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Urban middle school teachers' efficacy change resulting from Project Adventure's year -long RESPECT curricular intervention: A quasi -experimental design with corroborating data

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URBAN MIDDLE SCHOOL TEACHERS' EFFICACY CHANGE RESULTING FROM PROJECT ADVENTURE'S YEAR-LONG RESPECT CURRICULAR INTERVENTION: A QUASI-EXPERIMENTAL DESIGN WITH CORROBORATING DATA

BY

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DEDICATION

I hope every graduate student has someone as supportive and encouraging as my husband, Paul Tame. The pursuit of my Ph.D. has seen me on opposite ends of an emotional spectrum; I have been so frustrated the thought of quitting went through my mind, and I have jumped up and down celebrating clearing a hurdle. Paul was consistently there to support me. I will be ever-grateful for his patience and encouragement. Every spouse should be so fortunate. Thank you, Paul. I adore you and love you. This "book report" is dedicated to you.

This work is also dedicated to my family who has been incredibly supportive by tracking my progress and encouraging me. Both my mother and father spoiled me with scrumptious meals and relaxing environments throughout the process. I look forward to more of it...just with my Ph.D. complete!

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by

Brooke Moran

University of New Hampshire, December, 2007

Over 30 years of research highlight the effect teachers' beliefs about their teaching abilities (i.e., teacher efficacy) have on their professional actions (i.e., teachers' effectiveness). Yet the literature addressing this connection lacks extensive insight into how to raise teachers' efficacy. The purpose of this study was to examine the effectiveness of Project Adventure's RESPECT Program in raising middle school teachers' efficacy in four northeastern urban public schools.

This pretest-posttest quasi-experimental study tracked 68 teachers' efficacy change over the course of one school year. Teacher Efficacy (TE) change was measured using the Teachers' Sense of Efficacy Scale's (TSES) following subscales: Student Engagement; Classroom Management; and Instructional Practices. Teachers completed the TSES prior to their first introduction to the program and at the end of their first year implementing the RESPECT curriculum. It was hypothesized that the RESPECT Program would be more effective at raising TE during the second year (i.e., implementation year). Two different study samples participated for two different (but consecutive) years (n = 34 for each sample). Informing/corroborating data was gathered via interviews and a teacher questionnaire.

The difference between the first year (i.e., pilot) and second year (i.e., implementation) teachers' mean SE subscale difference scores was significant ($F(1, 66) = 8.08$, $p = .006$). However, the significance derived from the decrease in implementation teachers' (-.542) and increase in pilot teachers' (.099) mean SE difference scores (i.e., difference between posttest and pretest scores). Corroborating interview data suggested a lack of modeling by RESPECT consultants was a major contributor to the implementation teachers' decreased SE scores.

Teachers' school was also determined to be a significant factor in implementation teachers' TE change (i.e., $F(3, 30) = 5.66$, $p = .003$ for the SE subscale). A Bonferroni post hoc test revealed teachers at a particular school (i.e., "Tupelo") experienced significantly different SE change than teachers at other schools. Tupelo's teachers were the only ones to experience mean positive change (.333), while Larch (-.693), Magnolia (-1.2), and Walnut (-.839) all experienced mean negative changes in their SE subscale scores. Corroborating interview data suggested Tupelo's teachers' higher emphasis on collaboration and consistent level of program fidelity may have been reasons for this finding.

CHAPTER I

INTRODUCTION

Teachers are a key variable related to students' success; good teachers have positive impacts on students, from higher academic achievement to higher motivation and higher efficacy (Deemer, 2004; Hoy & Woolfolk, 1993). Most teacher education and professional development programs for educators are aimed at helping teachers become more proficient in their profession (e.g., utilizing various teaching strategies and implementing positive behavior management strategies). Ironically, research addressing how to help teachers become more proficient is limited.

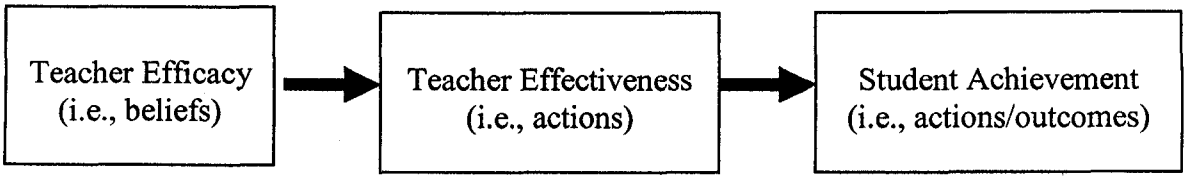
Teachers' level of success with their students is largely determined by teacher efficacy (TE), which is "...the extent to which teachers believe their efforts will have a positive effect on student achievement" (Ross, 1992, p. 51).[1] It is important to note TE is a belief system, not an action or process. It is also important to understand that this definition allows for TE to lie anywhere on a spectrum from high to low (i.e., some teachers with low TE think their actions will have no bearing on students' achievement, while teachers with high TE believe they can help students excel).

The primary value of TE is its relationship to teacher effectiveness (i.e., teachers' actions), which is generally determined according to the impact teachers have on their

[1] The term used to explain a teacher's belief in her/his ability to impact student achievement has evolved since its conception in the mid-'70s. It was initially developed to label a specific cohort's (i.e., teachers) self-efficacy (i.e., a belief in one's abilities to attain certain outcomes) and was called "teacher self-efficacy." As research and theory evolved, perhaps in trying to make the construct title more precise, researchers also employed "teachers' sense of efficacy" and "teacher efficacy." The latter term (which is the least redundant and therefore most precise name) currently seems to be the most common, although the other terms can still be found in the literature. The author of this study will primarily employ "teacher efficacy" and "teachers' efficacy" for consistency's sake.

students' achievement; teachers who are effective act in ways that positively affect their students, while teachers who are ineffective act in ways that do not have positive bearings on their students. For example, teachers who believe they positively impact students' achievement possess greater positive influence on this student trait. Conversely, teachers who believe other factors far outweigh their abilities to have very little bearing on students' achievement and little positive impact. Figure 1.1 illustrates this relationship[2]:

Figure 1.1 Historical Conception of Direct and Indirect Outcomes of Teacher Efficacy



Of course, the aim in teacher education programs and professional development initiatives for teachers is to nurture highly effective teachers (e.g., a teacher with highly effective actions might involve parents in the educational process or cultivate students' high cognition). The field of education has realized that addressing TE is a crucial factor in helping teachers to be effective. The following studies illustrate this critical relationship and begin to develop an understanding of how to raise TE.

In 1976, Armor et al. initiated attempts to measure TE by adding two questions on teacher attitudes on a teacher attributes survey. This survey attempted to gain insight into the causes for varying levels of effectiveness of a California reading program in minority schools. Analysis revealed a significant correlation between teachers' attitudes and their students' achievement (i.e., teachers who felt more efficacious saw their students advance more in reading than students of teachers who did not feel as efficacious). The study proved to be a springboard for the past 30 years of TE inquiry.

[2] While antecedents and effects of TE are more complex than the linear flowchart depicted, it is an important step in the historical evolution of TE.

Since the mid-1970s, teacher efficacy "[r]esearch...has been driven by the construct's powerful predictive and relational impact on both student and teacher outcomes" (Esterly, 2003, p. 2). That is, there is a clear relationship between efficacy and effectiveness, with researchers keen to discover the intricacies of the construct and related influences.

Anderson, Greene, & Loewen (1988) realized that while TE was not an action, it could be a catalyst as well as be changed. These researchers conducted a year-long study comparing 3rd and 6th grade teachers' efficacy to students' efficacy and achievement. While only TE and student efficacy were significantly correlated for 6th grade teachers, both student efficacy and achievement were significantly correlated to 3rd grade teachers' efficacy. It was unknown in this study whether students' high efficacy created high achievement, or was the result of high achievement. Interviews were also employed in the study, revealing four categories teachers believed helped or harmed their ability for success in influencing student learning. Their analysis included "...student factors, teacher factors, school factors, and home or community factors" (p. 160). These findings suggested TE was a result of external factors (e.g., students and the school environment) and internal factors (e.g., teacher's education or natural disposition), but it remained unclear as to what percentage of TE was influenced by each.

Ross (1992) analyzed the relationships of external factors (i.e., student achievement and the impact of teaching coaches) on teachers' efficacy. Participants consisted of eighteen 7th and 8th grade history teachers in 36 classes and six coaches. Students whose teachers had more consistent contact with their coaches experienced higher achievement than students in teachers' classes who did not work closely with their coaches. Examples of outcomes related to high TE included challenging teaching techniques, a willingness to be innovative, and students' enhanced cognitive goals. A

prevalent theme in the findings was the indisputable link between TE and student and teacher outcomes (i.e., the strong link between teachers' beliefs in their abilities and the resulting outcomes in teachers and students). In fact, Ashton and Webb (1986) found TE to be such an important factor in education that upon conclusion of a two-year study of TE in two schools, they asserted, "the promotion of a high sense of efficacy in teachers and students must become an educational aim as important as academic achievement" (p. 176). Since this time, TE has gained steady attention.

Ross (1994) also conducted an analysis of 88 TE studies and focused on the antecedents (i.e., predictors) and consequences (i.e., outcomes) of TE. School characteristics, such as presence/absence of teaching resources and mentors, were found to be antecedents of TE. Personal characteristics (e.g., including gender, teacher training and experience, and causal attributes) were also found to be antecedents. Ross noted, "Teachers who attribute student success and failure to forces within their own control are more likely to score higher on teacher efficacy measures" (p. 12). The more teachers recognized and took responsibility for their strengths and weaknesses, the higher the TE they possessed. Outcomes, or consequences, of high TE included greater likelihood to:

- provide powerful yet challenging instructional techniques;
- implement new curriculum;
- work with students with special needs;
- involve parents in the educational process;
- promote student autonomy;
- confront student management problems;
- keep students on task;
- cultivate students' high cognition; and

- enhance student motivation, self-esteem, and attitudes toward school.

While these outcomes of TE are both impressive and promising, it is important to note that many of these studies were correlation studies, with many of the correlations being weak (e.g., r = .23, r = .20, r = .13) (Ross, 1994). As such, it is unclear whether such actions result in high TE, or whether high TE results in such actions. Even with these limited findings, the possibility of such consistent outcomes merit further inquiry. Fortunately, international researchers have been adding to the knowledge base of TE (e.g., Anderson, Greene, & Loewen, 1988; Saklofske, Michayluk, & Randhawa, 1988; Taimalu & Õim, 2005; Wilkinson, 2005).

Wertheim & Leyser (2002) compared 191 pre-service Israeli teachers' choices for differentiated instructional strategies and their TE. These particular pre-service teachers intended to enter diverse and/or inclusive classrooms. It was found that the teachers who had higher TE had higher scores on:

- Intending to frequently use individualized and diagnostic teaching techniques;
- Planning to employ a variety of behavior management strategies; and
- Communicating with the principal, parents, other professionals, and students.

While this study only analyzed pre-service teachers' intentions rather than actual effectiveness, the results suggested it was critical to have instructional, classroom management plans and contingency plans (e.g., a variety of behavior management strategies) supporting successful problem-solving in a classroom, particularly in diverse and/or inclusive classrooms. These findings helped evolve the understanding of the TE construct. Perhaps the greatest questions remaining about TE, however, are regarding how to raise it.

Teacher Efficacy Theories and Constructs

The whole concept concerning TE originated from theoretical foundations and research development on self-efficacy, which "...is the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations" (Bandura, 1995, p. 2). Self-efficacy is a general belief about one's prospective abilities in a given situation and may be regarded as an umbrella under which teacher efficacy falls. It also "...is an important element of the link between knowledge and behavior (i.e., beliefs and actions). This sense affects performance by generating coping behavior, self-regulation of refractory behavior, perseverance, response to failures, growth of intrinsic interest and motivation, achievement strivings, and career pursuits" (Darling-Hammond, McLaughlin, & Bernstein, 1985, p. 69). This definition suggests that self-efficacy promotes healthy behaviors. Conversely, if one has low self-efficacy, coping behaviors might be unhealthy (e.g., drug abuse), interests and motivations might wane, or there might be a lack of perseverance when faced with difficult situations. Perseverance and a belief in one's ability to succeed are critical traits for not only facing challenging situations, but also being tenacious with problem solving and learning from adversity. As TE is merely a specialized aspect of SE, the afore-mentioned traits allow insight into the worth of TE. When a given situation proves more challenging than perceived, teachers with high TE likely persevere, while teachers with low TE may not.

