variables which can affect any child's school performance and which may have little to do with any single cultural or ethnic denomination. When teachers have such beliefs about particular ethnic groups, this may result in lowered expectations for particular groups of students, which could negatively affect standards of academic achievement.

The review of the literature on teacher efficacy confirms the variable nature of efficacy in different teaching contexts. Efficacy is the outcome of interconnected and inter-dependent relationships between variables within an educational context. It is widely felt that teaching experience can improve efficacy even in the most challenging school environments. There is however evidence of adverse effects on teacher efficacy resulting from poor teaching experiences. There are also distinct differences between

how teachers cope and manage the challenges faced in different teaching contexts. The chapters which follow investigate the variables involved in efficacy formation, the factors which affect teacher levels of efficacy and how teachers cope when faced with challenges in the teaching context.

Chapter 3. Research methodology and method

3.1. Theoretical perspectives and research methods

In choosing the methodology for this study the researcher carefully considered each of the research questions and the benefits of each of the different research methodologies. Quantitative analysis was used to test for any differences in efficacy between the teaching contexts. However quantitative testing and findings are limited in that they do not reveal or explain the complexities and the relationships involved between the different variables involved in forming efficacy beliefs (Braun & Clarke, 2006; Lund, 2012; Tschannen-Moran et al., 1998). Based on the underlying principles of social cognitive theory (Bandura, 1977), efficacy beliefs stem from a variety of interconnected and reciprocal variables and relationships. Qualitative methods were therefore also used to delve deeper to explore the real experiences and perspectives of teachers. This approach enabled a more thorough investigation of how the variables involved in efficacy growth interact ecologically to form efficacy beliefs.

Some social situations represent diversions from the guiding principles hypothesized for efficacy growth. Due to the variables involved in efficacy being diverse and subjective, the theoretical perspective of the researcher combines the benefits of a postpositivist, critical realist approach and constructivist thinking. This perspective is based on the researcher's view that meanings and understandings of reality make sense to those who experience that reality. Postpositivists see human knowledge as speculative, and therefore not based on unchallengeable and solid foundations (Morris, 1999). Postpositivism involves critical realism which attempts to validate what may be generally accepted in theory (McLaren, 2012). Constructivism on the other hand holds that research must do a better job in telling the stories of individuals. Constructivists

view meaningful understanding as contingent on human practices and thus different people socially construct reality in different ways (Morris, 1999). Thus, in explaining what works within particular frameworks of reality the researcher also values the contribution of universal knowledge about the construct under investigation in this study.

The research method chosen for this study complements the philosophical views and theoretical perspective of the researcher. Tschannen-Moran et al. (1998) state that quantitative measures used in isolation typically can contribute to our understanding of efficacy by offering a snapshot of the efficacy beliefs of a large number of teachers at a particular point in time. To address the research questions presented in Chapter 1 and align this investigation with the researcher's theoretical perspective, a mixed-methods approach using both quantitative and qualitative data was used. Braun and Clarke (2006) provide support for this approach in stating that the combination of the different perspectives provided by qualitative and quantitative methods produces a more complete picture of the domain(s) under study.

The quantitative measures in this study first compared the overall efficacy beliefs of teachers between the high- and low-socioeconomic contexts. These measures were then used to ascertain whether experience and efficacy were significantly related. Qualitative methods were then used to critically evaluate the above findings and to explain the differences between teacher efficacy beliefs by examining the variables involved in efficacy formation.

3.2. Methodology used for thematic analysis

Teacher responses to open-ended questions in this study are accounts of teachers' personal teaching experiences. These are influenced by others in the context of teaching. Teacher experiences are related to students, their parents, school leadership structures, and socioeconomic influences. Each of the participants in the learning process is in a participant–environment relationship and all together they create the variables involved in the context of learning. Bandura's (1977) social cognitive theory acknowledges the reciprocal and ecological nature of the interactions among the variables involved in efficacy. To investigate and explain the meanings underlying the relationships between variables involved in the education of children, the researcher uses the ideology which underpins the ecological model proposed by Bronfenbrenner (1979).

Bronfenbrenner's model offers an explanation of how relationships within systems are ecologically connected and interdependent. Relationships are nestled within and between systems. Systems overlap but together they form part of a whole without clearly defined boundaries. This study investigates the teaching context as a system created by the relationships between the teachers, students, parents, school leaderships, and school administrators. Teacher open-ended responses in this study relate to how teachers experience their contexts in their relationships with others. The approach thus a combination of critical realism and constructivism.

The open-ended survey questionnaire (Table 5) used in this study gave teachers an opportunity to anonymously disclose their views about teaching experiences in their particular teaching contexts. Teacher responses were then thematically analysed. According to Braun and Clarke (2006), thematic analysis is a method that works both to

reflect reality and to unpick or unravel the surface of reality. Charmaz (2002) states that thematic analysis allows the researcher to organize and describe a data set in richer detail and to identify, analyse, and report related patterns and themes. The data from the open-ended questionnaire in this study was analysed and coded to reveal the common themes. In coding the data, the researcher considered patterns, prevalence, and size. The researcher was guided by those patterns which related to the overall research question. The extracted themes represent patterned responses to the open-ended questions. The following steps guided the thematic analysis of data (adapted from Braun & Clarke, 2006):

1. After reading, re-reading, and becoming thoroughly familiar with the data, the researcher noted down initial ideas.

2. For each open-ended question the researcher then generated initial codes and numbered each. Each item of the data set per open-ended question was then matched to a numbered code. This process was repeated for all questions.

3. The researcher then repeated step 2 above, checking the matching process for accuracy and possible errors.

4. The numbers representing each code were then counted. Codes which were most prevalent per question were then listed on separate pages in order of prevalence. The most prevalent codes appearing at the top of each page began to initially indicate the potential themes.

5. The counting process in step 4 was repeated to check for errors.

6. The search for themes involved comparing the contents of each page (each question) with a focus on the items which were most prevalent across the data set – now listed on separate pages. The data was separated under each code.

7. Identifying potential themes also involved reviewing, checking, and relating themes with the lists of coded material across the entire data set. After drafting and examining potential thematic maps the researcher settled on the definitions and naming of the final themes.

8. The researcher then reported on each of the themes, selecting the most vivid extracts from teacher responses to qualify the themes within the framework of this research on efficacy. In the final analysis the coded data which supported each of the themes were quantified in percentages and tabulated for each individual question.

3.3. Background to the New Zealand school decile ranking system

In New Zealand, schools are classified by decile rankings, with decile 1 being the lowest and decile 10 the highest. The decile ranking a school is given relates to the economic and social factors of the community immediately surrounding it. Schools in decile 1 may have the highest proportion of students from low-socioeconomic backgrounds while schools in decile 10 have the highest proportion of students from high-socioeconomic backgrounds. The decile system is used by the New Zealand Ministry of Education to identify financial need and to address socioeconomic disparity by increasing the funding to lower-decile schools. The school decile ranking system was therefore not meant to and does not reflect on the students, school staff, or school achievement. It will benefit educational planning and decision making if it was better known how and why some low-decile schools perform above the general expectations despite socioeconomic disadvantage.

3.4. Method

3.4.1 Research process

After approaching the NZ Ministry of Education for assistance the researcher was provided with a link to all intermediate and secondary state schools in New Zealand. Using the online tools offered by this link the researcher was able to filter schools by the ranks required for this research project (deciles 1,2,3 and deciles 8, 9 and 10). The link also provided the researcher with the electronic mail addresses of schools. The researcher then contacted these selected schools by electronic email. All school principals contacted received a copy of the online participant information sheet (Appendix 3) and the link to the online survey questionnaire pages (Appendices 1 and 2). Interested and consenting school principals or their representatives were invited to use the information sheet to discuss the research with teachers and provide teachers with a link to the online research study. The information sheet was also available online for individual participants to read.

As the school principal was the only person contacted by the researcher to offer teachers the link to the survey, the offer to the staff by a principal was taken as consent and approval by the school principal or his/her chosen representative for school participation. The online survey also contained a copy of the information sheet for teachers to read. Each prospective participant was also required to give his/her individual online consent before being permitted to proceed to the survey questions. Participants were not requested to reveal their identities or the names of their schools..

3.4.2 Criteria used for the selection of teacher participants

For the purposes of this research, schools which have a decile ranking of 1 to 3 represented the one extreme of “lower decile schools” and schools ranked 8 to 10 as

“higher decile schools”. Each of the two teacher sample groups was representative of one of these two clusters. The rationale for the decile categorization (three decile ranks in each cluster) was to improve the chances of securing an adequate number of participants for this study. Selected teachers had to also be currently teaching for at least 10 hours per week and to have been teaching students in the 12-16 age group for two years or more.

Prospective participants had to first answer the online questions designed to screen each participant’s eligibility for this research. The eligibility criteria and the rationale for each are as follows:

a. Participants had to be teaching for 10 or more hours per week. The researcher investigated school teaching timetables in three schools. It was found that the average classroom teacher teaches (instruction time) for approximately 20 hours per week. The 10-hour requirement for teacher selection to the sample therefore represents approximately 50% of teacher–student contact time in a school week.

b. Only teachers who had taught children between and including the ages of 12 and 16 for two years or more were invited to complete the questionnaires. For various reasons outlined in the research, children in this age group are associated with the more serious behavioural and learning problems at schools. These years are also considered the transitional years before children settle into high school.

c. Only teachers teaching in schools ranked as decile 1, 2, 3, 8, 9, or 10 could participate in this study.

The participants in this study were teachers who fulfilled the above criteria and who completed the online questionnaires.

3.4.3 Data collection

All data was collated from teacher responses to a set of online surveys placed on SurveyMonkey for a period of four weeks. Raw data from SurveyMonkey was then downloaded into the SPSS statistical software package and processed for this study. The SPSS software simplifies the analytical process because it enables the researcher to more easily and accurately prepare, organize and format the data into tables. Data analysis using the software package also ensures greater accuracy and precision.

3.4.4 Online survey instruments used for the collection of data

a. Questions about participant demographic information

b. Open-ended questions (Included in Table 5)

In consultation with the supervisor of this study the open-ended questions were devised and carefully revised and edited before being finalized. The questions offered teachers an opportunity to anonymously express their personal school experiences in the areas under study.

c. Patterns of Adaptive Learning Scale (PALS) (Appendix 1)

According to Bandura (1977), learned mastery approaches (goal achievements) and experience are related and when established over time contribute to teacher efficacy growth. Goal mastery refers to successful task achievements which over time can enrich teacher experience. In this study the PALS 21-item scale constructed by Midgley et al. (2000) was used to assess the relationship between goal mastery, experience, and efficacy. The PALS scale was developed and refined over time using goal orientation theory to assess teachers' perceptions of the goal structure in the school, their goal-related approaches to instruction, and personal teaching efficacy. The rationale behind

the use of the scale in this study was to assess the success of teachers in achieving classroom goals and to compare this to their beliefs about their efficacy. Discrepancies between goal attainment and efficacy may also have implications for differences in the levels of challenge between high- and low-socioeconomic teaching contexts and the effects of experience on teacher efficacy beliefs.

The PALS scale has been successfully used to measure goal mastery by other researchers (Parlak-Yilmaz & Cikrikci-Demirtasli, 2010; Rubie-Davies et al. 2011). In the original scale, teachers rated statements about their mastery and performance goal orientation on a 5-point Likert scale. However, in the current administration a 9-point Likert scale is used ranging from 1 = "Never" to 9 = "All the time", so that the PALS scale is on the same Likert scale as the Teacher Sense of Efficacy Scale (TSES), which is also used in this study. An example of a mastery goal item is: "To what extent do you provide several different activities so that students can choose among them?"; an example of a performance goal orientation item is: "To what extent do you display the work of the highest achieving students as an example?" Midgley et al. (2000) report a Cronbach's alpha coefficient of .69 for this scale.

d. TSES (Appendix 2)

Teacher efficacy was measured with the TSES 24-item form (Tschannen-Moran & Woolfolk Hoy, 2001). Tschannen-Moran and Woolfolk Hoy intended the instrument to measure teacher efficacy in general using the total score of all scale items and the subscale scores. These items are grouped into three subscales: (1) Efficacy for student engagement (SE; 8 items), Efficacy for instructional strategies (IS; 8 items), and Efficacy for classroom management (CM; 8 items). The TSES scores for the three subscales and the total scale have been found to be internally consistent (Cronbach's

alpha). Studies have confirmed the psychometric properties of the TSES (Klassen et al., 2009; Tsigilis, Koustelios, & Grammatikopoulos, 2010). Construct validity has also been examined by correlating the TSES to the well-established Gibson and Dembo (1984) Personal Teaching Efficacy (PTE) scale.

Consistent with instructions in the TSES manual, participants responded to each of the questions using a rating scale ranging from 1 (Nothing) to 9 (A Great Deal**)**. Teachers were told to respond to each of the items considering their current ability in their present school.

The rationale behind the use of this scale was to assess and compare differences in efficacy between the low- and high-socioeconomic teaching contexts in this study. The scale was also used to assess and compare any relationship between teachers' level of experience and teacher beliefs in efficacy.

3.4.5 Ethical considerations

Principals were informed that by accepting the invitation and providing their school staff with the link to the survey, this action would be considered as them consenting to participate in the research project. For each prospective teacher participant the questionnaire contained a statement stating that by completing the document the participant had consented to the completed questionnaire document being used by the researcher for the purposes of the study. To ensure that teachers did not feel restricted in their responses, the questionnaire was completed anonymously with no personal or school details requested.

The researcher has not used the name of any school or staff participants in any part of

the research, thus protecting anonymity. All data was used only for the purposes of this study. Schools in this study will be referred to as LD (lower decile) schools or HD (higher decile) schools. SES is described in the research by words such as “high” or “low”. All raw data collected will be kept confidential and safe from unauthorized use. The data will be destroyed, deleted, and disposed off when this research project is completed. Due to school and participant anonymity the researcher has no records of names or contact details of schools and therefore cannot supply schools with reports of this research. However, schools were given the contact details of the university and can request copies of this research project.

Chapter 4. Results and findings

In Chapter 4 the researcher analyses and compares the data computed from teacher responses to the on-line questionnaires and the open-ended questions. The researcher investigates statistical relationships between teacher efficacy, goal orientation and experience and compares these between the low and high decile teaching contexts in this study. The aim is to examine the effect of experience on teacher efficacy and to establish whether there exists any significant margin of difference in teacher efficacy between the two teaching contexts. The qualitative data from teacher responses to the open ended questions is thematically analysed to investigate and compare teacher efficacy and classroom experiences in low and high decile school teaching environments.

A total of 117 teachers fulfilled the criteria for selection as participants, gave consent, and started the surveys. One hundred and eight of these teachers completed the surveys. Responses to the surveys were received from a total of 42 teachers from schools ranked as decile 1, 2, or 3 (LD) and 65 teachers from schools ranked as decile 8, 9, or 10 (HD).

4.1. Comparison of teacher goal orientation and efficacy between LD and HD schools

The research hypothesis that goal orientation and efficacy may be susceptible to conditions within different teaching contexts was examined. SPSS software was used to compare teacher responses to the TSES and PALS questionnaire to determine whether there existed any significant margin of difference between the two different socioeconomic teaching environments in this study.

Table 1: Teacher goal orientation and sense of efficacy

	Total goal orientation score.					**Total sense of efficacy score**				
	Mean	Median	Mode	SD	t-score	Mean	Median	Mode	SD	t-score
Decile: 1, 2, or 3	122.97	126.50	115.00	21.25	0.6572	176.85	178.00	158.00	22.25	0.0081
8, 9, or 10	120.46	119.50	108.00	15.79		176.89	182.00	178.00	28.75	

Teacher goal orientation: A t-test was conducted to compare the mean goal orientation levels of LD school teachers (M =122.97, SD = 21.25) and HD school teachers (M = 120.46, SD = 15.79) (Table 1). The outcome revealed no significant differences in goal orientation levels between the two groups of LD and HD school teachers: t(105) = 0.6572, $p = 0.51$.

Teacher efficacy: A t-test was conducted to compare the mean efficacy levels of LD school teachers (M =176.85, SD = 22.25) and HD school teachers (M = 176.89, SD = 28.75) (Table 1). The outcome revealed no significant differences in teacher efficacy levels between the two groups of LD and HD school teachers: t(105) = -0.0081, $p = 0.99$.

4.2. The overall relationship between teacher experience and efficacy

Table 2: Goal orientation and efficacy per level of teacher experience

	Total goal orientation score				**Total sense of efficacy score**			
	Mean	Median	Mode	SD	Mean	Median	Mode	SD
My total teaching experience in teaching 12 to 16 yr olds is:								
2 - 3 yrs	115.67	113.00	95.00	19.58	177.67	180.50	190.00	14.18
4 - 5 yrs	119.31	122.00	120.00	14.97	176.62	178.00	178.00	13.12
6 - 15 yrs	118.44	119.50	108.00	17.78	167.85	175.00	180.00	33.45
16 + yrs	126.68	124.00	115.00	18.67	185.35	189.00	179.00	21.71

4.2.1 Teacher experience and efficacy

A one-way ANOVA was used to test for differences in efficacy between the four experience levels of teachers who responded to the TSES. The means and standard deviations are presented in Table 2. The regression analysis (Table 3) revealed that there was a significant difference between the four groups of teachers, F (3, 103) = 3.212, p = 0.026 with regard to teacher efficacy. For this sample of teachers there was a relationship between teachers' level of experience and levels of efficacy.

Table 3: ANOVA results for experience differences and efficacy

	Sum of Squares	**Df**	**Mean Square**	**f**	**sig**
Between Groups	6,281.393	3	2,093.798	3.212	0.026
Within Groups	67,152.081	103	651.962		
Total	73,433.474	106			

4.3. Comparison of efficacy and goal orientation between the least and most experienced teachers in LD and HD schools

As the point of interest was the relationship between teacher experience, goal orientation and efficacy, t-test scores were obtained to assess the difference between those teachers with the least experience (2-5 years) and those teachers with the most (16+ years). Table 4 shows the means, standard deviations and t scores by decile category.

Table 4: T-test results for experience between least and most experienced teachers.

	Deciles 1, 2, or 3						**Deciles 8, 9, or 10**					
	My total experience in teaching 12 to 16 year old students is ?						My total experience in teaching 12 to 16 year old students is ?					
	2 - 3 years	4 - 5 years	6 - 15 years	16 years or more			2 -3 years	4 - 5 years	6 - 15 years	16 years or more		
No of teachers	4	6	14	18			5	10	26	24		
	Mean	Mean	Mean	Mean	SD	T	Mean	Mean	Mean	Mean	SD	T
Total goal orientation score	117.00	117.83	118.73	129.79	21.25	-6. 5104	114.33	120.57	118.30	124.50	15.71	- 7.0023
Total sense of efficacy	184.33	175.67	163.20	185.50	22.25	-0.5688	171.00	177.43	169.87	185.25	28.75	-5.3613

4.3.1 LD school teachers

A t-test was conducted to compare the mean goal orientation of the least experienced teachers (M = 117, SD = 21.25) and the most experienced teachers (M = 129.79, SD = 21.25). The result revealed that there was a significant difference in goal orientation between the least and most experienced teachers: t(116) = - 6.5104, p = 0.0001 (see

Table 4). This result indicates the probability of a relationship between teacher experience and goal orientation.

For teacher efficacy, a t-test was conducted to compare the mean efficacy of the least experienced teachers (M = 184.33, SD = 22.25) and the most experienced teachers (M = 185.50, SD = 22.25). In LD schools, there was no significant difference between the least and most experienced teachers for efficacy: t(116) = - 0.5688, p = 0.5706 (see Table 4). No relationship was found between teacher experience and efficacy.

4.3.2 HD school teachers

A t-test was conducted to compare the mean goal orientation of the least experienced teachers (M = 114.33, SD = 15.71) and the most experienced teachers (M = 124.50, SD = 15.71). The result revealed that there was a significant difference in goal orientation between least and most experienced teachers: t(116) = - 7.0023, p = 0.0001 (see Table 4). This means that it is probable that teacher experience and goal orientation are related.

For teacher efficacy, a t-test was conducted to compare the mean efficacy of the least experienced teachers (M = 171.00, SD = 28.75) and the most experienced teachers (M = 185.25, SD = 28.75). There was a significant difference between the least and most experienced teachers for efficacy: t(116) = - 5.3613, p = 0.0001 (see Table 4). This result indicates a relationship between teacher experience and efficacy.

4.4. Summary of the findings illustrated in the Tables 1-4

The above findings are based on data obtained from the administration of the TSES and PALS and demographic information about teacher experience. A t-test revealed no

differences in overall goal orientation and teacher efficacy between the LD and HD schools even though these schools differ in SES and challenge. The researcher then tested whether there existed any relationship between teacher experience levels and efficacy for both LD and HD teachers.

Goal orientation and efficacy were then compared between the least and most experienced teachers in the LD and HD schools separately. In LD schools the t-test revealed that there was a significant difference between the least and most experienced teachers for goal orientation, but no significant difference for teacher efficacy. Experience therefore was found to be a factor related to goal orientation but not to teacher efficacy. The t-test result for HD teachers revealed a significant difference between experience and both goal orientation and teacher efficacy. Experience therefore was related to levels of goal orientation and teacher efficacy in the HD schools.

4.5. Thematic analysis

Table 5 presents the open-ended questions (in italics) which were presented to teachers. The questions offered teachers an opportunity to anonymously write about their teaching experiences and challenges faced. The summary of response rates to each question, expressed in percentages, formed part of the analytical process used to capture the themes from the spread of data across the responses received. The percentages reflect the proportions of LD and HD teachers' responses who were in agreement with the most common response codes identified.

It is important to note that the data analysed in this section of the study are merely the comments individual teachers chose to make for each question – any number of factors could have affected the nature of a response, for example time constraints on the teacher

when completing the survey. However, due to the sample size (107 teachers), common patterns stemming from underlying themes could be identified.