TE is one of the major factors in teachers' varying levels of effectiveness. Taimalu and Õim (2005) asserted, "The teacher efficacy concept encompasses a collection of beliefs, attitudes and emotions that basically guide the work of individuals and accounts for individual differences in teaching effectiveness" (p. 177). If teacher education programs and professional development for teachers utilized more effective avenues to raise TE (i.e., teachers' beliefs in their abilities to excel), it is likely teachers

would be more willing to take the requisite risks leading to professional growth, increased effectiveness, and innovative teaching. Not only might such traits be considered admirable, but they might also contribute to the research finding that links TE and student achievement (e.g., Gibson & Dembo, 1984; Moore & Esselman, 1992; Ross, 1992).

One area of interest is the degree to which TE is a result of external factors (e.g., student behavior, peer support) and internal factors (e.g., self-concept). McLaughlin and Marsh (1978) reported TE has a "chain reaction" and strong link to student achievement. For example, teacher efficacy affects teacher behavior, which in turn affects students' efficacy, which further affects student achievement. Via this connection, higher TE results in higher student achievement, while lower TE results in lower student achievement. This process can be consistently positive or negative in nature. While this may seem logical, it presumes that nothing acts on the internal or external factors of TE, which we know to be misleading; TE is part of a bigger, more complex relationship as suggested above.

As seen in Figure 1.2, Huitt (2000) provided a similar, yet more complex, visual interpretation of the cyclical nature of teacher efficacy, student achievement, and other influential factors. The processes of enhancing TE and student achievement are illustrated in the diagram demonstrating a school climate's connection to achievement through several logical steps. The diagram allows for both the constructive and detrimental processes students, schools, and teachers can have on one another. However, it does not suggest school climate has a direct impact on student achievement.

Understanding the intricacies of TE entails recognizing that TE is task specific. For example, Huitt (2000) claims TE affects instructional input, instructional feedback,

and personal communications. While this is a great theoretical beginning, TE is specific to various teaching tasks. For example, a teacher might have high TE for facilitating an art project with students, but have low TE for dealing with parents. Just like people's confidence and competence levels vary from task to task in their lives, teachers' confidence and competence levels vary within the myriad tasks and people associated with their careers.

Figure 1.2 A School Based Model for Teacher Expectations (Huitt, 2000, p. 1)[3]

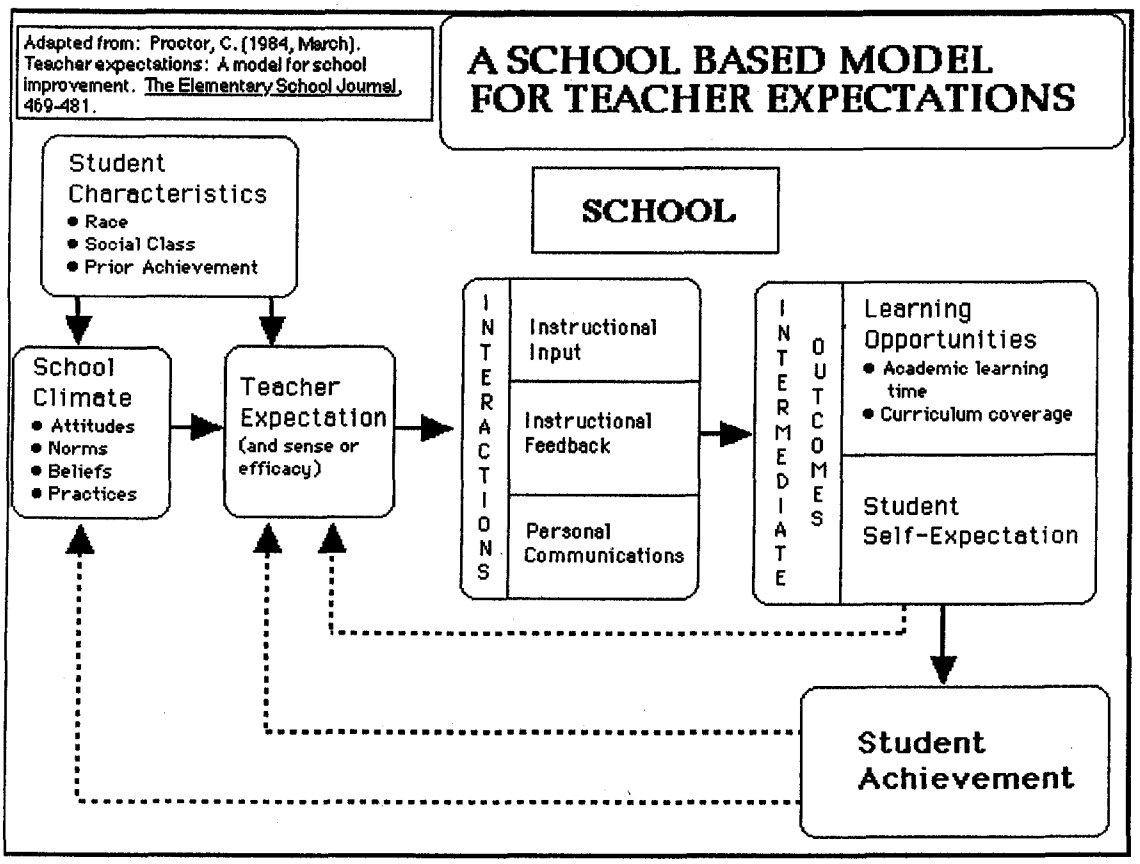


Figure 1.2 This theoretical diagram suggests students' characteristics can affect teachers' efficacy, and it can indirectly impact teachers' efficacy by first impacting school climate. Teachers' efficacy drives their instructional and communication practices, affecting learning opportunities and students' expectations of themselves. Student achievement ultimately is affected, impacting teacher efficacy and school climate.

[3] Permission to use this model was granted by Huitt (personal communication, August 2007) and can be found in Appendix A.

Catalyzing Change in Teacher Efficacy

While the process outlined in Figure 1.2 may seem clear, very little evidence exists concerning reliable means for enhancing TE, particularly with experienced teachers. It is also unclear how much teacher behavior affects teacher efficacy, versus how much teacher efficacy affects teacher behavior, or, if both factors influence one another, where such influence is shared. Despite limited concrete answers, research has provided some foundational understanding of TE in teachers with varying degrees of teaching experience, as well as the potential for changing levels of TE.

"Stable" or "unstable" are words used to describe how easy or hard it is to change levels of TE (e.g., Labone, 2004; Ross, 1994; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). Much of the knowledge on TE is based on programming with pre-service and novice teachers, who tend to possess relatively unstable levels of TE often easily affected by external factors. Such influences include the quality of teaching resources (Shaughnessy, 2004), college coursework (Watters & Ginns, 1995), and student teaching and practica experiences (Housego, 1992; Hoy and Woolfolk, 1990; Spector, 1990). Conversely, TE in experienced teachers (i.e., those who have taught for more than three years) tends to be much more stable, and particularly change-resistant to short in-service and one-time professional development workshops (Roberts, Henson, Tharp, & Moreno, 2000; Ross, 1994; Stein & Wang, 1988; Tschannen-Moran et al., 1998). Because of this, TE is thought to develop primarily over time through direct teaching experience, becoming so stable in experienced teachers that very few models of professional development have proven successful in raising it. The few exceptions to this stability include long-term interventions (e.g., Roberts, Henson, Tharp, & Moreno, 2000; Ross, 1994; Stein & Wang, 1988), participatory teacher research (e.g., Byrd & McIntyre, 1999; Cochran-Smith & Lytle, 1990, 1999; Henson, 2001), and coaching and

collaborating (e.g., Ross, 1992; Shachar & Shmuelevitz, 1997). While these studies instill hope that even experienced teachers' efficacy can be raised, further inquiry into existing research is needed to investigate other potentially successful interventions.

Before designing teacher efficacy research, it is important to heed the advice of past and current TE theorists and researchers. For example, it is suggested that longitudinal research be integral to all TE designs, for it is long-term change and stability that seem to provide the greatest insight into this issue. Likewise, because more TE research has focused on pre-service and novice teachers, a focus on experienced teachers' efficacy and associated changes in stability are warranted. As the majority of TE studies are correlational (e.g., Anderson, Greene & Loewen, 1988; Saklofske, Michayluk & Randhawa, 1988), experimental and/or quasi-experimental designs are also desired. Henson (2001) acknowledged "experimental (or quasi-experimental) and/or long term designs are near absent in the literature" (p. 822). Henson (2001), Ross (1992), and Tschannen-Moran and Woolfolk Hoy (2001) each encouraged the development of TE research through the emphasis of some or all of the following factors:

- longitudinal research;
- experienced teachers;
- implementation of new curriculum; and
- teacher efficacy enhancement.

These suggestions are underrepresented in TE research and ought to be heeded, so as to gain greater insight into TE. For example, the implementation of new curriculum can be challenging. As such, Ross (1992) suggested the need for tracking changes in experienced teachers' in TE while they implement new curriculum. He surmised that teacher confidence might oscillate during the process of implementation:

> Feelings of competence might change as a new program is implemented. A curvilinear relationship might be predicted: high scores during the first rush

> of enthusiasm, declining as teachers try to incorporate new practices in their routines, followed by a return to higher scores as the change is institutionalized (p. 61).

In summary, if teachers are excited and feel competent about implementing new curriculum, they tend to possess higher TE. Upon discovering the implementation is not as easy as the teacher anticipated, the level of TE wanes. It also increases when teachers persevere and make the curriculum familiar. Conversely, low TE may cause teachers to retreat and abandon the implementation of new curriculum and feel less efficacious.

The aim of all TE research is to gain insight into means for helping teachers believe they can have a positive effect on student achievement, no matter what the obstacles. As such, it is imperative to draw from innovative, growth-promoting educational programming strategies that have the potential to catalyze increases in TE.

Measures of Teacher Efficacy

The 30-year foundation of teacher efficacy research reveals 115 peer-reviewed studies listed in Academic Search Premier, and 522 dissertation abstracts listed in ProQuest (as of 5/28/07). Given this fairly limited amount of published peer-reviewed research, it is surprising to note that eight research instruments have been designed and employed (Labone, 2004). The majority of research in the late-1980s, 1990s, and into the 21st century, however, has been conducted with the use of the Teacher Efficacy Scale (TES) (Gibson & Dembo, 1984). It is a 22-item instrument with a 1 (strongly agree) to 6 (strongly disagree) Likert-scale, with 3 ("agree slightly more than disagree") and 4 ("disagree slightly more than agree") comprising the middle of the scale. Examples of items include the following:

- "I have enough training to deal with almost any learning problem"
- "If parents would do more for their children, then I could do more"

- "Some students need to be placed in slower groups so they are not subjected to unrealistic expectations"

Despite the TES having been deemed an invalid measurement instrument due to poor and sometimes inaccurate factor loading (Brouwers & Tomic, 2003; Gurskey & Passaro,1994; Soodak & Podell, 1993) and problems with reliability of the subscales (Henson, Kogan, & Vacha-Haase, 2001), it continues to be used (e.g., Deemer, 2004; Esterly, 2003; Nietfeld & Cao, 2003), perhaps due to its prevalence. Another concern with the TES is that teacher efficacy is task specific, yet the TES measures only two general factors (i.e., personal teaching efficacy and general teaching efficacy). Because of this lack of specificity and poor factor loading with the TES, Tschannen-Moran and Woolfolk Hoy (2001) created the Teachers' Sense of Efficacy Scale (TSES).

The TSES has 24 items and employs a 1 ("nothing") to 9 ("a great deal") Likert-scale, with 5 ("some influence") being in the middle. Three subscales help measure teachers' self-reported efficacy related to task categories and include Efficacy in Classroom Management, Efficacy in Instructional Practices, and Efficacy in Student Engagement. The TSES was created and refined in three research studies, having "...a unified and stable factor structure and assess[ed] a broad range of capabilities that teachers consider important to good teaching, without being so specific as to render it useless for comparisons of teachers across contexts, levels, and subjects" (Tschannen-Moran and Woolfolk Hoy, 2001, pp. 801-802). Despite increased validity levels of the TSES (which might presume increased use by researchers), several poor reviews continued regarding unreliable subscales and factor structures of the TES (e.g., Brouwers & Tomic, 2003; Lin, Gorrell & Taylor, 2002; Guskey & Passaro, 1994; Henson, Kogan, & Vacha-Hasses, 2001) and pointed to its continued use.

The TSES was used in this study primarily because it has proven more promising

in regard to reliability and task specificity (i.e., measuring TE according to the three subscales) than the TES. It is important to note that there are several reasons why the TSES has limited appearances in scholarly journals. First it is relatively new (e.g., compared to the TES) as it has only been available for six years. Second, researchers desire use of a known instrument (i.e., the TES) even with reported weaknesses. Third, the TSES's main users have been doctoral students (21 since 2003, as of 5/28/07) who have not submitted articles for peer review. The Teachers' Sense of Efficacy Scale can be found in Appendix B.