Table 5: Analysis of responses to open-ended questions

Open-ended questions (in italics) and response summary	**LD %**	**HD %**
1.Do you feel that your background affects your teaching?		
Yes	92	91
2. If "yes" please provide the main reasons.		
Varied work and life experiences are brought into the classroom.	23	27
The teacher's own educational and academic background influences expectations and the standards maintained for students.	23	20
3. What would you say constitutes a good day at school?		
Student learning, engagement and enthusiasm.	77	76
4. What would say constitutes a bad day at school?		
Behaviour issues which disrupt student learning, with many references to "disrespectful" behaviours.	72	64
5. Do you think that your ability to manage classroom challenges is improving with experience?		
Yes	86	100
6. If your answer to the above is "yes" please elaborate.		
Improved knowledge and understanding of young people and how they learn.	44	33
Have developed a wide range of strategies and can select and tailor strategies to individual student needs.	33	28
7. How would you describe the student make up of your classroom?		
Mixed abilities	32	30
Predominately Pakhea (white students)	0	27
Predominately Pasifika and Māori	26	0
Predominantly "middle" and "upper class" (as described by teachers)	0	12
No serious behavioural problems reported	0	24

8. Are there classroom difficulties which often make you feel helpless?		
Yes	32	13
Sometimes/not always	30	43
No	38	44
9. If your answer is "Yes" to the above, please elaborate.		
Behavioural issues and related problems.	48	14
Lack of support from management and organizational reasons.	24	11
Lack of parental support/"poor parenting"	33	22
10. What have you found to be most effective in dealing with difficult children in your classrooms?		
Establishing relationships and creating rapport with students to encourage engagement.	50	43
Devising and using the appropriate teaching strategies.	22	27
Restorative approaches, calmness and getting to talk to students.	20	27
11. How do you motivate student to learn ? Do you have some "tricks" that you use with them ?		
Planned lesson activities which can create a high level of student participation and engagement and enthusiasm – which involves teacher participation as well.	59	59
Engage with students establish rapport and build relationships.	39	37
12. What do you think makes one student more successful academically than another ?		
Student attributes which can promote learning, natural intelligence, interest, work ethic, commitment, determination, resilience.	48	56
Influences, support and expectation of parents and family. Home background.	47	36

4.5.1 Emerging themes

After a thorough analysis of the teacher responses, four themes were identified. These were:

1. Support or lack of support

2. Learning barriers

3. Relationships

4. Teacher background and experience

Responses categorized under the themes, “Support or lack of support” and “Learning barriers” generally described teacher perceptions of challenges and their attributions of the causal factors associated with school problems. Meanwhile, the responses categorized under “Relationships” and “Teacher background and experience” generally described how teachers coped with challenges and the strategies they identifies as the most successful.

Theme 1: Support or lack of support

Many more LD teachers referred to three levels of support which they felt could assist with classroom challenges and student learning than HD teachers. These support sources were identified as education stakeholders in general (for example, the Ministry of Education), support from the home (which included parents and families of students), and support from the school leadership. The support from school leadership included comments about organizational structures and planning. This is how some teachers expressed their situations:

a. General support

When discussing levels of support, some teachers expressed general frustration with the support available to teachers.

> We are made to feel that the only person that can help the child is the classroom teacher, when I am expected to work or follow up with the ever increasing paperwork demand and one student needs my attention I am forced to go and solve their issues. Why can there not be a shared communal group of educated adults that can assist each child ? Why is everything being landed on the lap of an already overworked classroom teacher ?

> I do think that external services are very poor when students tell me about awful family stuff Students home situation that affects their learning

b. Parental support

Thirty-three per cent of LD teachers and 22% of HD teachers identified classroom difficulties (Question 9) which could make them feel helpless due to poor or a lack of support from parents when faced with classroom challenges.

> Large number of students in the junior classes. Parents take no responsibility. Parents not supporting the school. Sometimes students bring issues from home and find it hard to cope within the classroom environment.

> Lack of home support where students come to school without gear or food or tired because they are expected to work to help the family

c. Support from the school and school leaderships

Twenty-four per cent of LD teachers and 11% of HD teachers felt a lack of support from the school and cited related organizational reasons for feeling helpless in the classroom (Question 9). Lack of support from school management came out very strongly.

> Management sometimes too busy to help and children have continued poor behaviour.

> The administration does not support teacher expectations in the classroom but expects teachers to make this explicit to students.

> Being told to have this information and that information on the computer when I have reports to write and tests to compile.

> Lots of meetings that seem to load more things onto my already busy schedule. I feel a little blue because many of these activities take me away from planning effective classroom experiences for the children.

Theme 2: Learning barriers

Seventy-two per cent of LD teachers and 64% of HD teachers described a bad day at school (Question 4) as one with many student behavioural issues. This included disruptive student behaviours and what some teachers described as “disrespectful” behaviours. In describing the student makeup in classrooms (Question 7), 24% more LD than HD teachers reported having serious behavioural problems. For classroom difficulties which could make a teacher helpless (Question 8), most LD and HD teachers cited behavioural and related problems as the main reason they were made to feel helpless. There was also a direct link between the theme “Learning barriers” and the lack of support from students’ parents and family, and school management. Disruptive, off-task and disrespectful behaviour featured in most behavioural episodes reported by teachers:

> Behaviour management takes away from the learning that I wish to have occur in my classroom.
>
> You can have the best teaching methods but you cannot physically make the students put pen to paper.
>
> Students show lack of respect.
>
> Some student are hugely disengaged in learning and choose not to participate. Students are consistently disruptive and don’t seem to improve despite my consistent efforts over the year.
>
> Pack bad behaviour where it is not clear who the instigator is or when students back each other and refuse to accept correction “ because other people were doing it”

Theme 3: Relationships

Many teachers felt that establishing rapport and building relationships with students increased engagement and was a very effective way of dealing with difficult students

(Question 10). In answering the question "What would you say constitutes a good day at school?" Seventy-seven per cent of LD and 76% of HD school teachers described such a day as one when students displayed a high level of engagement and enthusiasm which resulted in learning. Similar responses were received for Question 11, which asked, "How do you motivate students to learn?"

In general four types of relationships were highlighted. These were teacher–management, teacher–child, child–parent, and parent–teacher relationships. From their responses most teachers indicated that they encouraged and promoted high levels of student–teacher engagements. This occurred or was achieved in various ways. It is also significant to note that many teachers also stated that the teacher's direct participation in classroom activities and visible passion and enthusiasm for the subject(s) taught were important for effectively establishing relationships and promoting engagement. The following five practices were identified as important for creating and maintaining effective relationships:

a. Making the connection: Teachers emphasized being proactive and taking the first steps to initiate actions and behaviours which result in building relationships with the students. Teachers acknowledged that not all students start the process of relationship building with the teacher on their own accord:

> Getting to know each and every child in my class – what they like, dislike, strengths and needs. I would never have an invisible child (usually quiet good girls) in my class. It is my responsibility to seek them out and get to know them, not the other way around.
>
> Making connections with as many students as possible – seeing the "lights go on" in the face of a student who has been struggling. involve parents/teachers and children working together
>
> I have found that building rapport from early on with students helps.

b. Individualizing learning: Teachers emphasized the benefits of one-on-one interaction with their students. Teachers were then able to identify the needs and learning styles of students and design instructions to cater for their individual needs.

> Encouraging students, especially one on one rather than the whole class helps me to motivate kids.
>
> By being motivated by being taught in their preferred learning style.
>
> Try to tailor the programme to suit individuals with choice of content and teaching methods, small groups are used frequently behind the difficult behaviour – have restorative discussion with the student to find out (and address) the reasons for the difficult behaviour.

c. Creating rapport: Mood and tone created by the teacher makes the teacher approachable. Teachers created classroom climates conducive for building rapport. Calm, restorative, and reflective approaches were used in talks and discussion. Interaction and participation were invited. Teachers met with and had conversations with individual students. Students were made to feel that they were being heard:

> Listening to students issues so they feel heard.
>
> I have small meetings of 2-3 minutes prior to class starting or prior to school ending to get a feel of the emotions a certain child is feeling. Home visits and connections with the family are also key for success.
>
> Use calm, quite respectful language, have a restorative discussion to find out (and address) the reason.

d. Learning modes and incentives which complement instructional strategies

Teachers in general emphasized that providing optimal and appropriate classroom learning climates which included opportunities for cooperative learning and fresh

activities of relevance increased student participation and engagement. Incentives, praise, and rewards increased motivation to participate. The use of information technology (IT) for learning featured prominently in responses from both LD and HD teachers and was related to student willingness to participate in fun and games while learning. This represents a paradigm shift away from the traditional "pen and paper" approach to learning and relates directly to instructional strategy with a difference:

> Try to make learning fun – use multi media with content they can connect with
>
> Playing educational games and practical exercises. .
>
> I like to laugh, play games and support their learning, build around their interests, approach learning like a child.
>
> Students are very in tune with ICT so this is used as a tool for learning. Find out what they love. Play online games.

e. Establishing goals and expectations: These responses pointed to the teacher role modelling as a practitioner and earning rather than assuming respect and the right to manage the classroom. The teacher's own visible passion and enthusiasm contributed to role modelling for students. Expectations were made known:

> High expectations, let them know me so they see me more as an equal, remove the idea of authority from my position, get involved and show interest beyond school, you have to show them that you will never give up on them (because usually everyone else does)
>
> To be excited about learning myself-and to be well prepared
>
> Being enthusiastic about learning myself. Being a good role model. Getting excited about topics and school life. Set expectations and goals

Theme 4: Teacher background and experience

Ninety-two per cent of LD teachers and 91% of HD teachers felt that their background affected their teaching in the classroom. As part of background teachers highlighted three aspects which affected their classroom teaching: (a) their own personal attributes and family background, (b) work-life experiences; and (c) past teaching experiences.

a. Personal attributes – family and educational background

Twenty-three per cent of LD and 20% of HD teachers felt that a teacher's own education (academic) affected the expectations and standards they set in the classroom (Question 2). One factor, the teacher's family background, featured in many responses. Teachers felt that their personal family values, the values placed on education by their own families also affected their classroom expectations and the standards they set and maintain for their students. Teachers reported the following aspects of their background as influential to their teaching:

> My academic background has a major impact on my teaching in the way of the examples I use in class and the confidence I have to teach a certain subject. Education has been very important to me. I highly value learning and try to impart this on my students.

b. Work-life experiences

Twenty-three per cent of LD teachers and 27% of HD teachers felt that work-life experiences accounted for much of their approach in the classroom. Varied past experiences which included meeting different people in various different contexts seemed to influence how teachers practised in their classrooms and related to students. Only a few teachers referred to cultural differences or similarities which affected their teaching or relationships with students. The few who mentioned similarities and identified with the culture of their students stated this as an advantage. These teachers were mainly from Pasifika cultural backgrounds:

> Range of life experiences has given me a rich background to my teaching values, practices, expectations, cultural responsiveness.
>
> Accumulated life experiences thus far have coloured my worldview.
>
> My (previous) work has brought me into contact with people from all backgrounds.

c. Past teaching experience

This seemed to be one of the most powerful of teacher attributes and relates directly to teacher efficacy. Eighty-six per cent of LD teachers and 100% of HD teachers indicated that their ability to manage classroom challenges improved with experience (Question 5). The value of past teaching experience therefore emerged as the most powerful subtheme in this study. Teachers referred to a developing and expanding toolkit from which they could draw from and individualize teaching strategies. Forty-four per cent of LD teachers and 33% of HD teachers mentioned that their knowledge of young people and how they learn was improving with experience (Question 6):

> You build up a reservoir of behavioural techniques or strategies that work.
>
> More "tools" in my toolkit. Trial and error, changing and adapting content and teaching method to suit students in front of me. Now able to deal with 99% of challenges by myself-without getting any help.
>
> I learn new strategies every day in teaching. I deal with different situations that call on different skills and I learn on the spot what skills are needed for certain situations.

4.6. Summary of findings

Data obtained from administering the TSES and PALS; teacher demographic information about experience; and teacher responses to the open-ended questions were analysed. The overall results presented in Tables 1-5 above indicate that there was no significant difference found in the levels of teacher goal orientation or efficacy between

LD and HD schools. In both LD and HD schools a significant relationship was found between the lowest-experienced and highest-experienced teachers for efficacy, indicating that experience and efficacy are related.

The tabulated data above present an overall picture of teacher's goal orientation, experience, and efficacy for all teachers in the study and for LD and HD teachers separately. Individual teacher responses to the open-ended questions were analysed separately and the data presented in Table 5. Thematic analysis of the responses revealed common experiences and views of teachers. These were compared between LD and HD school teachers. Findings from the thematic analysis confirmed a strong relationship between teacher experience and efficacy. "Experience" in this analysis included the rich diversity of experience gained from managing more challenging classroom issues and problems in addition to the compounded experience of time spent in the profession. The thematic analysis also highlights the difference in challenges and supports between teachers who teach in LD and HD schools. A much greater proportion of teachers from the LD schools indicated challenges and barriers which could affect their sense of efficacy.

Chapter 5. Discussion

Chapter 5 combines and integrates the findings from the mixed method approach used in this study. Findings from quantitative data are confirmed or disputed in light of the findings from the analysis of the qualitative data. This chapter discusses the results and findings against the backdrop of the literature on teacher efficacy. In validating research the discussion also highlights and reveals the dynamic interaction of the variables involved in the formation of teacher efficacy beliefs.

Data analysis was used to confirm theoretical assertions that teacher efficacy as a construct fluctuates in accordance with environmental teaching conditions. Evidence was found in support of reciprocal interactions between the variables responsible for the formation of beliefs about efficacy. This research found these variables to be entwined in relationships between the individuals or groups who are a part of and create the context for teaching and learning. An educational context then is composed of a system of interconnected relationships of which the teacher is but one participant. Higher levels of teacher efficacy are a reflection of how well a system can sustain, reduce, or eliminate challenge and support teachers to be more efficacious.

In this study, no significant difference was found between teacher goal orientation and efficacy beliefs between LD and HD schools, despite the difference in expected levels of challenge. Qualitative analysis revealed that many teachers in LD schools were able to utilize effective teaching practices and approaches to manage challenging situations. The concern however, which continues to spur the research into efficacy, is very low teacher efficacy and the related consequences for student academic achievement. This study found that that the key variables involved in efficacy growth are contextual

relationships and how teachers perceive these relationships. Strained or non-existent relationships seem evident from teacher attributions of blame for their difficult classroom situations. These attributions were linked with how teachers perceived their job situation, their responsibilities, and the responsibilities of others. Levels of challenge seemed to mediate teachers' attributions, perceptions, and beliefs.

4.7. Teacher assessments and responses to socioeconomically related challenges

Ethnic and cultural minorities often face difficulties associated with SES. Findings in this study revealed that LD classrooms are more culturally and ethnically diverse than HD equivalents, and include many more Māori and Pasifika students. LD teachers also reported more challenging and disruptive student behaviours. Researchers have associated such challenging school environments with lower SES (Barbee, 2010; Nahal, 2009; Pendergast et al., 2011; Wilson, 2009).

Problems associated with the cultural, ethnic, and language differences of migrant and minority children can negatively affect their school performance (Regalla, 2013; Rubie-Davies et al., 2012). Biased and prejudiced attitudes and perceptions of teachers may contribute to the problems of these already disadvantaged students. Teachers' blurred understandings of the teaching situation can affect how they assess the tasks and challenges, and how they respond to challenge and relate to students (Auwarter & Aruguete, 2008; Bandura, 1997; Brady & Woolfson, 2008; Keogh, 2000; Kulinna, 2008; Muller et al., 1999, cited in Rubie-Davis, et al., 2006; Torff, 2011).

There is also research evidence confirming that parents, especially lower-income parents, tend to make fewer contacts with schools and teachers in the years after their children transition into high school (Barbee, 2012; Carpenter, 2004; Rubie-Davies et al.,

2012). Teachers in the current study taught students from ages 12 to 16 years old, usually considered the transition years into high school. Many more LD teachers in this study related classroom difficulties to absence of parent support than did HD teachers. Researchers have found that teachers tend to misconstrue limited contact from parents as an indication of lack of interest and support, not realizing that parents, especially lower-income parents are actually relying on greater support from the teachers (Barbee, 2010; Bempechat et al., 2011). According to Bempechat et al. (2010), lower-income parents care deeply about their children but their socioeconomic predicaments may make them less available for school visits – hence greater support from teachers and the school may be expected by parents.

Inconsistencies in expectations between teachers and parents can also affect teacher efficacy beliefs. Researchers have associated student learning outcomes with levels of academic expectations (Rubie-Davies, 2006, cited in Rubie-Davies et al., 2012; Stipek, 2012). High-efficacy teachers usually have high expectations for students. Teachers from the LD schools in this study made reference to lower expectations for children, especially from parents:

> Most of the low-achieving students I have met over the years have parents who don't really expect them to succeed
>
> You have to show them that you will never give up on them (because usually everyone else does)
>
> The administration does not support teacher expectations in the classroom but expects teachers to make this explicit to students.

Research findings confirm that the classroom expectations of students from lower socioeconomic teaching contexts are generally lower (Hirn, 2011; Stipek, 2012; Torff,

2011; van Uden et al., 2013). Parents' expectations may therefore be inconsistent with teachers' expectations. Studies emphasize the importance of academic expectations as a source of motivation for students to achieve at the expected levels (Rubie-Davies, 2010; Stipek, 2012). The strengths and attributes of an efficacious teacher can vary across contexts and expectations can mediate the levels of this efficacy (Bandura, 1997; O'Neill & Stephenson, 2012; Tschannen-Moran et al., 1998; Tschannen-Moran & Woolfolk Hoy, 2007). If teachers lose motivation due to lack of support for their higher expectations, some teachers may not persist against challenge which may then reduce beliefs in their ability to affect change (Mota, 2010). Teacher expectations may also be lowered because of the time spent or lost while dealing with challenging classroom situations (Scott et al., 2007).

Researchers investigating low teacher efficacy have found that some teachers in lower-socioeconomic teaching environments may also hold lower expectations of disadvantaged students because these match their personal perceptions and associated attributions about students' academic potential (Rubie-Davis et al., 2006; Stipek, 2012). Often these teacher expectations are associated mainly with the differences in ethnic and cultural backgrounds between teachers and students. This study did not illicit conclusive support for efficacy effects of culture or ethnic differences. However, for open-ended Question 1, over 90% of responses from teachers in both LD and HD schools indicated that their background did affect their teaching. Social cognitive theory (Bandura, 1977) purports that teachers who do not expect students to be successful are likely to put in less effort in preparation and delivery of instruction, and to give up more easily at the first sign of difficulty. In the presence of challenge the classroom climates of these teachers may therefore not be as stimulating as those of highly efficacious and

motivated teachers.

Teachers are the interface between students, parents, and the community on the one hand and their school leadership and administrators on the other. Teachers in this study strongly attributed the difficulties they experienced in coping with classroom problems to a lack of support from school managements and school practices which they felt took up much of their time. The situation was worse in LD schools, where challenges seemed to be greater:

> The administration does not support teacher expectations in the classroom but expects teachers to make this explicit to students.

> Having senior management overturn or ignore established school policies – management does not back up the classroom teachers.

When teachers are aware of low levels of support, this can affect their level of resilience against challenge, causing them to give up more easily on students. In comparison to the above excerpt, the following response indicates resilience against challenge:

> High expectations, let them know me so they see me more as an equal, remove the idea of authority from my position, get involved and show interest beyond school, you have to show them that you will never give up on them (because usually everyone else does).

4.8. Teacher experience

Teacher experience is predicted to mediate and increase teacher efficacy (Bandura, 1986, 1997). The ANOVA regression analysis and t-tests conducted in this study confirm the qualitative findings on the relationship between teacher experience and teacher efficacy. As there were many more experienced teachers in this study, based on theoretical assumptions this result was anticipated and confirms the association between

teacher experience and efficacy. The findings reveal that various factors are involved in creating the experiences which result in the formation of efficacy beliefs. Therefore the nature of teachers' experiences influences the quality of teacher relationships within the educational context. Teacher experience can therefore be considered as the teacher's felt experience of the network of relationships which contribute to efficacy beliefs. Teachers' ultimate feelings of efficacy are strongly influenced by factors beyond their classroom experiences.

4.8.1 Classroom teaching experiences and teacher efficacy beliefs

Researchers have placed emphasis on the importance of successful classroom teaching experiences (Bandura, 1977; Tschannen-Moran & Woolfolk Hoy, 2007). Both LD and HD teachers in this study indicated that greater experience had contributed to more effective classroom practices:

> More "tools" in my toolkit. Trial and error, changing and adapting content and teaching method to suit students in front of me. Now able to deal with 99% of challenges by myself-without getting help.

A fair proportion of teachers, particularly in LD schools, reported classroom experiences of struggles against challenge. Such experiences are indicative of how low teacher efficacy beliefs are formed. Teachers in LD schools described experiences such as the following:

> Behaviour management takes away from the learning that I wish to have occur in my classroom. You can have the best teaching methods but you cannot physically make the students put pen to paper.

> Some students are hugely disengaged in learning and choose not to participate. Students are consistently disruptive and don't seem to improve despite my consistent efforts over the year.

Classroom experiences like the above accompanied teacher responses to Question 8. For this question, 32% of LD teachers expressed feelings of “helplessness” in the face of classroom challenge (answering “yes”). A further 30% indicated that they “sometimes/not always” felt this way. In comparison, only 13% of HD school teachers reported helpless experiences and 43% “sometimes/not always” (answering “yes”). Most teachers cited coping with poor student behaviour as the main reason for feelings of helplessness.

Bandura (1977) states that not all teaching contexts will be conducive to promoting higher efficacy. Raudenbush et al. (1992) assert that there are many classroom situations which could challenge even the most experienced teacher. For HD schools in this study a relationship was found between teacher experience, goal orientation, and efficacy. In comparison, in LD schools the t-test found no significant connection between the least and most experienced teachers with regard to teacher efficacy. In this study, greater experience in LD schools did not seem to indicate higher efficacy.

An analysis of the type of teacher classroom experiences may explain part of the reason for this finding. The nature of teacher experiences over time is important for efficacy growth (Bandura, 1997). Accumulated experiences which threaten teacher efficacy include compounded, intense and repeated poor teaching experiences. Participants in this study were mainly teachers with over 15 years of teaching experience, with all participants having more than a year’s teaching experience. Many teacher responses such those quoted above seem to exemplify what Gotshall and Stefanou (2011) refer to as learned helplessness. If repeated failed experiences overwhelm the teacher this can

result in negative beliefs about capability. Learned helplessness, according to Gotshall and Stefanou, is the flip side of efficacy. It can therefore be inferred that classroom challenges can affect the teaching efficacy of even experienced teachers.

Bandura (1977, 1997) particularly warns against the risk to teacher efficacy growth in challenging socioeconomic teaching environments. Bandura states that efficacy is not stable across contexts and mere experience is not adequate enough to ensure high efficacy levels at any given time. Thus, the trajectory of self-efficacy through adulthood may not be uniform or stable. Bandura states workers reassess their self-efficacy beliefs in mid-life. There is a need then for experienced teachers to continue feeling efficacious. Despite levels of experience, in this study a total of 62% of LD teachers and 56% of HD teachers reported states of helplessness due to challenging classroom situations. The findings from studies on teacher attrition reveal that over time even experienced teachers fail to remain resilient against the challenges of teaching (Ages, 2011; Green et al., 2009; Rice, 2010). According to Ages (2011), many teachers may not remain long enough in the profession to become experienced in the classroom.