Adventure Education and Teacher Efficacy

One promising innovative strategy for raising TE is adventure education (AE), which has been employed in limited degrees with traditional educational programming for over two centuries. Various forms of AE have shown evidence of having positive effects on students, including psychological, social, and intellectual development (e.g., Conrad & Hedin, 1981), self-confidence (e.g., Palmberg & Kuru, 2000), self-perception (e.g., Garst, Scheider & Baker, 2001), and grade point averages (e.g., Gass, 1987). Although these studies are limited, the prevalence of AE programs has steadily grown.

The first recorded implementation of AE into a traditional American school was in the early 1800s when Joseph Cogswell pioneered a two-hour physical education and outdoor activities class each day at the Round Hill School in Northampton, Massachusetts. His aim was to develop the "whole boy" and he went on to include short hiking and camping excursions (Bennett, 1972). In the late 1930s, the W. K. Kellogg Foundation offered three camps near Battle Creek, Michigan, which were eventually taken over by the Battle Creek school district and turned into year-round programs. Ninety 5th through 7th graders attended the camp for two weeks at a time and participated in work experiences, healthful living, social living and leisure pursuits (Eells, 1986;

Hammermann, 1980). The coupling of AE with traditional schools in the form of out-of-classroom experiences was critical, pioneering the way for more intimately integrating AE into the classroom.

In 1962, Outward Bound (OB) was introduced to the United States from Europe and immediately started working with schools; its legacy to date spans 45 years and is currently integrated into 136 schools (www.elob.org). Many more schools employ adventure education but do not strictly use the Outward Bound philosophy/model. Project Adventure (PA), the organization that originally trained physical education teachers to implement OB philosophy and some of its practices into the traditional school, has also been very active in school and curricular reform.

Fortunately, PA has shed some light on the impact of AE in traditional schooling. In 1972 PA was awarded a grant for teachers with OB backgrounds to bring OB philosophy to their classrooms. Initially experiential education (in the form of outdoor education) was used in physical education classes, but math and English teachers eventually implemented similar experiences into their classes (Prouty, 1990). Research on the initial partnerships is non-existent, but anecdotal evidence proved strong enough to forge further relationships with schools and teachers with the aim of curricular reform. Of the numerous partnerships between PA and traditional schools, few have been researched and published. Exceptions are qualitative studies by Dyson & O'Sullivan (1998) and Dyson (1996), revealing successful partnerships. Success was attributed to teachers' and PA's aligned values, such as educating the whole child "physically, emotionally, socially, and cognitively, using a student-centered approach..." (Dyson, 1996, p. 96). As might be presumed, OB and PA were the first to offer AE programming and educational opportunities for teachers and perhaps provided the models for those existing today.

The educational need for further understanding of initiatives catalyzing change in teachers' efficacy through adventure education makes a logical match for investigation. As such, the purpose of this study was to examine changes in four northeastern American city's public middle schools' novice and experienced teachers' efficacy as a result of the following experiences:

1. Teachers' participation in PA's RESPECT[4] training during the summer;
2. Teachers' initial implementation of the RESPECT curriculum into their classes during the first few days of the school year, with varying levels of coaching from PA staff; and
3. Teachers' on-going employment of the RESPECT curriculum in their classes over the school year, with PA staff's on-going consultation.

The format of the study incorporated elements showing success in enhancing TE in previous studies (e.g., long-term intervention), as well as elements that were missing in the literature (e.g., quasi-experimental design, experienced teachers, implementation of new curriculum).

Research Questions for the Quasi-Experimental Design

Because researchers in both outdoor adventure education (e.g., Gass, 2005) and teacher efficacy (e.g., Henson, 2001) have called for experimental studies, and researchers in teacher efficacy have called for qualitative data (e.g., LaBone, 2004; Wheatley, 2005), this study employed quantitative methods supported by the informing nature of interpretive interviews. The specific questions of the study were:

Quantitative

1. Did Project Adventure's RESPECT Program training and implementation create significant changes in public middle school teachers' efficacy as measured by the

[4] RESPECT is an acronym for Responsibility Engagement, Safety, Principles, Empathy, Challenge, and Trust.

Teachers' Sense of Efficacy Scale's subscales when compared to teachers' efficacy change during the pilot year of implementation?

2. Did teachers' efficacy changes vary between and within the four participating schools?
3. Did the following demographic factors influence teachers' efficacy change: age, race, gender, number of years of teaching experience, months of student teaching experience, and level of job satisfaction?

Informing/Corroborating Questions

1. In what ways did interview data elucidate Teachers' Sense of Efficacy Scale analysis findings, particularly regarding its subscales?
2. In what ways did interview data elucidate both strengths and areas for growth of the RESPECT Program curricula and methods of implementation?
3. As measured by the teacher questionnaire, how much fidelity did participants have to implementing the RESPECT curriculum?

Definitions of Key Terms

Pre-Service Teacher: A student in a teacher education program, who has not yet worked professionally under her/his own guidance (Housego, 1992; Nietfeld & Coa, 2003; Swars, 2005).

Novice Teacher: A teacher in her/his first one (Scott, 2003) to three years of teaching (Knobloch & Whittington, 2002).

Experienced Teacher: One who has taught in the classroom for more than three years.

Experiential Education: A process and pedagogy involving direct personal experience, followed by reflection on and observation of the experiences, conceptualization of abstract ideas, and application of those ideas to future learning situations, some or all phases of which occur with the guidance or support of a mentor. The level of emotional,

intellectual, spiritual, physical, and/or mental engagement with the subject lend to the level of student experientiality[5] and ultimately to the power of the learning experience (Dewey, 1938; Joplin, 1981; Kolb, 1984; Sakofs, 1996).

Adventure Education: "The premise of adventure education is that change may take place in groups [i.e., interpersonal] and individuals [i.e., intrapersonal] from direct and purposeful exposure to: challenge, high adventure, and new growth experiences. The product of adventure education is personal growth and development. By responding to seemingly insurmountable tasks, groups and individuals learn to overcome almost any self-imposed perceptions of their capabilities to success. They are able to turn limitations into abilities; and, as a result, they learn a great deal about themselves and how they relate to others" (Priest, 1990, p. 114).

Professional Development: Professional development is employed to describe classes, activities, and workshops in which novice and experienced teachers participate to gain practical skills and theoretical knowledge, so as to become more effective in the classroom.

Teacher Efficacy: "[T]he extent to which teachers believe their efforts will have a positive effect on student achievement" (Ross, 1992, p. 51).

Student Achievement: This heading includes that which contributes to a student's success, including academics, social skills, leadership skills, and behavior.

Intervention: For the purposes of this paper, interventions describe professional development initiatives introduced to teachers with the intent of raising teachers' effectiveness in the classroom, thereby lending to enhanced student achievement.

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[5] Experientiality is determined by the level of ownership a student has in an experience versus the amount of guidance they receive (Gibbons & Hopkins, 1980).

Project Adventure: An innovative teaching organization with the mission of providing "...leadership in the expansion of adventure-based experiential programming. Project Adventure seeks to develop responsible individuals, productive organizations and sustainable communities" (PA, n.d.).

Research Assumptions

This study assumes the following:

1. All study participants volunteered to be study participants without coercion.
2. The Teachers' Sense of Efficacy Scale (TSES) is a valid quantitative instrument to measure novice and experienced teachers' efficacy.
3. Participants responded to the TSES self-assessment items honestly.
4. Participants responded to interview questions honestly.
5. Participants responded to the teacher questionnaire honestly.
6. Teacher participants had varying degrees of interest in participating in the Project Adventure RESPECT Program training and curricular intervention.
7. Study participants had varying levels of exposure to Project Adventure and/or similar experiential education organizations both before and during the study.
8. Project Adventure's RESPECT training with this population will be representative of other RESPECT trainings with similar populations in similar environments.

Limitations

The following list describes potential restrictions of the study, decreasing generalizations that can be made to other populations and/or programs:

1. All study participants taught in underperforming inner-city schools, and while generalizations may be made to similar populations, it should not be presumed

that generalizations can be made to all teachers, nor teachers in different teaching environments.

2. The RESPECT curriculum was provided solely by Project Adventure. While some generalizations to similar organizations and populations may be made, it is inappropriate to presume findings directly suit any other organizations or groups of teachers.
3. The results of the study are limited to teachers who volunteered to be study participants.
4. This study is limited by variables uncontrolled in the study, which could have interacted with other variables to impact the participants and therefore the study.
5. This study attempts to uncover causation, but the study design (i.e., quasi-experimental) and the scope (i.e., too narrow) limit the ability to thoroughly understand cause and effect.
6. Lack of appropriate comparison groups limited the ability to make accurate concluding statements regarding the understanding of how the RESPECT affected the teachers in the study.
7. The small sample size, particularly when comparing teacher efficacy change across schools, limited the power of the study to provide significant answers to the study's questions.

Significance of the Study

Theoretical Significance

AE has been linked to participants' independence, confidence, self-efficacy, and decision making (Hattie, Marsh, Neill, & Richards, 1997). Although there are several personality characteristics and skills associated with growth and AE interventions, it is unknown whether AE enhances TE. If Project Adventure's RESPECT training affects

TE, the findings will contribute to the knowledge base in education programming, teacher education, and professional development, as well as student achievement. Analyzing changes in teachers' TSES over the course of one school year, aided by the use of interviews, might shed light on the impact of different aspects of the intervention. This study will not be able to concretely identify what aspects of the intervention had the most impact on TE (e.g., summer training, coaching throughout the year, implementation of new curriculum, longevity of initiative). It will, however, begin to build a knowledge base of adventure/experiential education interventions on TE, on which further research can be built.

Both the fields of AE and teacher education have the potential to benefit from this study. Much of the research conducted on adventure education as a catalyst for change is based on teenagers and students just entering college, such as first-year orientation programs (e.g., Gass, 1987). Teachers themselves, however, are virtually untapped sources of information. This study has the potential to suggest a beneficial partnership between AE providers and professional development for teachers.

Gass (2005) called for an alignment of value systems of stakeholders in experiential education/adventure research studies (e.g., students, teachers, and administrators, municipal, state and federal governments). Stakeholders in educational systems presumably want teachers, children, and schools to each have a part in experiencing academic success. Research is needed to differentiate effective and ineffective means of enhancing TE and student achievement. While various entities in the proposed study may have different impetuses for pursuing the project, the overarching goal is the same: to gain insight into factors contributing to achievement. This study may provide significance to the research arena of experiential education because it heeds Gass' (2005) call to align the goals of invested parties. Experiential

education needs more rigorous research if it is to join the national discourse regarding education. Currently the U.S. Department of Education, in light of the No Child Left Behind Act, supports "quantitative, randomized, and controlled experiments similar to research conducted in medicine and welfare reform" (Gass, 2005, p. 291). The proposed quasi-experimental, non-equivalent control-group research design approaches such a paradigm.

Practical Significance

Educators strive to help students master content and the requisite social skills to participate in a democratic society. Teachers with a high sense of efficacy have greater success in reaching these goals. The findings of this study could provide beginning evidence of adventure programming serving as a means of raising TE. In this case, the future could see more emphasis on longitudinal professional development for teachers emphasizing adventure programming. Conversely, if this innovation proves fruitless, researchers can look to alternate initiatives, populations, and/or environments to enhance TE.

CHAPTER II

LITERATURE REVIEW

This chapter is a literature review on the education and professional development of teachers with regard to teacher efficacy (TE) and adventure programming. It is divided into the following sections:

1. A conceptualization on the evolution of TE
2. A review of research, with primary emphasis on what alters TE in:
    a. pre-service and novice teachers and
    b. experienced teachers
3. Future trajectories of raising TE and conducting research, including:
    a. a review of adventure education professional development initiatives anecdotally raising TE and
    b. a proposed and promising method for raising TE.
4. Conclusion

Evolutionary Conceptualization of Teacher Efficacy

Since the inception of the concept of TE, researchers and theorists have relied on Bandura's (1977) efficacy work to help evolve their understanding of TE. Bandura delineated two kinds of efficacy: outcomes expectancy and efficacy expectation. Outcomes expectancy is "...a person's estimate that a given behavior will lead to certain outcomes," while the latter is "...the conviction that one can successfully execute the behavior required to produce [desired] outcomes" (p. 79). Efficacy expectation entails a belief in oneself and one's abilities in a particular area and provides the framework for

TE. Nearly 25 years after his initial work on efficacy, Bandura (2001) wrote, "Efficacy beliefs are the foundation of human agency [an act done intentionally]. Unless people believe they can produce desired results and forestall detrimental ones by their actions, they have little incentive to act or to persevere in the face of difficulties" (p. 10). Bandura (e.g., 1995, 1997) still remains convinced that people's beliefs in the amount of control they can have over their actions and their environment are inextricably linked to their behavior. This construct is important because it suggests that people take some responsibility in dictating their actions, which has related benefits for achieving intended outcomes and experiences.