Most teachers in this study quoted disruptive student behaviour and lack of support as the main reasons for their feelings of helplessness in challenging situations. Researchers have identified a direct relationship between teacher efficacy beliefs and their perceptions of the support they receive from school administrators and parents (Li, 2010; Regalla, 2013; Stipek, 2012). Stipek (2012) asserts that teachers' self-efficacy beliefs are not solely based on their own skill levels. If unsupported, teachers who experience low efficacy are more likely to attribute student misbehaviour to home and student factors and not to teacher or school factors (Brady & Woolfson, 2008; Cothran

et al., 2009; Kulinna, 2008; Woodcock & Vialle, 2010). Woodcock and Vialle (2010) assert that these attributions of blame can affect the teacher's confidence and efficacy in establishing sound relationships with students and student engagement in lessons. According to Prather-Jones (2011), attributions and perceptions which result when teachers have low confidence in their abilities thwart classroom relationships and affect classroom management (Johansen et al., 2011; Pang, 2012). When teachers are unmotivated to persevere they are more likely to believe that all school problems can be linked to unconcerned parents (Bempechat et al., 2011).

4.8.2 Relationship experiences and teacher efficacy beliefs

Many researchers believe that the nature of teachers' relationships with other partners in education is crucial to nurturing teacher beliefs about their efficacy (Blank et al., 2012; Brinson & Steiner, 2012; Osher et al., 2012). These researchers have shown that more collaborative relationships result in shared visions for school learning and open the channels of communication for engagement. Osher et al. (2012) state that children can only benefit from the cooperation and partnership of parents and schools. According to the authors, teachers and schools are then able to gain the support of parents when raising the expectations for children. It seems that such an approach is necessary to address the following types of school problems identified by teachers in this study:

> Management sometimes too busy to help and children have continued poor behaviour. The administration does not support teacher expectations in the classroom but expects teachers to make this explicit to students.

Brinson and Steiner (2012) place value on the need to bridge and foster relationships in education. More privileged socioeconomic teaching contexts may offer greater opportunities for more stable working relationships between teachers, students, and

other participants in education. In the present study teachers in both LD and HD schools valued the support of parents. The greater challenge in LD schools heightens the need for parental involvement and support. However, socioeconomic-related constraints can limit opportunities for these parents to maintain contact with schools. Rubie-Davies et al. (2012) state that in higher-decile schools teacher efficacy may be higher due to greater pressure from parents. This indicates that parents have high expectations and they are able to act on these expectations. In comparison to parents in lower-socioeconomic communities, these parents are in a position to ensure that their expectations are met by the school and teachers.

Teachers may not always proactively make the effort to involve and engage parents. Low teacher efficacy is associated with lower teacher self-confidence (Bandura, 1997; Deskins, 2010; Waleff, 2010). When teachers are experiencing the problems associated with low confidence and efficacy they are less likely to approach their managements for support and assistance. When teachers do not anticipate support they generally tend to project blame for student problems rather than admit that they may be a part of the problem (Barbee, 2010; Wilson, 2009). The risk is that the critical teacher–parent relationship is affected, with the potential loss of parental contact and support.

Researchers are clear in stating that it is the responsibility of school leaderships to initiate engagement and support staff to become more efficacious teachers (Borrero et al., 2013; Drago-Severson, 2012; Glover, 2007; TNTP, 2012). According to Stipek (2012), school administrators also have the ability to change teachers' perceptions of parents by fostering closer parent–teacher partnerships. Blank et al. (2012) state that school leaderships, in collaboration with teachers, can train and develop teachers and

involve parents in a combined effort to share resources. Therefore, better collegial partnerships between school administrators, managements, and teachers could contribute to improving or altering teacher perceptions of parents. Stipek (2012) suggests that teacher efficacy is best understood by considering the effects and contributions of all participants on efficacy and student achievement.

4.8.3 Successful classroom experiences

Researchers in education emphasize teacher mastery of three domains of classroom practice for efficacious teaching: student engagement, instructional strategies and methods, and classroom management (Tschannen-Moran & Woolfolk Hoy, 2001). Teacher deficiencies in any or all of these domains may result in classroom climates which are not conducive for academic learning. The responses below fit research recommendations for efficacious classroom behaviours. For Questions 10 and 11 teachers responded that they manage difficulties and motivate children in the following ways:

> High expectations ... get involved and show interest beyond school, you have to show them that you will never give up on them (because usually everyone else does)

> Being enthusiastic about learning myself. Being a good role model. Getting excited about topics and school life.

> I have found that building rapport from early on with students helps.

In the above excerpts teachers are employing efficacious strategies against the grain of contextual challenge to efficacy. According to Stipek (2012), student success is a consequence of the teachers' ability to produce positive learning outcomes.

Definitions of efficacy emphasize personal beliefs in one's capability, which presumes a degree of preparedness to be efficacious (Bandura, 1977; Stipek, 2012; Tschannen-Moran et al., 1998). The level of teacher preparedness to face challenge may depend on more than just the classroom teacher. Teachers need to possess the skills necessary to effectively to engage students, manage their classrooms, and design and implement appropriate instructional strategies.

Building relationships and rapport which promote engagement and attract student attention is regarded as one of the most important domains of classroom practice (Lloyd, 1995; Peterson et al., 2011). This features prominently in responses to Question 11 about how teachers motivate students to learn. One teacher had this to say about relationship building:

> The aim is to build a relationship with the students. Learn every child's name by the end of the first week.

Successful student engagement can arrest the attention of students, thus allowing the teacher and students to be heard during instruction and classroom activity.

Research findings continue to identify the importance of relationship building as crucial to classroom engagement. Results from a study by Lloyd (1995), who conducted interviews with students highlighted the importance of building relationships with students who experience problems with classroom learning. In their study, Peterson et al. (2011) interviewed students, teachers, and parents. All three groups highly rated the value of teacher–student relationships as important for student learning. According to

Cleve (2012), gaining students' attention and cooperation is not merely about enforcing classroom rules. Exploring and finding out what will promote student engagement at different levels and implementing these may be a more effective strategy to attract student attention and involvement.

Complementary to building relationships, researchers also stress the importance of getting to know students as individuals. This, combined with appropriate instructional activities, could promote very high levels of engagement (Andersen et al., 2012; Cleve, 2012; Dibapile, 2012; McClowry et al., 2010).Teachers in this study confirmed the benefits of this strategy in the following responses:

> Getting to know each and every child in my class – what they like, dislike, strengths and needs.
>
> I would never have an invisible child (usually quiet good girls) in my class. It is my responsibility to seek them out and get to know them, not the other way around.
>
> Encouraging students, especially one on one rather than the whole class helps me to motivate kids
>
> Try to tailor the programme to suit individuals with choice of content and teaching methods, small groups are used frequently behind the difficult behaviour

Parsonson (2012) states that exciting, participatory learning will result when children feel included in the learning process. As teachers become more motivated by student successes beliefs in efficacy will rise.

4.8.4 Support for successful teaching experiences

Gaining the attention of children who are already affected by disadvantaged circumstances poses a challenge to the teacher and can affect efficacy beliefs. For various reasons embedded in their socioeconomic circumstances, these children will be

less focused and bear negative attitudes, which may also stem partly from their experience of teachers' attitudes (Hirn, 2011; Sazak Pinar & Sucuoglu, 2011; Torff, 2011; van Uden et al., 2013). Moderating the sources of contextual challenges, like poverty, may not always be practical or possible to achieve. However, with adequate support, mentoring, and development teachers will be equipped with the knowledge, capability, and skills to efficaciously manage school behavioural problems. When teachers feel supported, resilience is strengthened which in turn increase beliefs in efficacy (Briley & Plaza, 2012; Gebbie et al., 2012; Pendergast et al., 2011). Researchers state that learning how to build student–teacher relationships to promote classroom engagement requires formal training (Andersen et al., 2012; Johansen et al., 2011; Mitchell et al., 2010; Parsonson, 2012).

Researchers acknowledge that teaching can be a very challenging profession (McClowry et al., 2010; Travers & Cooper, 1996; Vaezi & Fallah, 2011) and warn that teachers may not always be prepared enough for the challenges of the classroom (Britzman, 2003; Nahal, 2009; Raudenbush et al., 1992). Serious challenge can lower teacher beliefs in efficacy and reduce motivation to work harder and to persist with difficult students (Aitken & Harford, 2011; Atkin & Massey, 2004, cited in Agarwal, 2011). The following responses from teachers indicate levels of preparedness and lack of understanding about their predicaments:

> Students are consistently disruptive and don't seem to improve despite my consistent efforts over the year

> You can have the best teaching methods but you cannot physically make the students put pen to paper

Students show lack of respect

The literature review carried out in Chapter 2 established that contextual challenges can mediate teacher beliefs. There is a need for teacher beliefs to be strengthened and reinforced in order to remain powerful and resilient to the potentially overpowering effects of contextual challenges (Gibson & Dembo, 1984, cited in Pas et al., 2012; Liu et al., 2008). Researchers have found evidence to support a strong focus on teacher mentoring, development, and training to retain and assist teachers in developing more stable and resilient skills which prepare them for the challenges ahead (Briley & Plaza, 2012; Pendergast et al., 2011). According to Stipek (2012), very supportive teaching environments may contribute to higher teaching efficacy in challenging and demanding conditions. This has been confirmed by the findings of other researchers (Calik et al., 2012; Ghamrawi, 2011). Calik et al. (2012) found that teachers' self-efficacy can increase if teachers perceive support from the actions and behaviours of their school leaderships.

Teacher training and constant mentoring and development which foster classroom relationships, engagement, and resilience will equip teachers to remain prepared and resilient to challenge, raise efficacy beliefs, and avoid the necessity for blame.

Researchers have found that when teachers are well equipped for challenge, their confidence and resilience improves (Briley & Plaza, 2012; Gebbie et al., 2012; Pendergast et al., 2011). They will be more willing to take risks and be less afraid of failures. Such teachers are less critical and can work harder with struggling students (Ashton & Webb, 1986; Gebbie et al., 2012; Ross et al., 1996). Liu et al. (2008) state that teachers remain motivated if they can find ways to manage problems, which then

increase mastery approaches, experience, and efficacy. As successful experiences accumulate, so will a teacher's sense of efficacy improve. This seems evident from the following teacher response:

> With experience I am able to quickly identify potential disrupting behaviours in class and do something to prevent it from escalating – reduce risk of challenges in the classroom.

The responsibility then reverts to school leaderships and administrators to offer or increase the required support teachers in this study have stated they need. This may prevent teachers feeling helpless in situations such as the above. The most important learning from these findings points to the value of teachers, students, school leaderships, and parents working together in a collaborative, engaging, and interactive ways to cope with challenge. Sound relationships need to be established and built on effective communication, collaboration, and engagement which shares the responsibility and accountability for effective practices against challenge. The stress and pressure of challenge on individuals may reduce resilience and teacher efficacy. To compensate for this problem, the researcher compared the relationship between efficacy beliefs of the lowest and most experienced teachers.

Chapter 6. Conclusion

This study has demonstrated the powerful impact teachers can have on student classroom behaviour and the implications for student academic achievement. However, the study has also highlighted the reciprocity of variables espoused in the social cognitive theory of Bandura (1977). Against challenge, it is teamwork which will assist and equip the lone classroom teacher to persist and remain resilient. The team should involve all stakeholders, including the students in the process of learning. Working together rather than separately can generalize the main goals for all. Teachers seem more likely to dispense responsibility for student learning if they feel isolated in the face of challenge. A team effort could change the teaching and learning culture of a school and possibly an entire community. The students and community will be able to recognize this culture when it is more evidently displayed by all.