During the same time of Bandura's initial work on efficacy, Armor et al. (1976) conceptualized TE when they added the following two items to a teacher questionnaire on reading programs in Los Angeles:

- "When it comes right down to it, a teacher really can't do much (because) most of a student's motivation and performance depends on his or her home environment;" and
- "If I really try hard, I can get through to even the most difficult or unmotivated students" (p. 23).

The aim of the Los Angeles study was to gain insight into the School Preferred Reading Program, implemented by the Board of Education to provide positive benefits for Black and Mexican American students. Researchers unexpectedly discovered an inextricable link between reading progress and how teachers responded to the items. They found that the higher the teachers' sense of efficacy, the greater the students' advancement in reading. These two aforementioned items proved to be very powerful (more than any other attributes), and revealed the fact that teachers' roles in implementing new curriculum were critical (Tschannen-Moran et al., 1998). These findings encouraged

academics and administrators to take note and search for greater understanding of teacher efficacy.

Continuing to lay theoretical and practical foundations, Gibson and Dembo (1984) applied the theoretical underpinning of Bandura's work on self-efficacy to Armor et al.'s construct of TE by further dissecting TE into personal teaching efficacy (PTE) and general teaching efficacy (GTE). These mirrored Bandura's (1977) delineations of these two concepts.

Just as outcomes expectancy was a matter of estimation, so too was GTE, which measured a "teachers' beliefs about the power of...external forces compared to the influence of teachers and schools" (Tschannen-Moran et al., 1998, p. 204), serving as a gauge of a teacher's belief that students can learn under the guidance of teachers. For example, teachers who possessed a high sense of GTE believed that teachers could positively influence students despite factors outside the school's purview (i.e., physical or emotional abuse, socio-economic status, or substance abuse) and/or various student challenges (e.g., learning differences, lack of motivation). PTE is defined as an "...internally held belief about oneself that solidifies with experience and time" (Henson, 2001, p. 831), which mirrors efficiency expectations regarding specific self beliefs. The concepts of PTE and GTE continue to be used, and researchers continue searching for deeper understanding of the TE construct and how to measure it.

Several versions of TE measurements emerged from 1981 through 1984, each trying to improve upon the previous measure, including Responsibility for Student Achievement, Teacher Locus of Control, The Webb Scale, and Ashton Vignettes (Tschannen-Moran & Woolfolk Hoy, 2001). Other scales also emerged, including the Teacher Self-Efficacy Scale and the Ohio State Teacher Efficacy Scale[6], in 1997 and 2001, respectively (Tschannen-Moran & Woolfolk Hoy, 2001). However, none has been

[6] This is now called the Teachers' Sense of Efficacy Scale.

used as prevalently as Gibson & Dembo's (1984) Teacher Efficacy Scale, which employs PTE and GTE subscales.

Another critical aspect in the conceptualization of TE was the recognition of task (or subject) specificity (e.g., Ebmeirer, 2003; Henson, 2001). "Teachers feel efficacious for teaching particular subjects to certain students in specific settings, and they can be expected to feel more or less efficacious under different circumstances" (Tschannen-Moran et al., 1998, p. 18). For example, teachers can feel efficacious in one aspect of teaching (e.g., classroom management) and inefficacious in another aspect (e.g., decision-making). Or they may feel efficacious if teaching math, but inefficacious if teaching art. This phenomenon first led to researchers adapting the TES (e.g., Coladarci & Breton, 1997; Emmer, 1990) to better target task specificity (e.g., special education, classroom management) (Tschannen-Moran & Woolfolk Hoy, 2001). In the field of language arts, for instance, Chacón (2005) altered the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) by substituting or adding "English" or "learning English" for "school work" to gain insight into English as a Foreign Language Teachers' Efficacy beliefs in Venezuela. Scales have also been altered to address language differences (Wertheim & Leyser, 2002). Soon afterward, subject-specific TE instruments were created (e.g., Science Teaching Efficacy Belief Instrument and Mathematics Teaching Efficacy Beliefs Instrument). Adding various instruments has resulted in increased insight into TE relationships; and this has contributed to TE gaining international attention.

TE research abroad is becoming more prevalent (e.g., Chacón, 2005; Davies, 2004; Ho & Hau, 2004; Taimale & Õim, 2005). While the construct of TE seems to hold true across cultures, measurement and interpretation may be culture-specific. Investigations into necessary measurement and interpretation differences are in initial stages of development. Ho and Hau (2004) investigated teacher efficacy with Australian

and Chinese teachers and surmised different cultural roles and responsibilities ought to be considered. For example, Chinese teachers have a higher sense of guidance efficacy than Australian teachers, since they possess a "parent-like" responsibility in their culture. This cultural awareness and realization of needed sensitivity is relatively new and will require time and research to unfold.

Review of Research

Having offered an overview of the TE construct evolution, it is critical to review past and present courses of research in an effort to make wise choices in designing future inquiry. What follows is a review of research, with primary emphasis on what alters TE in pre-service and novice teachers, as well as experienced teachers.

The majority of TE research entails correlation studies employing quantitative instruments to establish the power of TE (Labone, 2004). However, a few qualitative (e.g., Knobloch & Whittington, 2002; Wheatley, 1997; Yost, 2002), mixed-methodological (e.g., Anderson, Greene & Loewen, 1988; Chacón, 2005; Davies, 2004; Henson, 2001; Swars, 2005; Wilkinson, 2005), and experimental and quasi-experimental designs (e.g., Dallas, 2003; Gordon & Debus, 2002; Paneque & Barbetta, 2006; Poulou, 2007; Tucker et al., 2005) exist. In the last three decades, employing TE measurements and research designs mentioned in the previous section have linked TE to such things as:

- higher order instructional emphasis (Davies, 2004);
- student achievement (Gibson & Dembo, 1984; Moore & Esselman, 1992; Ross, 1992);
- special education referrals and persistence with struggling students (Brownell & Pajares, 1999; Soodak & Podell, 1993);
- experimentation with new and/or different instructional methods (Guskey, 1988; Smylie, 1998; Sparks, 1998);

- students' sense of efficacy (Anderson, Greene, & Loewen, 1988; Midgley, Feldlaufer, & Eccles, 1989);
- organizational health of schools (Hoy & Woolfolk, 1993);
- predictions of student success based on student characteristics (Tournaki & Podell, 2005);
- classroom management (Ashton & Webb, 1986; Gibson & Dembo, 1984; Woolfolk & Hoy, 1990); and
- level of teaching (e.g., primary, secondary) (Taimalu & Õim, 2005; Tschannen-Moran & Woolfolk Hoy, 2002).

To thoroughly understand the presently-known intricacies of TE, however, all antecedents and outcomes must be considered.

Based on a review of TE studies from 1976 through 1993, Ross (1994) delineated antecedents and outcomes of TE in Figure 2.1 below. Additions have been made (in bold), based on peer-reviewed research since 1993. While some items have been proven significant in multiple studies, others have only been cited in one study. Underlined items have proven significant in some studies and of no significance in others.

Figure 2.1 illustrates the linear flow from antecedents of teacher efficacy, represented by "teacher characteristics" and "organizational characteristics" of teacher efficacy to the outcomes of teacher efficacy, represented by "teacher outcomes" and "student outcomes". Though not depicted in the figure, outcomes then act as performance feedback to the original sources of efficacy. The reader is reminded that antecedents may have negative affects on TE, which can have negative affects on outcomes.

Figure 2.1 Antecedents and Outcomes of Teacher Efficacy

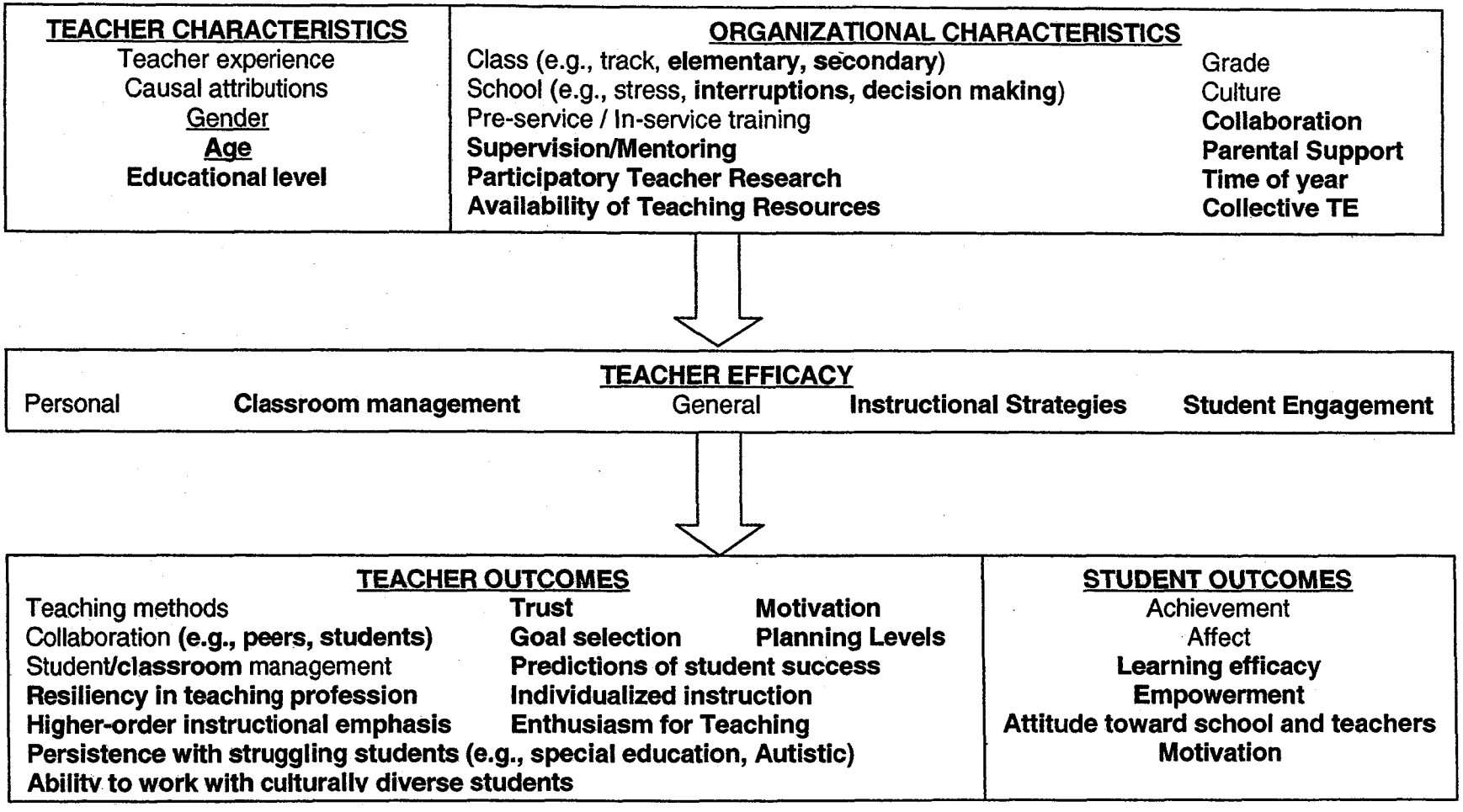

Figure 2.1 illustrates both antecedents (i.e., "teacher characteristics" and "organizational characteristics") and outcomes (i.e., "teacher outcomes" and "student outcomes") of teacher efficacy that are delineated in teacher efficacy research.

The linear flow from antecedents to TE to outcomes may be misleading, for it is still unknown to what extent outcomes may act as antecedents to TE, if TE affects organizational characteristics, and if teacher and student outcomes happen simultaneously. It might be possible for TE to affect teacher outcomes, which in turn would affect student outcomes. For example, if a teacher possessed high TE and it was manifested by means of individualized instruction, more thought might be put into ensuring that various teaching styles were employed during the teaching day. This would help students learn and likely aid in their achievement. This relationship is not represented in the present model.

Another relationship that does not directly fit the linear model is between collective teacher efficacy (CTE) and student achievement. CTE entails "...the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students" (Goddard, Hoy, & Woolfolk Hoy, 2000, p. 480). The role of an individual's TE is not addressed, so the reader is left to assume one of two things: either individuals' TE has no bearing on the relationship of CTE and student achievement, or individuals' TE is presumed to be encompassed in CTE. While constructive criticism can be raised about the presented model, it would likely be very confusing and chaotic if arrows were added to depict every possible relationship. What the model does do is consider what types of things shape TE. In addition, how teachers process antecedents to TE still remains unknown. To gain insight into such questions, researchers turned to Bandura's research and theories.