The studies by Lloyd (1995) and Peterson et al. (2011) involving students, teachers, and parents identify relationship building as the key factor which can promote engagement and learning. Teachers in this study stated that establishing relationships which promote engagement and rapport was their best strategy against challenge. The literature on teacher efficacy emphasizes the importance of collegiality and working in partnership. This can also be extended to parents. In summary, this study highlights the benefits for teacher efficacy of promoting school relationships which involve greater communication, collaboration, and teamwork - all of which characterize a cultural framework of practice. This approach is supported by Stipek (2012), who suggests that efficacy is best understood by an understanding of the relationships between all the participants responsible for teacher efficacy and student achievement.

The findings in this study have implications for areas such as teacher mentoring, training, and development. Many researchers argue that the responsibility for developing school practices which can increase teacher efficacy lies with school leaderships. Putting into practice more cooperative and collaborative relationships within schools should enhance collegiality and trust which will make teachers feel supported rather than isolated and alone when faced with challenges. If teachers are well supported and prepared for challenge then they will grow in efficacy from the successful experiences which result.

Faced with the prospect of not being able to secure enough schools and participants for this research, the researcher had to rely on the data from anonymous surveys for this study. While the use of these tools allowed freedom of expression without restriction, this method of data collection denied the researcher access to more invasive and informative data about the nature of supports for teachers and relevant details about the staff development programmes and training opportunities available in individual schools. The use of such data would be useful to evaluate content and, in any comparison of teacher efficacy beliefs, to determine how these beliefs may be affected and influenced by available supports and development initiatives. The findings on the relationship between the levels of teacher experience and efficacy are also limited by the sample size of teachers in the four age categories investigated in this study. Only 9 of the 108 teacher participants had under three years of teaching experience, with the majority having over six years of experience.

References

Agarwal, R. (2011). Negotiating visions of teaching: Teaching social studies for social justice. *Social Studies Research & Practice, 6*(3), 52-64.

Ages, V. D. (2011). Teacher perceptions on stress and retention. (Unpublished doctoral dissertation). Walden University, Minneapolis, MN. ERIC Number: ED524451.

Alliance for Excellent Education (AEE). (2004). *Tapping the potential: Retaining and developing high-quality new teachers*. Washington, DC: Author.

Alzaidi, A. M. (2008). Secondary school head teachers' job satisfaction in Saudi Arabia: The results of a mixed methods approach. *ARECLS, 5*, 161-185.

Andersen, R. J., Evans, I. M., & Harvey, S. T. (2012). Insider views of the emotional climate of the classroom: What New Zealand children tell us about their teachers' feelings. *Journal of Research in Childhood Education, 26*(2), 199-220. doi:10.1080/02568543.2012.657748.

Anderson, R. N., Greene, M. L., & Loewen, P. S. (1988). Relationships among teachers and students, thinking skills, sense of efficacy, and student achievement. *Alberta Journal of Educational Research, 34*(2): 148-165.

Andreou, E., & Rapti, A. (2010). Teachers causal attributions for behaviour problems and perceived efficacy for class management in relation to selected interventions. *Behaviour Change, 27*(01), 53-67.

Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement.* New York: Longman.

Auwarter, A. E., & Aruguete, M. S. (2008). Effects of student gender and socioeconomic status on teacher perceptions. *Journal of Educational Research, 101*(4), 242-246.doi: 10.3200/JOER.101.4.243-246.

Bandura, A. (1977). *Social learning theory.* Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1982). Self-efficacy mechanisms in human agency. *American Psychologist, **37***, 122-147.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1989). *The multidimensional self-efficacy scales.* Unpublished test, Stanford University, Stanford, CA.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.

Bandura, A. (2008). An agentic perspective on positive psychology. In S. J. Lopez (Ed.), *Positive psychology: Exploring the best in people* (Vol. 1, pp. 167-196). Westport, CT: Greenwood.

Barbee, M. W. (2010). A handbook for educators: Encouraging parent involvement in low SES middle schools. (Unpublished doctoral dissertation). Alliant International University, San Diego, CA. ERIC Number: ED516381.

Bempechat, J., Li, J., Neier, S. M., Gillis, C. A., & Holloway, S. D. (2011). The homework experience: Perceptions of low-income youth. *Journal of Advanced Academics, 22*(2), 250-278. doi: 10.1177/1932202X1102200204.

Bergsmann, E. M., Van De Schoot, R., Schober, B., Finsterwald, M., & Spiel, C. (2013). The effect of classroom structure on verbal and physical aggression among peers: A short-term longitudinal study. *Journal of School Psychology. 51*(2): 159-174.

Berman, P. (1977). *Federal programs supporting educational change, vol. VII: Factors affecting implementation and continuation* (Rand Report R-1589/7-HEW). Santa Monica, CA: Rand Corporation.

Blank, M. J., Jacobson, R., & Melaville, A. (2012). *Achieving results through community partnerships: How district and community leaders are building effective, sustainable relationships.* Washington, DC: Center for American Progress.

Blase, J., & Blase, J. (2004). The dark side of school leadership: Implications for preparation. *Leadership and Policy in Schools, 3*(4), 245-273.

Borrero, N., Lee, D., & Padilla, A. M. (2013).Developing a culture of resilience for low-income immigrant youth. *Urban Review: Issues and Ideas in Public Education,* (2), 99-116.

Brady, K., & Woolfson, L. (2008). What teacher factors influence their attributions for children's difficulties in learning? *British Journal of Educational Psychology, 78*(4), 527-544. doi: 10.1348/000709907X268570.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.

Briley, J. S., & Plaza, O. H. (2012). The relationships among mathematics teaching, mathematics self-efficacy, and mathematical beliefs for elementary pre-service teachers. *Issues in the Undergraduate Mathematics Preparation of School Teacher,5.*

Brinson, D., & Steiner, L. (2012). *Building family and community demand for dramatic change in schools.* Chapel Hill, NC: Public Impact.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.

Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education, 16*(2), 239-253.

Buxton, C. A., Salinas, A., Mahotiere, M., Lee, O., & Secada, W. G. (2013). Leveraging cultural resources through teacher pedagogical reasoning: Elementary grade teachers analyze second language learners' science problem solving. *Teaching and Teacher Education, 32*, 31-42.

Calik, T., Sezgin, F., Kavgaci, H., & Cagatay Kilinc, A. (2012). Examination of relationships between instructional leadership of school principals and self-efficacy of teachers and collective teacher efficacy. *Educational Sciences: Theory and Practice, 12*(4), 2498-2504.

Carpenter, V. M. (2004). Parent preferences: Low-decile school teacher attributes. In *ACE working paper 14: Risks and dilemmas for teacher education: A selection of conference papers.* Auckland College of Education, Auckland.

Carpenter, V. M. (2010). Opening eyes to different worlds. *Waikato Journal of Education, 15*(1), 121-133.

Charmaz, K. (2002). Grounded theory: Objectivist and constructivist methods. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed.) (pp. 509-535). London: Sage.

Cleve, L. (2012, September 9). Classroom management that works. *Teachscape,* 2-33.

Cothran, D. J., Kulinna, P. H., & Garrahy, D. A. (2009). Attributions for and consequences of student misbehaviour. *Physical Education & Sport Pedagogy, 14*(2), 155-167.

Day, C., & Gu, Q. (2009). Veteran teachers: Commitment, resilience and quality retention. *Teachers and Teaching: Theory and Practice, 15*(4), 441-457. doi: 10.1080/13540600903057211.

Deskins, T. H. (2010). Determining teacher expectations in an urban school environment its implications for affecting student achievement. (Unpublished doctoral dissertation). Bowie State University, MD. ERIC Number: ED535024.

Dibapile, W. T. S. (2012). A review of literature on teacher efficacy and classroom management. *Journal of College Teaching & Learning (TLC), 9*(2), 79-92.

Dilworth, M. E. & Brown, C. E. (2001). Consider the difference: Teaching and learning in culturally rich schools. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed.) (pp. 643-667). Washington, DC: American Educational Research Association.

Drago-Severson, E. (2012). New opportunities for principal leadership: Shaping school climates for enhanced teacher development. *Teachers College Record, 114*(3), 1-30.

Duffin, L. C., French, B. F., & Patrick, H. (2012). The Teachers' Sense of Efficacy Scale: Confirming the factor structure with beginning pre-service teachers. *Teaching and Teacher Education, 28*(6), 827-834.

Eslami, Z. R., & Fatahi, A. (2008). Teachers' sense of self-efficacy, English proficiency, and instructional strategies: A study of non-native EFL teachers in Iran. *TESL-EJ, 11*(4), 1-19.

Gebbie, D. H., Ceglowski, D., Taylor, L. K., & Miels, J. (2012). The role of teacher efficacy in strengthening classroom support for preschool children with disabilities who exhibit challenging behaviors. *Early Childhood Education Journal*, *40*(1), 35-46. doi:10.1007/s10643-011-0486-5.

Geving, A. M. (2007). Identifying the types of student and teacher behaviours associated with teacher stress. *Teaching and Teacher Education, 23*(5), 624-640.

Ghamrawi, N. (2011). Trust me: Your school can be better—A message from teachers to principals. *Educational Management Administration & Leadership, 39*(3), 333-348. doi: 10.1177/1741143210393997.

Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76*(4), 569-582. doi:10.1037/0022-.76.4.569.

Gillen, A., Wright, A., & Spink, L. (2011). Student perceptions of a positive climate for learning: a case study. *Educational Psychology in Practice, 27*(1), 65- 82. doi:10.1080/02667363.2011.549355.

Glover, E. (2007). Real principals listen. *Educational Leadership, 65*(1), 60-63.

Gottshall, C., & Stefanou, C. (2011). The effects of on-going consultation for accommodating students with disabilities on teacher self-efficacy and learned helplessness. *Education, 132*, 321-331.

Green, T., Alejandro, J., & Brown, A. H. (2009). The retention of experienced faculty in online distance education programs: Understanding factors that impact their involvement. *The International Review of Research in Open and Distance Learning, 10*(3): 1-15.

Grissom, J. A. (2011). Can good principals keep teachers in disadvantaged schools? Linking principal effectiveness to teacher satisfaction and turnover in hard-to-staff environments. *Teachers College Record, 113*(11), 2552-2585.

Guy, T. H. (2010). Addressing South Carolina's secondary level teacher attrition problem: Examining teachers' self-efficacy, attitudes, and assertions. (Unpublished doctoral dissertation). University of South Carolina, SC. ERIC Number: ED516214.

Hirn, R. G. (2011). An examination of teacher instruction and student engagement involving adolescents with and without challenging behaviour. (Unpublished doctoral dissertation). University of Louisville, KY. ERIC Number: ED540273.

Hoy, A. W., & Spero, R. B. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education, 21*(4), 343-356.

Jamil, F. M., Downer, J. T., & Pianta, R. C. (2012). Association of pre-service performance, personality, and beliefs with teacher self-efficacy at program completion. *Teacher Education Quarterly, 39*(4), 119-138.

Johansen, A., Little, S. G., & Akin-Little, A. (2011). An examination of New Zealand teachers' attributions and perceptions of behaviour, classroom management, and the level of formal teacher training received in behaviour management. *Kairaranga, 12*(2), 3-12.

Johnson, B. W. (2010). Job satisfaction, self-efficacy, burnout, and path of teacher certification: Predictors of attrition in special education teachers. (Unpublished doctoral dissertation). Capella University, Minneapolis, MN. ERIC Number: ED516770.

Kangas, M. (2010). Finnish children's views on the ideal school and learning environment. *Learning Environments Research, 13*(3), 205-223. doi:10.1007/s10984-010-9075-6.

Keogh, B. K. (2000). Risk, families, and schools. *Focus on Exceptional Children, 33*(4), 1-10.

Kıranlı, S. (2013). Teachers' and school administrators' perceptions and expectations on teacher leadership. *International Journal of Instruction, 6*(1): 179-194.

Klassen, R. M., & Chiu, M. M. (2011). The occupational commitment and intention to quit of practicing and pre-service teachers: Influence of self-efficacy, job stress, and teaching context. *Contemporary Educational Psychology, 36*(2), 114-129.

Klassen, R. M., Bong, M., Usher, E. L., Chong, W. H., Huan, V. S., Wong, I. Y., & Georgiou, T. (2009). Exploring the validity of a teachers' self-efficacy scale in five countries. *Contemporary Educational Psychology, 34*(1), 67-76.

Knoblauch, D., & Woolfolk Hoy, A. (2008). "Maybe I can teach *those* kids." The influence of contextual factors on student teachers' efficacy beliefs. *Teaching and Teacher Education, 24*(1), 166-179.

Kowal, J., & Brinson, D. (2011). *Beyond classroom walls: Developing innovative work roles for teachers.* Washington, DC: Center for American Progress.

Kulinna, P. H. (2008). Teachers' attributions and strategies for student misbehavior. *Journal of Classroom Interaction, 42*(2), 21-30.

Labaree, D. F. (2000). On the nature of teaching and teacher education difficult practices that look easy. *Journal of Teacher Education, 51*(3), 228-233. doi: 10.1177/0022487100051003011.

Lane, K. L., Pierson, M. R., Stang, K. K., & Carter, E. W. (2010). Teacher expectations of students' classroom behavior. *Remedial & Special Education,31*(3), 163-174.

Leonard, J. (2011). Using Bronfenbrenner's ecological theory to understand community partnerships: A historical case study of one urban high school. *Urban Education*, *46*(5), 987-1010.

Li, G. (2010). Race, class, and schooling: Multicultural families doing the hard work of home literacy in America's inner city. *Reading & Writing, 26*(2), 140-165. doi: 10.1080/10573560903547452.

Liu, C. J., Jack, B. M., & Chiu, H. L. (2008). Taiwan elementary teachers' views of science teaching self-efficacy and outcome expectations. *International Journal of Science and Mathematics Education*, *6*(1), 19-35. doi: 10.1007/s10763-006-9065-4.

Lloyd, S. R. (1995, April). *Teacher traits students find helpful or bothersome: Implications for the inclusive classroom.* Paper presented at the annual meeting of the Council for Exceptional Children, Indianapolis, IN.

Lovett, S., & Davey, R. (2009). Being a secondary English teacher in New Zealand: Complex realities in the first 18 months. *Professional Development in Education*, *35*(4), 547-566. doi: 10.1080/19415250902879600.

Lund, T. (2012). Combining qualitative and quantitative approaches: Some arguments for mixed methods research. *Scandinavian Journal of Educational Research, 56*(2), 155-165. doi: 10.1080/00313831.2011.568674.

Lyons, W. E. (2013). Examining role issues in inclusive classrooms through participatory action research. *Canadian Journal of Action Research, 13*(3), 19-37.

Mansfield, C. F., & Woods-McConney, A. (2012). "I didn't always perceive myself-as a science person": Examining efficacy for primary science. *Australian Journal of Teacher Education*, *37*(10), 37-52.

McLaren, I. A. M. (2012). The use of quantitative and qualitative methods in the analysis of academic achievement among undergraduates in Jamaica. *International Journal of Research & Method in Education*, *35*(2), 195-216. doi:10.1080/1743727X.2012.686229.

McClowry, S. G., Snow, D. L., Tamis-LeMonda, C. S., & Rodriguez, E. T. (2010). Testing the efficacy of INSIGHTS on student disruptive behavior, classroom management, and student competence in inner city primary grades. *School Mental Health*, *2*(1), 23-35.doi: 10.1007/s12310-009-9023-8.

McMahon, S. D., Wernsman, J., & Rose, D. S. (2009). The relation of classroom environment and school belonging to academic self-efficacy among urban fourth- and fifth-grade students. *Elementary School Journal, 109*(3), 267-281.

Midgley, C., Feldlaufer, H., & Eccles, J. S. (1989). Student/teacher relations and attitudes toward mathematics before and after the transition to junior high school. *Child Development, 60*, 981-992.

Midgley, C., Maehr, M. L., Hruda, L. Z., Anderman, E., Anderman, L., Freeman, K. E., ... & Urdan, T. (2000). *Manual for the patterns of adaptive learning scales (PALS)*. Ann Arbor, MI: University of Michigan Press.

Mitchell, M. M., Bradshaw, C. P., & Leaf, P. J. (2010). Student and teacher perceptions of school climate: A multilevel exploration of patterns of discrepancy. *Journal of School Health, 80*(6), 271-279. doi:10.1111/j.1746-1561.2010.00501.x.

Mohamadi, F. S., & Asadzadeh, H. (2012). Testing the mediating role of teachers' self-efficacy beliefs in the relationship between sources of efficacy information and students' achievement. *Asia Pacific Education Review, 13*(3), 427-433. doi: 10.1007/s12564-011-9203-8.

Morris, B. J. (1999). *The poverty of constructivism: A comparison of philosophies of inquiry in the social sciences.* ERIC Number: ED440903.

Morton, L. L., Vesco, R., Williams, N. H., & Awender, M. A. (1997). Student teacher anxieties related to class management, pedagogy, evaluation, and staff relations. *British Journal of Educational Psychology, 67*(1), 69-89. doi: 10.1111/j.2044-8279.1997.tb01228.x

Mota, R. (2010). A descriptive analysis of the impact of leadership styles on teacher job satisfaction. (Unpublished doctoral dissertation). Capella University, Minneapolis, MN. ERIC Number: ED519733.

Nahal, S. P. (2009). Exploring disparities between teachers' expectations and the realities of the education profession. *Research in Higher Education, 8,* 1-19.

Oliver, M., Venville, G., & Adey, P. (2012). Effects of a cognitive acceleration programme in a low socioeconomic high school in regional Australia. *International Journal of Science Education, 34*(9), 1393-1410. doi:1080/09500693.2012.673241.

O'Neill, S., & Stephenson, J. (2010). The use of functional behavioural assessment for students with challenging behaviours: current patterns and experience of Australian practitioners. *Australian Journal of Educational & Developmental Psychology, 10*, 65-82. doi: 10.1080/02568543.2012.657748.

O'Neill, S., & Stephenson, J. (2012). Exploring Australian pre-service teachers' sense of efficacy, its sources, and some possible influences. *Teaching and Teacher Education, 28*(4), 535-545.

Osher, D., Coggshall, J., Colombi, G., Woodruff, D., Francois, S., & Osher, T. (2012). Building school and teacher capacity to eliminate the school-to-prison pipeline. *Teacher Education and Special Education, 35*(4), 284-295. doi:10.1177/0888406412453930.

Ozturk, I. H. (2012). Teachers' role and autonomy in instructional planning: The case of secondary school history teachers with regard to the preparation implementation of annual instructional plans. *Educational Sciences: Theory and Practice*, *12*(1), 295-299.

Pajares, F., & Urdan, T. (Eds.) (2006). *Adolescent self-efficacy*. Greenwich, CT: Information Age Publishing.

Pang, I. W. (2012). Teacher stress in working with challenging students in Hong Kong. *Educational Research for Policy and Practice*, *11*(2), 119-139. doi:10.1007/s10671-011-9109-6.

Parlak-Yilmaz, N., & Cikrikci-Demirtasli.N.(2010). Adapting a Portion of the Patterns of Adaptive Learning Scales for Research in Turkish Schools. *International Journal Of Educational Reform.19*(4), 287-297.

Parsonson, B. S. (2012). Evidence-based classroom behaviour management strategies. *Kairaranga*, *13*(1), 16-23.

Pas, E. T., Bradshaw, C. P., & Hershfeldt, P. A. (2012). Teacher- and school-level predictors of teacher efficacy and burnout: Identifying potential areas for support. *Journal of School Psychology*, *50*(1), 129-145.

Pendergast, D., Garvis, S., & Keogh, J. (2011). Pre-service student–teacher self-efficacy beliefs: An insight into the making of teachers. *Australian Journal of Teacher Education*, *36*(12). doi:10.14221/ajte.2011v36n12.6.

Peterson, E. R., Rubie-Davies, C. M., Elley-Brown, M. J., Widdowson, D. A., Dixon, R. S., & Earl Irving, S. (2011). Who is to blame? Students, teachers and views on who is responsible for student achievement. *Research in Education*, *86*(1), 1-12.

Prather-Jones, B. (2011). How school administrators influence the retention of teachers of students with emotional and behavioral disorders. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *84*(1), 1-8. doi:10.1080/00098655.2010.489387.

Prochnow, J. E., & DeFronzo, J. V. (1997). The impact of economic and parental on juvenile misconduct. *Journal of Emotional and Behavioral*, *5*(2), 119-124.

Raudenbush, S. W., Rowan, B., & Cheong, Y. F. (1992). Contextual effects on the self-perceived efficacy of high school teachers. *Sociology of Education*, *65*, 150-167.

Regalla, M. (2013). Teacher expectations and students from low socioeconomic background: A perspective from Costa Rica. [Research report]. ERIC Number: ED540254.

Rice, J. K. (2010). *The impact of teacher experience: examining the evidence and policy implications*. Brief No. 11. Washington, DC: Calder National Center for Analysis of Longitudinal Data in Education Research.

Ross, J. A., Bradley Cousins, J., & Gadalla, T. (1996). Within-teacher predictors of teacher efficacy. *Teaching and Teacher Education, 12*(4), 385-400.

Ross, S. W., Romer, N., & Horner, R. H. (2012). Teacher well-being and the implementation of school-wide positive behavior interventions and supports. *Journal of Positive Behavior Interventions, 14*(2), 118-128. doi: 10.1177/1098300711413820.

Rubie-Davies, C. M. (2007). Classroom interactions: Exploring the practices of high-and low-expectation teachers. *British Journal of Educational Psychology, 77*(2), 289-306.

Rubie-Davies, C. M. (2010). Teacher expectations and perceptions of student attributes: Is there a relationship? *British Journal of Educational Psychology, 80*(1), 121-135. doi: 10.1348/000709909X466334.

Rubie-Davies, C. M., Flint, A., & McDonald, L. G. (2012). Teacher beliefs, teacher characteristics, and school contextual factors: What are the relationships? *British Journal of Educational Psychology, 82*(2), 270- 288. doi:10.1111/j.2044-8279.2011.02025.x

Rubie-Davies, C. M., Peterson, E., Irving, E., Widdowson, D., & Dixon, R. (2010). Expectations of achievement: Student, teacher and parent perceptions. *Research in Education, 83*(1), 36-53.

Rubie-Davies, C., Hattie, J., & Hamilton, R. (2006). Expecting the best for students: Expectations and academic outcomes. *British Journal of Educational Psychology, 76*(3), 429-444. doi: 10.1348/000709905X53589.