Teachers are thought to tap into "teacher characteristics" and "organizational characteristics" to make efficacy judgments, but each individual weighs each factor differently. Bandura (1997) outlined four possible routes for sifting through and weighing information:

1. additive processing: stronger efficacy beliefs come with greater numbers of indicators;
2. relative weighing: some factors are weighed more heavily than others;
3. multiplicative processing: conjoint factor effects are greater than additive effects; and
4. configural processing: certain factors are weighted more heavily, depending on the availability of source information.

Why and when certain routes for processing occur is as of yet unknown, but it is thought that an individual's depth of processing and accuracy of judgments may play a role (Labone, 2004).

Adding to the TE discourse were the various types of information that categorize antecedents. Inquiry into how and why individuals choose certain bits of information and perhaps ignore others in their formation of TE led to examining what types of information help teachers formulate efficacy beliefs. Bandura's (1977) work helped provide answers. He identified four sources of efficacy belief information: mastery experiences; physiological and emotional states; vicarious experiences; and social persuasions. These sources have been adopted by TE researchers, particularly when trying to explain certain phenomenon in findings (e.g., Ebmeier, 2003; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). In Figure 2.1, the four sources of efficacy information are represented by "Teacher Characteristics" and "Organizational Characteristics." These information sources can influence efficacy beliefs positively and negatively. It is best to gain insight into each when they are explained in light of research findings.

In an attempt to organize and present the following research, findings are split into two main categories: pre-service and novice teachers and experienced teachers. Because pre-service and novice teachers' efficacy have been found to be relatively unstable, research highlights were categorized into Bandura's (1977) four sources of

self-efficacy information, which allowed for understanding of the unstable nature of inexperienced teachers. This was an attempt to make it easier to identify strong aspects of teacher education programs, as well as to suggest possible positive changes.

As experienced teachers' efficacy tend to be relatively stable, minimal initiatives have proven effective. Since nurturing TE is viewed as critical to effective teaching and student achievement, the literature review on experienced teachers focuses on professional development initiatives proven successful in raising TE. This allows focused insight into future directions for professional development for experienced teachers.

Pre-service and novice teachers. Pre-service teachers' (i.e., individuals with no professional teaching experience) and novice teachers' (i.e., professionals with one-to-three years of teaching experience) tend to possess relatively unstable levels of TE that are possible to enhance. Much of this enhancement has been associated with the quality of teaching resources (Shaughnessy, 2004), college coursework (Watters & Ginns, 1995), and student teaching and practica experiences (Housego, 1992; Hoy & Woolfolk, 1990; Spector, 1990). This is not a comprehensive list, but rather a list of indicators that appear most often in TE research. As stated previously, the review of pre-service and novice teachers can be organized into mastery experiences; physiological and emotional states; vicarious experiences; and social persuasions (a definition will be provided for each prior to the review of literature. Following the last source of efficacy belief information, social persuasion, is a section outlining interesting - yet weak – research on social persuasions).

Mastery experiences. Mastery experiences entail "...the extent to which a teacher has the opportunity to experience success in a given endeavor. Successful experiences raise efficacy beliefs, which contribute to the expectation that performance will be proficient in the future" (Ebmeier, 2003, p. 114). Conversely, direct experiences also reveal shortcomings and hence decrease efficacy beliefs. "One may learn, for

example, that enthusiasm is an asset when working with a group of particularly active children, but it is not enough to compensate for a lack of organization or planning" (Tschannen-Moran et al., 1998, p. 19). Of the four efficacy-influencing factors, mastery experiences are the most powerful. For example, students' teaching experiences can have a sobering effect on idealistic pre-service teachers. "Student teachers are less sure after student teaching that schools can overcome the limitations of home environment and family background than before student teaching" (Hoy & Woolfolk, 1990, p. 294). Additionally, Kozol (1991) provided case studies that depicted the abominable state of poor, inner-city public schools; non-White, eventual drop-outs were inextricably tied to such schools. Public schools are not treated equally or equitably. It is understandable that pre-service teachers do not grasp such complexities of teaching without mastery experiences.

The following study might also fit under the "Vicarious Experiences" section, in that the pre-service teachers observed various teaching strategies (see the Vicarious Experiences section below for a complete definition). However, since the profound findings entailed the students' direct experience learning via particular pedagogic strategies, this study was placed in the mastery experiences section.

Nietfeld and Cao (2003) measured personal teaching efficacy before and after a pre-service course to examine changes as a result of various instructional strategies, including "lecture, focus group discussion, reading the textbook, completing a schema representation project, course website, textbook website, whole group discussion, use of video in the classroom, peer collaboration/tutoring for classroom learning, and in-class illustration exercises" (n.p.). PTE was a topic covered in the course, so students were prepared to comment on it at the end of the course. They reported active, rather than passive, instructional methods helped raise their PTE. The four highest strategies included in-class illustration exercises, whole-group class discussion, peer collaboration,

and focus group exercises. These findings align with Woolfolk Hoy's (2000) report of PTE increasing during pre-service teacher training (note: this is different that the student teaching experience).

Physiological and emotional states. Physiological and emotional states pertain to arousal levels. The ideal amount and type of arousal may differ for individuals, with a continuum ranging from calm relaxation to "butterflies" and increased perspiration, respiration, and heart rate, with a state of flow somewhere in the middle (Bandura, 1977; Ebmeier, 2003; Tschannen-Moran et al., 1998). As of yet, no studies have specifically targeted the relationship between psychological and emotional states and changes in TE. Researchers can only presume this source of efficacy information is integral to certain situations (e.g., mastery experiences).

Vicarious experiences. Vicarious experiences include examples such as watching someone teach, images portrayed in the media, case studies, and gossip. Like other efficacy sources of information, vicarious experiences can have positive or negative effects by means of the observer making comparisons to the example provided. Having a pre-service teacher watch a mentor might result in any of the following:

- The observer learns to teach in skillful ways, thinking the ways are manageable, and hence increasing TE;
- The observer watches the mentor and concludes he/she is highly talented, loses hope of ever attaining such mastery, and thereby experiences a decrease in TE;
- The observer deems the mentor had a sub-par performance, but concludes the task was simply too demanding for anyone, and therefore experiences a decrease in TE; or

- The observer evaluates a mentor's sub-par performance, deems it the mentor's fault, thinking her/his own performance would be better, and thereby experiences an increase in TE.

Yost (2002) asserted being mentored is a quintessential opportunity for vicarious experiences, for the one being mentored can imagine what it would be like to be in the teaching position, as well as imagining how he/she would perform if placed in similar circumstances. It also gives the mentor an opportunity to examine the pre-service teacher's performance and reflect on her/his own as a result.

Social persuasion. The final source of self-efficacy information is social persuasion, which "...can be general or specific; it can provide information about the nature of teaching, give encouragement and strategies for overcoming situational obstacles, and provide specific feedback about a teacher's performance" (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998, p. 19). Verbal persuasion can come from principals, mentors, peers, students, parents, and/or friends. While feedback does not directly correlate with teaching competence, positive feedback may counter potentially permanent side effects derived from negative mastery experiences. Note that it is unclear how long individuals harbor social persuasions; teachers begin to internalize persuasions prior to being employed as a teacher. (Please see Wertheim & Leyser (2002) in Chapter I.)

Weak research, yet interesting insights regarding social persuasions. The first research that falls into this category is Housego's (1992), who monitored changes in pre-service teachers' PTE and GTE. While the study appears promising, conflicting reports in the article render it unreliable. For example, one section states, "...personal teaching efficacy, and [general] teaching efficacy mean scores increased significantly in the first term" (p. 49), while a later section states, "Neither subgroup recorded significant increases in [general] teaching efficacy at any point" (p. 49). A point in the conclusion

runs contrary to the first point noted above: "...there was a declining trend in [general] teaching efficacy scores. They decreased significantly in the first term" (p. 59). Despite the unreliable reports, the "Implications for Teacher Education" section raises an interesting point. It finds that women's PTE increased significantly during the practicum, while the men's did not. This finding may be linked to Ross' (1994) report of TE studies through 1993, most of which revealed females' higher sense of efficacy. Drawing from another report (i.e., Roberts & Nolen-Hoeksema, 1989), Housego (1992) asserted,

> ...women are influenced by positive and negative feedback and alter their self-evaluations accordingly, [while] men take a more self-promotional stance and respond more to positive than negative feedback. Failure to process and act on negative feedback may help to explain male student teachers' limited increase in personal teaching efficacy (p. 61).

It is imperative to consider constructive criticisms and view them not as negative, but rather as an opportunity to become a more effective teacher if one's aim is to improve. Those who successfully remedy weaknesses, or at least make some progress, might gain a sense of empowerment and thereby increase their TE. Whereas those who internalize, but do not address, constructive criticisms might experience stable or decreased senses of TE (e.g., through knowledge of an unaddressed issue). As feedback seems to have a powerful effect on the formation of pre-service and novice teachers' efficacy beliefs, it is not surprising that support, mentoring, and active instructional methods continue to appear in the literature.

Secondly, Knobloch and Whittington (2002) identified the following factors that influence novice teachers' efficacy. Sources of information equivalencies, which follow the "=" symbols, were added, so as to begin to understand how and why TE is unstable/malleable in this population:

1. support and feedback = social persuasion, psychological and emotional states;

2. knowledge and education = mastery experiences, psychological and emotional states;
3. teaching and student teaching experience = mastery experiences, vicarious experiences, social persuasions, psychological and emotional states;
4. positive interactions with students = mastery experiences, social persuasion, psychological and emotional states;
5. preparation, anticipation, and expectations = mastery experiences, psychological and emotional states;
6. resources and facilities = psychological and emotional states, mastery experiences;
7. personal background = mastery experiences, psychological and emotional states, vicarious experiences, social persuasions;
8. intrinsic motivation = psychological and emotional states;
9. isolation, overwhelmed, and helplessness = mastery experiences, psychological and emotional states, social persuasions;
10. other factors such as school procedures, paper work, workload, and unrealistic expectations = psychological and emotional states, mastery experiences.

Most of these factors are undoubtedly ones experienced teachers encounter, as well as positive interactions with students, knowledge and education, and support and feedback. However, not all such things affect experienced teachers' TE and/or have as profound of an effect. Since much less is known about experienced teachers' TE, it is important to delve into existing research, so as to make informed decisions about future research.

Experienced Teachers. Most studies have found experienced teachers' efficacy to be stable, particularly with short in-services and one-time professional development workshops (Roberts et al., 2000; Ross, 1994; Stein & Wang, 1988; Tschannen-Moran et

al., 1998). This aligns with the idea of mastery experiences providing source information for efficacy formation; when in the same environment and teaching the same thing, experiences tend to stabilize and so does TE. Despite the difficulty in increasing TE with experienced teachers, long-term interventions (e.g., participatory teacher research) and coaching and collaborating elements in research on experienced teachers have proven significant in enhancing TE (e.g., Byrd & McIntyre, 1999; Cochran-Smith & Lytle, 1990, 1999; Henson, 2001; Ross, 1992; Shachar & Shmuelevitz, 1997). An understanding of the various effective initiatives is a necessary step to providing future interventions aimed at raising TE, as well as discovering new and more effective initiatives. Further, other beneficial efforts entail repeating studies that hold promise. The following sections highlight professional development initiatives that have proven effective in raising TE in experienced teachers, as well as initiatives that hold promise. The sections entail Collaboration and Professional Learning Communities, Mentors, Long-term Interventions, Participatory Teacher Research, and Adventure Education.

Collaboration and Professional Learning Communities. Teachers in professional learning communities have high TE (Chester & Beudin, 1996; Midgley, Feldlaufer, & Eccles, 1989), as do teachers who collaborate with peers (Shachar & Shmuelevitz, 1997). Conversely, the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) revealed the teachers felt fairly efficacious in their instructional strategies and classroom management, but inefficacious in their ability to engage students in learning; this was attributed to a general lack of administrative support for student discipline issues.

Middle school teachers were found to have high TE ratings associated with common planning time (Warren & Payne, 1997). Henson (2001) found collaboration to be a means to raise GTE, but not PTE. This is likely because collaboration would be a mastery experience to inform GTE, but only a social persuasion for PTE. Mastery

experiences are thought to be more powerful than other sources of efficacy information.

Mentors. A mentor could be an experienced teacher, a long-term consultant, a department chair, an assistant principle, or an area coordinator. Ideally, however, a mentor would be someone who teaches in the same discipline area as the mentee and who has a similar personality (Gagen & Bowie, 2005). Mentoring as a means of raising TE for the mentor has not yet been investigated but holds promise. Yost (2002) argued mentoring taps into all four sources of self-efficacy information. Mentoring provides mastery experience and greater understanding into the intricacies of teaching; teaching someone how to teach allows for greater understanding than simply teaching. Being chosen as a mentor taps into increased physiological and emotional states, via recognition and feeling important, as well as being in the spotlight, while being observed. Recognition by supervisors (e.g., principal), teacher education programs, and the student teacher falls under the information source of social persuasion. Finally, experienced teachers can gain vicarious experiences via observations of their student teacher, thereby gaining insight into their own teaching.