Sandoval, J. M. (2010). The relationship between teachers' collective efficacy and student achievement at economically disadvantaged middle school campuses in Texas. (Unpublished doctoral dissertation). Texas A&M University, TX. ERIC Number: ED521637.

Sass, D. A., Seal, A. K., & Martin, N. K. (2011). Predicting teacher retention using stress and support variables. *Journal of Educational Administration, 49*(2), 200-215. doi: 10.1108/09578231111116734.

Sazak Pinar, E., & Sucuoglu, B. (2011). Turkish teachers' expectancies for success in inclusive classrooms. *Educational Sciences: Theory and Practice, 11*(1), 395-402.

Scott, T. M., Park, K. L., Swain-Bradway, J., & Landers, E. (2007). Positive behavior support in the classroom: facilitating behavior ally inclusive learning environments. *International Journal of Behavioral Consultation and Therapy, 3*(2), 223-235.

Sela-Shayovitz, R. (2009). Dealing with school violence: The effect of school violence prevention training on teachers' perceived self-efficacy in dealing with violent events. *Teaching and Teacher Education, 25*(8), 1061-1066.

Stetson, R., Stetson, E., Sinclair, B., & Nix, K. (2012). Home visits: Teacher reflections about relationships, student behavior, and achievement. *Issues in Teacher Education, 21*(1), 21-37.

Stipek, D. (2012). Context matters: Effects of student characteristics and perceived administrative and parental support on teacher self-efficacy. *Elementary School Journal, 112*(4), 590-606.

Swanson, P. (2012). Second/foreign language teacher efficacy and its relationship to professional attrition. *Canadian Modern Language Review/La Revue canadienne des langues vivantes, 68*(1), 78-101.doi: 10.3138/cmlr.68.1.078.

TNTP. (2012). *Greenhouse schools: How schools can build cultures where teachers and students thrive*. New York: Author.

Torff, B. (2011). Teacher beliefs shape learning for all students. *Phi Delta Kappan, 93*(3), 21-23.

Travers, C. J., & Cooper, C. L. (1996). *Teachers under stress: Stress in the teaching profession*. London. Routledge.

Tschannen-Moran, M., & Woolfolk Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*(7), 783-805.

Tschannen-Moran, M., & Woolfolk Hoy, A. W. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education, 23*(6), 944-956.

Tschannen-Moran, M., Woolfolk Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research,68*(2), 202-248. doi: 10.3102/00346543068002202.

Tschannen-Moran, M., Uline, C., Woolfolk Hoy, A., & Mackley, T. (2000). Creating smarter schools through collaboration. *Journal of Educational Administration, 38*: 247-271**.**

Tsigilis, N., Koustelios, A., & Grammatikopoulos, V. (2010). Psychometric properties of the teachers' sense of efficacy scale within the Greek educational context. *Journal of Psychoeducational Assessment, 28*(2), 153-162.

Vaezi, S., & Fallah, N. (2011). The relationship between self-efficacy and stress among Iranian EFL teachers. *Journal of Language Teaching and Research, 2*(5), 1168-1174.

Van Maele, D., & Van Houtte, M. (2011). Collegial trust and the organizational context of the teacher workplace: The role of a homogeneous teachability culture. *American Journal of Education, 117*(4), 437-464.

Van Uden, J. M., Ritzen, H., & Pieters, J. M. (2013). I think I can engage my students. Teachers' perceptions of student engagement and their beliefs about being a teacher. *Teaching and Teacher Education, 32,* 43-54.

Vesely, J. (2009). Supporting teacher efficacy: Implications for school leaders. (Unpublished doctoral dissertation). Northern Arizona University, AZ. ERIC Number: ED531648.

Wachira, P., Hall, J., & Pourdavood, R. G. (2003). Mathematics teachers' role in promoting classroom discourse. *International Journal for Mathematics Teaching and Learning* [Online journal]. Retrieved from http://www.cimt.plymouth.ac.uk/journal/wachira.pdf

Waleff, M. L. (2010). The relationship between mastery orientation goals, student self-efficacy for reading and reading achievement in intermediate level learners in a rural school district. (Unpublished doctoral dissertation). Walden University, Minneapolis, MN. ERIC Number: ED521676.

Wang, M. C., Haertel, G. D., & Walberg, H. J. (1993). Toward a knowledge base for school learning. *Review of Educational Research, 63*(3), 249-294. doi:10.3102/00346543063003249.

Wilson, C. M. (2009). The relation among parental factors and achievement of African American urban youth. *Journal of Negro Education, 78*(2), 102-113.

Woodcock, S., & Vialle, W. (2010). Attributional beliefs of students with learning disabilities. *International Journal of Learning, 17*(7), 177-191.

Woolfolk Hoy, A. E., & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology, 82*(1), 81.

List of appendices

Appendix 1: Teacher Goal Orientation Scale (adapted for online survey in this study)
(1= never, 9 = All the time)

1. I give special privileges to students who do the best work.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
2. If I try really hard, I can get through to even the most difficult student.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
3. In this school: The importance of trying hard is really stressed to students.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
4. I make a special effort to recognize students' individual progress, even if they are below grade level.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
5. In this school: Students are told that making mistakes is OK as long as they are learning and improving.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
6. Factors beyond my control have a greater influence on my students' achievement than I do.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
7. In this school: It's easy to tell which students get the highest grades and which students get the lowest grades.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
8. I am good at helping all the students in my classes make significant improvement.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
9. I display the work of the highest achieving students as an example.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
10. In this school: Students who get good grades are pointed out as an example to others.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
11. During class, I often provide several different activities so that students can learn to choose among them.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
12. In this school: Students hear a lot about the importance of getting high test scores.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
13. I consider how much students have improved when I give them report card grades.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
14. In this school: A lot of the work students do is boring and repetitious.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
15. In this school: Grades and test scores are not talked about a lot.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
16. In this school: Students are frequently told that learning should be fun.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
17. I help students understand how their performance compares to others.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
18. Some students are not going to make a lot of progress this year, no matter what I do.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
19. I encourage students to compete with each other.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
20. In this school: The emphasis is on really understanding schoolwork, not just memorizing it.	(1) (2) (3) (4) (5) (6) (7) (8) (9)
21. I point out those students who do well as a model for the other students.	(1) (2) (3) (4) (5) (6) (7) (8) (9)

Appendix 2: Teacher Sense of Self-Efficacy (adapted for online survey for this study)
(1= never, 9 = All the time)

Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities.

Please indicate your opinion about each of the statements below. Your answers are confidential.

	How much can you do?								
	Never								All the time
1. How much can you do to get through to the most difficult students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2. How much can you do to help your students think critically?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3. How much can you do to control disruptive behaviour in the classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4. How much can you do to motivate students who show low interest in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5. To what extent can you make your expectations clear about student behaviour ?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6. How much can you do to get students to believe they can do well in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7. How well can you respond to difficult questions from your students ?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
8. How well can you establish routines to keep activities running smoothly?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
9. How much can you do to help your students value learning?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10. How much can ou gauge student comprehension of what you have taught?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11. To what extent can you craft good questions for your students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12. How much can you do to foster student creativity?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
13. How much can you do to get children to follow classroom rules?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
14. How much can you do to improve the understanding of a student who is failing?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
15. How much can you do to calm a student who is disruptive or noisy?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
16. How well can you establish a classroom management system with each group of students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

17. How much can you do to adjust your lessons to the proper level for individual students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
18. How much can you use a variety of assessment strategies?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
19. How well can you keep a few problem students form ruining an entire lesson?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
20. To what extent can you provide an alternative explanation or example when students are confused?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
21. How well can you respond to defiant students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
22. How much can you assist families in helping their children do well in school?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
23. How well can you implement alternative strategies in your classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
24. How well can you provide appropriate challenges for very capable students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Appendix 3: School and teacher participation information sheet

MASSEY UNIVERSITY
COLLEGE OF EDUCATION
TE KUPENGA O TE MĀTAURANGA

SCHOOL AND TEACHER PARTICIPANT INFORMATION SHEET
Researcher's Introduction

Name of researcher: Rodney Allen Soupen

Current study: This research forms part of the completion of the Masters in Educational Psychology (MEdPsych) for which this student is currently enrolled.

Description of Project
The research aims to investigate the variables involved in the formation of teachers' beliefs in a sense of teaching efficacy.

Schools and teachers' whose profiles fit the requirement description as outlined below are invited to participate in this research. You kind agreement to participate will ultimately contribute to a pool of knowledge which could increase the understanding of problems and barriers to student learning. Your time and contribution will be greatly appreciated.

Participant Identification and Recruitment
For the purpose of this research the researcher seeks to attract teacher participation from schools which are situated and serving either low (lower decile) or higher (high decile) socioeconomic communities. The researcher will first contact principals of schools which fit the above description. The criteria for teachers who wish to participate are:
1. The teacher should currently be a classroom teacher for 10 hours or more per week.

2. The teacher should be teaching students in the age group 12 to 16 years.

3. The teacher should have two years or more of teaching experience teaching students in the above age category

4. The teacher agrees that by accepting to complete a questionnaire the teacher is giving consent for participation. A completed questionnaire submitted is also a consent to participate.

The researcher seeks to sample between 80 and 100 teachers from each of the two socioeconomic areas being researched.

Project Procedures
All principals contacted will receive a copy of this information sheet and the web link to the online survey questionnaire pages. Three surveys and demographic information will

be placed online, using the SurveyMonkey site. There are three survey questionnaires:
1. The First Questionnaire : Open ended questions.
2. The Second Questionnaire: This is about teacher beliefs in their abilities.
3. The Third Questionnaire: This is about teacher goal orientation, meaning briefly the things teachers do to achieve goals in the classroom and to enhance student performance. The approximate time for completion of the questionnaire is 20 to 25 minutes. Note that each of the questionnaires requires only a button to be pressed to indicate a preferred response.

It is anticipated that the interested school principal or representative will use this information sheet to discuss the research with teachers. The school principal will be the only person contacted by the researcher to offer teachers the link to the survey. It will be appreciated if principals could invite teachers to participate in this project.

No teacher personal or school details – which can lead to identification - are required from participants who complete the online surveys. To ensure that participants fit the criteria for this study, at the beginning of the survey each participant will be required to answer questions related to the criteria outlined above. On agreeing to complete the questionnaire each teacher participant consents to participating in the research. This will also be stated on the questionnaire. A copy of this information sheet will also appear on SurveyMonkey. All participants are free to withdraw their participation at any time before or during completion of the questionnaire.

It is not the intention of the researcher to name any school or any of the staff participants in any part of this research or to use any such information for any other purpose. Schools, decile rankings and community socioeconomic status will be described in the research by words such as “high” or “low”. New Zealand school cities where the schools are located may be mentioned, for example, “a high decile school in Auckland”.

Data Management

The data will only be used for the purposes of this research as outlined above. The only data gathered and to be used for this research will be the online responses of participants. Gathered data will be stored online and in hardcopies. All data information will be kept safely until this research is over and the research is assessed by the university. Thereafter, if there is no further need to keep the data only for the duration and completion of this research, all online data material will be deleted. In the same circumstances all hardcopies of data will be shredded and disposed of.

Rights of all Participants

You or any other potential participant are under no obligation to accept this invitation. Completion and submission of the questionnaire implies consent. You have the right to decline to answer any particular question or part of the questionnaires. If, at any time, you have any concerns please feel free to contact the university immediately. Contact details appear above. Contact details of the researcher appears below.

I do look forward to the kind cooperation of all participants. Thank you.

Rodney Allen Soupen
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