Increased TE for experienced teachers also resulted when teachers worked closely with coaches (Ross, 1992), such as peers more experienced in a particular area, principals, and/or university professors. However, Ebmeier (2003) asserts "Only when the principal engages in activities that actively demonstrate commitment to teaching is there any real hope for building trust, increasing teacher commitment, and building individual TE" (p. 136). It is yet unknown whether teachers' efficacy is affected more when mentoring or being mentored.

Long-term Interventions. Roberts et al. (2000) reported an association between the length of in-service trainings and levels of TE in science education teachers. A higher TE increase was reported in teachers who participated in 4-6 week in-service trainings than teachers who participated in 2-3 week in-service trainings. In another

study, experienced teachers exposed to an eight-month intervention reported higher levels of GTE while their PTE remained stable (Ross, 1994). Providing professional development programs of greater length, in conjunction with teachers' successful implementation of new curriculum (as explained below) has also proven to be effective in raising TE.

> A longitudinal study of the implementation of a new instructional program over the course of a school year demonstrated [a] lag in efficacy beliefs as teachers attempt[ed] to put a new method into practice (Stein & Wang, 1988). Although the degree of implementation showed the largest gain between fall and winter, the teachers' efficacy scores did not register an increase until spring. Teachers who successfully implemented the new program exhibited marked gains in self-efficacy while teachers who learned about the new method but were unsuccessful in their attempts to implement it saw their level of self-efficacy decline (Tschannen-Moran et al., 1998, p. 25).

These findings tend to validate the reciprocal theory among TE, teacher behavior, student behavior, and student outcomes. The teachers who did not experience satisfactory results upon implementation of new curriculum decreased in TE. Teachers may have internalized poor curriculum implementation based on dissatisfaction with their instructional practices and/or lack of student engagement. Conversely, teachers with increased TE likely judged their success on their instructional practices and/or student engagement.

Participatory Teacher Research. Participatory teacher research [PTR] entails teachers examining aspects of their classrooms and/or teaching, abstractly conceptualizing educational interventions, experimenting with them, then evaluating the effectiveness of the interventions (Henson, 2001). PTR often entails teacher and university collaboration and has been called action research, collaborative research, collaborative inquiry, and qualitative experimental research (Byrd & McIntyre, 1999). Cochran-Smith & Lytle (1990: 1999) stated that PTR was an effective means of professional development, and Henson (2001) reported increases in TE when

experienced teachers participated in teacher research. This is supported by the foundational theory of mastery experiences being the most powerful source of efficacy information; teachers who conduct research on teaching and learning take an active part in the learning and inquiry process. Byrd & McIntyre (1999) reported PTR having positive impacts on teachers, their schools, and at-risk students with whom teachers worked.

McNaughton (2002) asserted teachers' experiential knowledge about success level of various teaching strategies should not be discounted. In a case on a successful Australian literacy program, Wilkinson (2005) supported the notion. She found "Sometimes [the teachers] had come across research or theory which gave support for what they already knew from their own teaching, enhancing their sense of efficacy" (p. 134). What is unclear in the article is if the increase in teachers' efficacy was observed, espoused, or measured / evaluated by some other means.

One Future Trajectory of Raising Teacher Efficacy and Conducting Research

AE professional development initiatives anecdotally raising TE. The longevity and anecdotal evidence of successful pairings of AE programs and professional development for teachers suggests further investigation is warranted. Before giving examples of such existing programs, however, it is important to identify research themes in existing literature, as a means to orient future researchers to needed and interesting studies; they are as follows:

1) Correlation research dominates and experimental studies are scarce. Henson (2001) acknowledged "experimental (or quasi-experimental) and/or long term designs are near absent in the literature" (p. 822);
2) Assertions have been made to conduct qualitative research to gain understanding about TE context;
3) The majority of research focuses on pre-service and novice teachers' efficacy, rather than on experienced teachers' efficacy. Specifically, there is limited inquiry

into means of raising experienced teachers' efficacy, perhaps because early inquiries revealed little promise; and

4) Peer-reviewed research on adventure education initiatives' effect on teachers' efficacy, for pre-service / novice and experienced teachers is non-existent.

It is also important to consider Bandura's (1997) proposed guidelines of routes for weighing efficacy and the amount of sources that are incorporated into each professional development initiative. Despite the different means of weighing factors, it would seem the greater the number of factors, the more information the individual has to make an informed decision, no matter what process is used. For example, incorporating both mastery experiences and social persuasions into one study is likely of greater benefit than one information source alone.

Insights into raising experienced teachers' efficacy are limited, but promising. However, knowing there is hope is not enough. A large percentage of the teaching population is reaching retirement age, fewer teachers are entering the profession (Olson, 2000), and high rates of attrition continue within the first three years of teaching. Since TE (i.e., a belief) is paramount to agency (i.e., action), it needs regular attention in not only teacher education, but also in educational reform, to which teacher education is integral.

One innovative area of interest for raising experienced teachers' efficacy is AE. It is an area needing exploration, particularly because adventure education has shown some evidence for positively affecting participants' sense of potential, self-perception, and self-efficacy in various populations (Conrad & Hedin, 1981; Gass & Gillis, 1995; Hattie et al., 1997; Miller, 1972; Schulze, 1971; Walsh & Golins, 1976). However, the potential for a successful marriage between AE and teacher education is as of yet tentative.

The presence of adventure programming in various teacher development

programs possesses some 35 years of anecdotal effectiveness. For example, due to positive testimonials from past students, in 1971, Colorado State College, Dartmouth College, the University of Massachusetts, and Mankato State College offered graduate credit to teachers and administrators who participated in Outward Bound courses. Earning graduate credit for participation in Outward Bound and other outdoor/adventure education programs is still an option for many teachers (this is discussed in greater detail below). While there is no scientific evidence proving programs' level of success, it is important to outline efforts to understand why AE and TE is a relationship in need of investigation. Since AE has been shown to enhance people's beliefs about themselves (e.g., self-perception, sense of potential, self-efficacy), it just might also have the ability to enhance another type of belief: TE. Some of the following studies focus on effectiveness, while other studies focus on beliefs; insights into both actions and beliefs are included because the two are inextricably linked in TE literature.

Outward Bound. The first attempt to study the affects of month-long Outward Bound courses on teachers' classroom effectiveness was in the late 1960s and was reported to be a great success. "[T]he teachers gained an increased sense of their potentialities, greater confidence, and learned to relate more sensitively and humanely with others. To the extent that a teacher was altered in these directions, he became a more effective teacher" (Schulze, 1971, p. 16). The researchers claimed the courses had the following positive effects on teachers' classroom performance (i.e., effectiveness), based on post-course observations and interviews:

- teachers were more empathic with their students;
- teachers were more open and relaxed with students;
- teachers were less concerned about traditional school regulations (e.g., dress code);

- teachers were more self-confident;
- teachers developed a willingness to give students more independence and greater sense of control over their learning;
- teachers realized the value of planned stress situations;
- teachers were more willing to communicate on a personal level with their students, and are not as fearful of revealing their own strengths and weaknesses; and
- teachers were more interested in tailoring instruction to meet the needs and concerns of individual students (Hawkes, 1970).

While these were arguably positive traits for teachers to possess, unfortunately the study was exploratory in nature and results were based solely on post-course interviews and observations.

In this same research, Schulze (1971) also conducted an analysis of the partnering of Outward Bound with 12 diverse (e.g., racially, economically, geographically) American high schools. Schools chose to partner with Outward Bound in hopes of improving such things as racial tension, teacher-student relationships, students' initiative and self-images, and conservation/environmental leadership. At least some of the teachers and students from every school participated in a backcountry Outward Bound course, ranging in length from three to 28 days. Schulze conducted observations of both the Outward Bound programs and various classrooms to evaluate the impact Outward Bound had on the students, teachers, and school environment. He also interviewed students, high schools teachers, and Outward Bound instructors and administrators, and parents. The common theme across the schools about teachers was their improved relationships with students and colleagues, which led to better teaching and enhanced positive impacts on their students.

In addition to the studies noted above, nearly 40 years of operation suggest the courses have some positive affect on teachers. Outward Bound currently offers teacher education courses where classroom teachers (often from Expeditionary Learning Outward Bound Schools) go on extended backcountry expeditions. Instructors facilitate discourse regarding what it means to be a teacher, a learner and how to foster healthy educational environments (http://www.elob.org/design/profdev.html). Because many teachers go on courses with their peers, an environment of collaboration and discussion of new learning is available for on-going professional development upon conclusion of the Outward Bound course. Further the group dynamics integral to such courses have the potential to provide opportunities for vicarious experiences, social persuasion, and physiological and emotional states.

Live, Learn and Teach. University of New Hampshire's Live, Learn, and Teach program works with prospective and practicing teachers in the woods and in a mountain cabin for the first five days of a seven-week course (i.e., Wilderness Week). The teachers go rock climbing, participate in community service, and live in a tight-knit community with the aim of fostering "greater self-confidence, increased awareness and acceptance of individual differences" (http://www.unh.edu/education/LLT/). Based on informal observations, Eder and Williamson (1977) claimed "direct and personal experiences, critical analysis and reflection, opportunities for immediate transfer of a practice with new skills, and support in implementing changes" (p. 22) gained during Live, Learn and Teach led to the following:

- the use of approaches to learning that are interdisciplinary and community-based;
- an increased sensitivity and responsiveness to individual pupil differences and needs;
- changes leadership style: from teacher-centered to more student-centered; and

- an increased self confidence as a teacher.

Again, while these insights are not a result of rigorous research, some of the authors' claims are substantiated by findings in more recent, peer-reviewed research, including individualized instruction. (Please see the "Review of Research" section in Chapter II.)

National Outdoor Leadership School. Since its inception in 1965, NOLS has been teaching people to be teachers. NOLS started by training prospective Outward Bound instructors, but testimonials about course benefits spread, and NOLS currently educates practicing and prospective educators, Navy SEALS, astronauts, people looking for adventure, those yearning to enhance their life skills, et cetera. Due to the diversified client base, various course types are offered, one of which caters to educators. Most educator courses are 24-31 days in length, though a few two-to-three week courses are available. No matter what the length, courses operate in backcountry settings, often five-or-so days' walk from road heads. This makes for a vigorous learning environment with real and immediate consequences. Additionally, a main emphasis of educator courses is on teaching; teachers gain both first-hand experiences and observe their peers teaching. Despite the backcountry setting, the NOLS core leadership curriculum defies environments and can be applied in any setting with all populations. Leadership principles, and examples of tenets, follow:

- Expedition Behavior: how one acts on an expedition (or in a spaceship, in a school, on a team, et cetera); keeping oneself and others motivated; cooperation and conflict resolution; teamwork; and the ability to get along in a group of very diverse people.
- Communication: using timely, specific, clear feedback; listening actively; having courage to state thoughts, feeling, and wants; practicing compassion, even during conflict.

- Tolerance for Adversity and Uncertainty: learning to endure, even enjoy, hard work and challenge; adapting to changes and unknowns; turning challenging situations into opportunities; using humor to keep things in perspective; making focused decisions under stress.
- Competence: knowledge and skills; organization and management; technical ability.
- Judgment and Decision-Making: situation-appropriate decision-making; using experience to develop good judgment; harnessing the strengths and knowledge of other group members to solve problems.
- Self-Awareness: knowing personal strengths and weaknesses; learning from experience; awareness of personal leadership styles and influences on others; realizing how personal words and actions impact others.
- Vision and Action: seeing the possibilities in any situation and finding creative ways to move (the group) forward; motivating and initiating; using group goals to guide actions (NOLS, n.d.).

While NOLS does not aim to raise teachers' efficacy per se, the courses do provide opportunities for prospective and practicing educators to engage in mastery experiences, be recipients and providers of social persuasions, experience psychological and emotional states, as well as vicarious experiences associated with teaching.

Project Adventure. One focus area for Project Adventure (PA) is training physical education (PE) teachers to integrate an adventure education component into their existing physical education program, with an on-going coaching relationship. The curriculum aligns with national and state physical education standards

(http://www.pa.org/programs/physed.php). Dyson and O'Sullivan (1998) reported PA's success teaching PE teachers a new curriculum, who then implemented the curriculum with their students. Though they had a small sample size, the curriculum was an early form of what is still being used due to positive feedback.

Conclusion

This literature review revealed two important facts about teacher efficacy: it can influence student traits (e.g., efficacy, achievement); and it can be altered. The literature review also revealed limited understanding regarding raising TE. Based on the need for further TE research and adventure education's promising potential for raising it, this quasi-experimental research design with informing/corroborating data endeavored to discover the effectiveness of an adventure education program's affect on public middle school teachers' efficacy.

CHAPTER III

RESEARCH METHODOLOGY

This chapter is a report of the methods and participant characteristics employed in this research study, divided into the following sections:

1. Overview of Research Design
2. RESPECT Program (curricular implementation)
3. Setting
4. Sample
    a. Quantitative Data Participants
    b. Informing / Corroborating Data Participants
5. Researcher Bias Declaration
6. Overview of Quantitative Research
    a. Data Collection
        i. Demographic Questionnaire
        ii. Teachers' Sense of Efficacy Scale
    b. Data Analysis
7. Overview of Informing/Corroborating Data
    a. Teacher Questionnaire
    b. Interviews

Overview of Research Design

Due to successful partnerships with educators and public schools for more than 30 years (Dyson, 1996; Dyson & O'Sullivan, 1998), Project Adventure (PA) was paired with four middle schools in a large American northeastern city for a four-year research study. At the onset of the research, all schools were deemed underperforming in accordance with the No Child Left Behind Act (www.nclb.gov), which was a criteria of garnering the grant associated with the study. The partnerships were forged with the intent of tracking changes in middle school students' behavior, social emotional skills, academic attendance, and achievement—as well as teachers' efficacy and their fidelity to the program—as a result of adopting PA's *Responsibility, Engagement, Safety, Principles, Empathy, Challenge, and Trust* (i.e., RESPECT) Program curriculum. While the intent of the RESPECT Program was to raise students' social and academic achievement, the author of this study was invited to join the University of New Hampshire research team to gain insight into teachers' efficacy change.

The PA consultants determined that annual waves of implementation would best serve the schools, while enabling themselves to give teachers the most support. The 2005-2006 school year was the first time the RESPECT curriculum had ever been implemented in any school; thus it was considered a pilot year. It was expected that there would be changes made to the RESPECT curriculum and the means of implementation. Changes were made based on research, anecdotal feedback, and RESPECT consultants' informal observations. This study used data gathered during the pilot year as baseline data; the sample was primarily comprised of 6th grade teachers. During the 2006-2007 year (i.e., implementation year) of data collection, the sample was primarily comprised of 7th grade teachers. Since the thrust of the inquiry was on the RESPECT Program's effectiveness in raising TE, the discrepancy in teachers' grade level was not a concern in the study design for two reasons. One, grade level has not

been consistently identified as an antecedent to TE, nor has it been highly correlated with TE consistently. Two, many of the study participants taught students in more than one grade (e.g., Magnolia's teachers work with students from 6th, 7th, and 8th grade).

It is important to note that while participation in the RESPECT Program training and implementation was mandatory for the teachers, participation in the teacher efficacy portion of the research (i.e., the research conducted by this author) was not. During the pilot year of gathering quantitative data, teachers were given monetary incentives for participation in the survey portion of the study. Depending on their level of involvement, they were entered into a raffle for various sums of money (e.g., $25, $50, $100).

RESPECT Program

Elements of the RESPECT Program included supportive relationships, positive social norms, support for efficacy, opportunities for goal setting and assessment, and skill building. Its use of experienced-based activities provided a compelling and clear reason for the provision of safety. The five *Full Value Concepts* provided a framework and philosophy for the program, as well as familiar and common language that helped students behave appropriately. For example, "BE HERE" had layers of meanings, including the following: be physically present; be a participant; be focused; be on time; and be connected to the people and activities that occur in the classroom and the school. BE SAFE referred to both physical and emotional safety of oneself and others. BE HONEST asked students to be truthful to others and themselves. LET GO AND MOVE ON guided students to address problems, try to solve them, and then engage with the present. This concept was aimed at helping students understand that mistakes are part of the learning process; they should learn from them, and then move on to the next learning opportunity. SET GOALS was the last Full Value Concept and guided students to understand the benefits of having goals, setting them, telling someone else about them, revisiting them, and evaluating the results.

Setting *STAR Goals* gave students specific steps to set goals, allowing them to adhere to the final Full Value Concept, described above. STAR stood for Specific, Trackable, Achievable, and Relevant. Some teachers had their students set goals weekly, while other teachers had their students set and strive for their goals over longer periods of time, such as a semester. During the second year of implementation, the PA consultants encouraged teachers to have their students set weekly goals that could be easily tracked by students. As well, this allowed students to experience timely consequences (both positive and negative) of their actions. During the second year, PA encouraged teachers to implement grade-wide incentive systems for good behavior; this proved an effective initiative in one school during the pilot year.

The *Quick Class* was experienced-based in that all students were expected to actively participate in problem solving, but it was also designed to set norms and establish emotional and social safety. When students or teachers encountered a problem that needed addressing, they called a Quick Class. At that point, everyone in the class stopped what they were doing and joined the circle. They then progressed through the following steps as a means to resolve the problem: Assemble and Ask; Brainstorm; Choose; Do It; and Evaluate. The Quick Class was one avenue to "LET GO AND MOVE ON" (described above). This process was also referred to as "ABCDEs of Problem Solving," as each step started with one of the five letters. The Quick Class was not only a means to solve a problem, but it also provided students examples of making healthy and deliberate choices.

Teachers in the RESPECT Program were encouraged to follow the model they asked students to follow during training and throughout implementation (Sarah Amadon, Personal Communication, September 2005). This included modeling the highest level of RESPECT behavior, which ranged from Level 0: Irresponsible (e.g., blaming, arguing, unsafe behavior) to Level 4: Responsible/Caring (e.g., setting goals for personal

success, doing more than the minimum, helping others students be successful in class). Level 1, Level 2, and Level 3 were titled Self Control, Involvement, and Self Responsibility, respectively. During the second year of implementation, the titles of the levels changed slightly. Level 1 to Level 5 progressed respectively from Lacking Responsibly to Emerging Awareness to Involved to Personally Responsible to Socially Responsible. (The revised rubric can be found in Appendix C.) The rubric was used by teachers to help students understand what was expected of them, as well as by students to self-assess by aligning their behaviors to those outlines in the RESPECT rubric levels. When students identified two of their exhibited behaviors being Level 4 and three of their behaviors being Level 3, then they were on their way to having Level 4 behaviors, but they had not yet achieved Level 4. Some teachers used the rubric to award points toward the chosen incentive for good behavior and achievement.

One way students displayed their level on the RESPECT Rubric was during a *Quick Starts* or *Quick Close*. In the beginning of each class, teachers were asked to take a few minutes to help students focus through referencing one or more of the five Full Value Concepts. One example provided in the RESPECT Program Training Manual was for teachers to ask "What is one thing you can do in this class to be focused on the lesson?" At the end of the class, teachers were asked to bring students full circle and reflect on how students answered the question at the beginning of the class and if they did what they suggested. This not only helped students "BE HERE" at the beginning of the class, but it also guided them to set goals and assess their progress at the end of class.

In addition to the curricular components explained above, PA also helped develop activities tied directly to the Physical Education, Math, English Language Arts, Science, and Social Studies curriculums. So as to help teachers become accustomed to the RESPECT curriculum during the pilot year, PA instructors modeled facilitation with

teachers' students, coached teachers on their facilitation, and had one-on-one sessions with teachers. During the implementation year, PA consultants wanted teachers to have more ownership over the RESPECT implementation in their classes and leadership within their schools. As such, PA consultants had one-on-one sessions with the teachers but they did not model lessons in the teachers' classes in the beginning of the year.

In the beginning of the 2005 school year, PA instructors visited schools one time a week. This schedule evolved to primarily bi-weekly visits in late October, and then monthly visits in November and December. In January 2006, the visits resumed to a bi-weekly schedule. In the beginning of the pilot year, three PA instructors were associated with the program; various people took leading roles and others assumed supportive roles. A fourth instructor was added to the team and allowed for more visits and mentoring in February. During the implementation year, there were two lead consultants and two supportive consultants; one to two PA consultants were assigned to each school, so as to maintain consistency and familiarity.

Setting

Data collection occurred at several locations. The demographic questionnaire and first Teachers' Sense of Efficacy Scales (TSESs) were completed at one of the following locations where participants received their first introduction to the RESPECT Program: PA, at a local church, or at the participants' home schools. The second TSESs were distributed and gathered at participants' home schools. Interviews and the teacher questionnaire were conducted at participants' home schools (i.e., Tupelo Middle School, Larch Middle School, Walnut Middle School, and Maple Middle School).

Sample

While the level of participation in various parts of this study is described below, it is important to note the complexities of involvement that cannot be gathered from sheer participant numbers. For example, there could be school involvement with varying levels

of administrative support and hence teacher participation. Teachers could believe in the RESPECT philosophy yet have varying levels of consistency regarding implementation. The ability to access appropriate information from a matching comparison group (that received no treatment) severely weakened the study design. Chapters IV and V will delve more deeply into these issues.

Quantitative Data Participants

During the pilot year of data collection (2005-2006), 47 teachers completed the pre-test TSES and 43 completed the post-test TSES. Thirty-four (n=34) teachers completed both the pretest and the posttest. Sixth grade teachers comprised the majority of the sample; a few of the teachers worked with 7th and/or 8th grade students in addition to 6th graders. Years of teaching experience ranged from being in their first year to 35 years, with 12 being the mean. Four schools were represented in the study, with Tupelo being the biggest school (roughly 650 students) and having the greatest participation in the sample (42%) and Magnolia being the smallest school (roughly 100 students) with the least participation in the volunteer sample (10%). Larch's (roughly 590 students) and Walnut's (roughly 430 students) teachers comprised 26% and 21% of the sample, respectively.

During the implementation year of data collection (2006-2007), the bulk of the sample was comprised of 7th grade teachers, with a few specialty teachers (i.e., those who teach one subject to multiple grades), new 6th grade teachers and two 8th grade teachers adding to the sample. Forty-six (n = 46) teachers completed the pretest TSES and 38 teachers completed the posttest TSES. Thirty-four (n=34) teachers completed both the pretest and the posttest. Teachers' years of teaching experience ranged from being in their first year to being in the classroom for 27 years. Fourteen (27%) participating teachers were from Larch Middle School, 8 (15%) were from Magnolia, 14 (27%) were from Tupelo, and 16 (31%) were from Walnut Middle School. Nearly all pilot

and implementation teachers who were invited to participate in the study, volunteered to some extent (i.e., pretest, posttest, teacher questionnaire, and/or interview). The exceptions were the three people who did not sign consent forms.

Informing / Corroborating Data Participants

Interview Data Participants. The interview sample was largely a convenience sample (i.e., those who completed the first TSES and were willing to grant interviews were considered). However, emphasis was placed on gathering data from a representative sample of the population, considering traits such as gender, number of years teaching, and age.

During the pilot year of interview data collection, three males and six females granted interviews. The nine interview participants had varying years of teaching experience, ranging from one (i.e., 2005 was their first year of teaching) to 25 years. They earned their teaching certificates through four-year, five-year, graduate, and alternative-certification programs. The following number of teachers participated in interviews from the following middle schools: one from Larch; three from Magnolia; and five from Tupelo. During the implementation year of interview data collection, five women and three men granted interviews. Their years of teaching experience ranged from 30 years to 2006-2007 being the first year. Three teachers taught at Larch Middle School, three at Tupelo Middle School, and two taught at Magnolia Middle School.

The researcher obtained written consent from each participant prior to data collection; those who granted interviews completed both a quantitative (Appendix D) and interview (Appendix E) data collection consent form. As well, permission was obtained from the Public School Research Board, the Institutional Review Board at the University of New Hampshire (Appendix F and Appendix G), and Project Adventure. In accordance with the consent forms, only the author had access to each participant's raw data. Others (e.g., the author's dissertation committee) were able to view the transcriptions

with participants' pseudonyms. Revealing names of schools and teachers / principals were given pseudonyms during transcription.

Teacher Questionnaire Data Participants. Implementation teachers from the four participating schools completed the teacher questionnaire, though few teachers completed the questionnaire all five times (i.e., in September, October, November, January, and March). Because some teachers did not record their names on the questionnaire each time, tracking individual teachers' data was not possible. As such, schools' teachers' means of each question were employed to track fidelity to the RESPECT Program.

Researcher Bias Declaration

It is important for researchers to investigate, reveal and acknowledge their biases as a means to address potential areas of subjectivity in research design, data collection, and data analysis. One means of doing this is recording personal paradigms and biases; of course, inherent in biases is a lack of thorough understanding of the biases. Bogdan and Biklen (2003) explain, "...being a clean slate is neither possible nor desirable. The goal is to become more reflective and conscious of how who you are may shape and enrich what you do, not to eliminate it" (p. 34). It is important for the reader of this study (i.e., dissertation committee) to comprehend the novice researcher's biases and her acknowledgement of them. As such, what follows is a declaration of the researcher's biases as they relate to the research project.

Since 1993, I have been a firm believer that incorporating experiential pedagogies into the traditional classroom would enhance the quality and effectiveness of the education; this belief derived from sheer hope and naiveté, rather than observation of or inquiry into this practice. As a student on a semester-long National Outdoor Leadership School course in Patagonia, experiential / adventure education resonated

with me; being an expensive course, I realized the only way the greater population could gain exposure to experiential education would be to incorporate it into classrooms.

Primarily based on a review of literature, I believe the RESPECT Program will have beneficial effects when implemented into the participating classrooms for the following two reasons: it is a long-term intervention; and PA staff will act as mentors to the teachers implementing the curriculum. Lastly, I believe the teachers will embrace a new curriculum if they see it worthy of their time and energy; if implemented well, I believe teachers will see the merit of employing experiential education pedagogy (such as the RESPECT Program) into their classroom practice. Successful implementation of the curriculum will lead to increased TE.

Overview of Quantitative Research

The purpose of quasi-experimental research is to investigate potential cause-and-effect relationships within samples that are not randomly selected and assigned (as is the case with experiential research designs). In both experiential and quasi-experimental designs, it is hypothesized that the independent variable could cause a change in the dependent variable. However, only in experimental research can causality be established. Three common quasi-experimental designs are as follows:

1. posttest only with nonequivalent groups;
2. pretest-posttest with non-equivalent groups; or
3. time series design with a single group (Charles & Mertler, 2002, p. 332).

This study employed a quasi-experimental pretest-posttest design with non-equivalent groups. Because the research took place in schools with standardized grades and incoming classes, an experimental design with a randomly selected and assigned sample was not an option. However, so as to make the design as strong as possible, a pretest was used to acknowledge pre-existing differences and aid with proper interpretation of the posttest and difference scores. The TSES is designed to be

measured by three subscales: Efficacy in Student Engagement (SE); Efficacy in Classroom Management (CM); and Efficacy in Instructional Practices (IP). Comparison between subscale pretest means of the pilot and implementation participants' TSES revealed the following: SE was not significantly different ($t(91) = -1.810$, $p = .074$); CM was not significantly different ($t(91) = .320$, $p = .750$); and IP was significantly different ($t(90) = -2.150$, $p = .034$). The pilot and implementation teachers' pretests revealed that only the IP subscale was significantly different between groups; pilot and implementation teachers' baseline TE was not similar according to all subscales.

Data Collection

Demographic Questionnaire: Nine demographic questions were asked after participants had signed the consent form and before they were introduced to RESPECT. During the pilot year, exceptions included teachers wary of participating in the study at their initial training; some chose to participate after the first training and subsequently signed the consent form and answered the demographic questions. In both the pilot and experimental years, 25 teachers did not complete the second TSES because they either left school during the year (e.g., maternity leave) or opted not to participate. Table 3.1 lists the demographic questions as well as the rationale for including them in the study. A complete demographic questionnaire can be found in Appendix H. The demographic questions were employed for two reasons: one, to provide descriptive statistics of the population; and two, to explore influencing factors of the TSES.

Table 3.1 Rationale for the Demographic Variables in the Study

The Variable	Hypothesis on why the variable might impact the study
School	This variable was added to be able to track teacher efficacy trends within and across both pilot and implementation schools.

Table 3.1 is continued on page 59.

Table 3.1 Rationale for the Demographic Variables in the Study (continued)

Gender	Gender has been found to be an influential factor on teacher efficacy (Anderson, Greene, & Loewen, 1998; Housego, 1992; Hoy & Woolfolk, 1993)
Age	Taimalu & Õim (2005) discovered that a teacher's age had a bearing on teacher efficacy.
Number of years in teaching	Moore & Esselman (1992) and Ross (1994) found experienced teachers' efficacy to be relatively stable and number of years in teaching has been linked to teacher efficacy levels (Dembo & Gibson, 1985; Glickman & Tamashiro, 1982; Guskey & Passaro, 1994).
Race	Because the study participants are racially diverse, this variable was added to gain insight into race having bearing on teacher efficacy.
Amount of student teaching	Some studies (e.g., Lin, Gorrell, & Taylor, 2002; Onafowora, 2004) indicate fluctuations during student-teaching experiences. As such, amount of time in student teaching might have a bearing on levels of teacher efficacy.
Level of education	Hoy and Woolfolk (1993) and Taimalu and Õim (2005) found level of teaching to have an affect on teacher efficacy.
Satisfaction with job	Trentham, Silvern, & Brogdon (1985) found teacher efficacy to be related to satisfaction with choice of profession.
Investment in PA's RESPECT Program training	Fritz, Miller-Heyl, Kreutzer, & MacPhee (1995) found investment in new curriculum to have bearing on levels of teacher efficacy.

Teachers' Sense of Efficacy Scale. The Teachers' Sense of Efficacy Scale (TSES) was built from over 30 years of teacher efficacy research using eight instruments. It was developed by Tschannen-Moran and Woolfolk Hoy (2001). Noting the problematic nature of using an unreliable measure, Tschannen-Moran and Hoy (2001) developed the TSES. Its use in three studies revealed that "...it has a unified and stable factor structure and assesses a broad range of capabilities that teachers consider important to good teaching, without being so specific as to render it useless for comparisons of teachers across contexts, levels, and subjects" (Tschannen-Moran &

Woolfolk Hoy, 2001, p. 802). The long-form version of the TSES has 24 items and a Likert-type scale, ranging from 1 (Nothing) to 9 (A Great Deal). Three subscales focus teacher efficacy on *Efficacy for Student Engagement, Efficacy for Classroom Management,* and *Efficacy in Instructional Practices.* Examples of items that target each subscale are listed in table 3.2.

Table 3.2: Examples from the Teachers' Sense of Efficacy Scale

Efficacy for Instructional Practices	• To what extent can you craft good questions for your students? • How well can you provide appropriate challenges for very capable students? • How much can you do to adjust your lessons to the proper level for individual students?
Efficacy for Classroom Management	• How well can you respond to defiant students? • How much can you do to get children to follow classroom rules? • How well can you establish routines to keep activities running smoothly?
Efficacy for Student Engagement	• How much can you do to foster student creativity? • How much can you do to motivate students who show low interest in schoolwork? • How much can you do to improve the understanding of a student who is failing?

Data Analysis

Both the Demographic Questionnaire and TSES data were entered into the SPSS statistical program for analysis. TSES Subscale averages were checked for outliers via scatterplots and histograms. Descriptive statistics, independent samples *t*–tests, and one-way ANOVAs with post-hoc tests were employed to analyze data. These tests allowed insights into the effect of the intervention in regard to various relationships between demographic traits and TSES difference scores.

Scatterplots and histograms allowed the researcher to identify anomalous cases that skewed the data analysis. In several cases, data was entered incorrectly (e.g., 77 rather than 7) and the problem was remedied once the data was fixed. Descriptive statistics allowed the researcher to observe mean pretest, posttest, and teacher

questionnaire values according to year and school. Frequencies primarily provided insight into demographic data (e.g., varying percentages of racial involvement, percentages of participants who earned their teaching certificates via different means).

To analyze differences between pilot and implementation teachers' TSES subscale changes within schools, a split file (i.e., each school vs. each and every other school) independent-samples *t*-test was used with the TSES subscales serving as the test variables and pilot/implementation serving as the grouping variable. This process allowed the researcher to answer the following research question: "Did Project Adventure's RESPECT Program training and implementation create significant changes in public middle school teachers' efficacy as measured by the Teachers' Sense of Efficacy Scale's subscales when compared to teachers' efficacy change during the pilot year of implementation?"

A split-file (pilot vs. implementation teachers) one-way ANOVA with TSES subscales as the dependent variables and home school as the independent variable (i.e., factor) was employed to analyze between school differences for both the pilot and implementation years; this allowed for answering the research question, "Did teachers' efficacy changes vary between and within the four participating schools?" Figure 3.1 illustrates the model employed to investigate TE change.

Figure 3.1 TE change analysis model

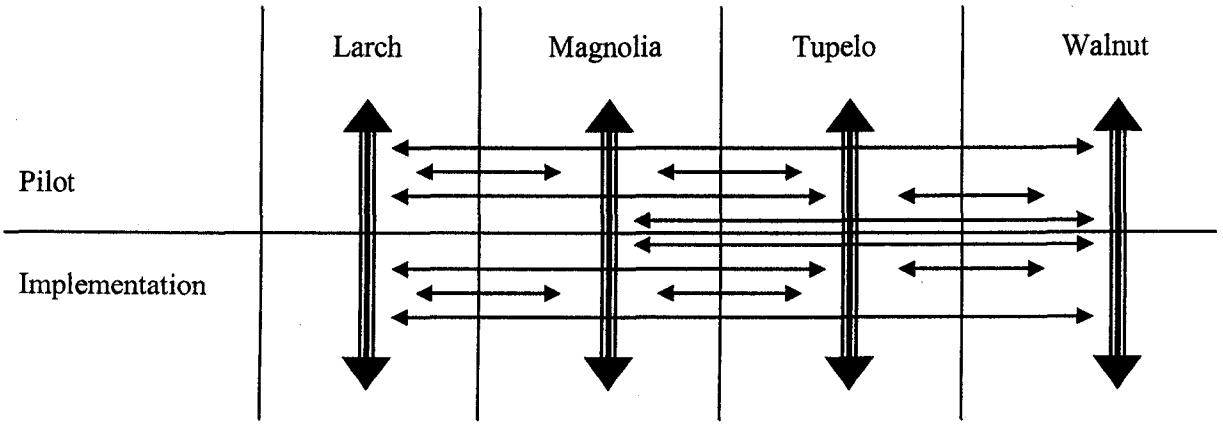

Figure 3.1 Large, triple-line, vertical arrows indicate inquiry into significant change between each schools' pilot and implementation teachers. Thin, single-line horizontal arrows indicate inquiry into significant differences between pilot school teachers and implementation school teachers.

Table 3.3 lists the variables used in the study with accompanying ranges or categories.

Table 3.3 Types of Variables Included in the Demographic Survey

Variable	Type of Variable	Category or Range
School	Category	7 categories
Gender	Category	Female / Male
Age	Metric	22 – 62 years-old
Number of years in teaching	Metric	0 – 34 years
Race	Category	7 categories
Amount of student teaching	Metric	0 – 24 months
Level of education	Category	6 categories
Satisfaction with job	Category	7 categories
Investment in PA's RESPECT Program training	Category	7 categories

Overview of Informing/Corroborating Data

Two data sources provided means for informing/corroborating data to explore TSES findings: a teacher questionnaire regarding frequency of implementation and interviews. The teacher questionnaire (Appendix I) provided information on teachers' fidelity to implementation of the RESPECT Program. Interview data was gathered to provide insight into TSES and teacher questionnaire findings.

Teacher Questionnaire

During the implementation year, teachers were asked to complete the Likert-type teacher questionnaire, which allowed insight into teachers' fidelity to RESPECT implementation. This questionnaire was created by Paul Shirilla, a member of the University of New Hampshire research team, Alison Rheingold and Larry Childs (both of whom were RESPECT consultants). It was administered in teachers' home schools five times over the course of the 2006-2007 year (i.e., in September, October, November, January, and March[7]). Examples of 12 items on the questionnaire included the following:

- I used the five Full Value Concepts with the following frequency (circle one):
- Students in my classes used the RESPECT language (Full Value Contract, Quick Class, etc) with the following frequency[8]
- I have noticed other adults in the school modeling RESPECT Full Value Concepts *for students* to the following extent
- My students have monitored their goals in my classes[9]

Data was entered into Excel and mean monthly scores revealed the level to which teachers at each of the schools employed the RESPECT curriculum.

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[7] This instrument was administered by Paul Shirilla.

[8] The following Likert-type scale was employed for the above examples: Never, Once or twice, A few times in a couple of classes, During most classes, Every day in every class

[9] The following Likert-type scale was employed for the third and forth examples: Not at all, Slightly, Somewhat, Quite a bit, A great deal

Interviews

Interviews were conducted with teachers to inform and corroborate quantitative findings. In addition to seeking insight into teachers' experiences with the RESPECT curriculum, another aim was to provide PA instructors with feedback. For while this study spanned only the first two years of implementation, the greater study (of which this is a part) will continue for two more years. The instructors want to be as effective as possible, so they welcomed feedback. In some respects, RESPECT interviews were evaluative in nature (Rossman and Rallis, 1998). Though not all questions were directly related to the RESPECT Program, they shed insight into effective and ineffective aspects of the program design. For example, the interview questions that asked for examples of effective and ineffective aspects of professional development initiatives allowed insights into aspects of RESPECT via comparison.

Interview questions were initially constructed by the author and were based on a review of literature on teacher efficacy (TE). For example, long-term professional development initiatives have been shown to increase TE more so than short-term interventions (Ross, 1994). As such, one of the interview questions asked, "Please describe the most effective professional development initiative of which you have been a part. What made it so effective?" The intent was to determine if study participants' thoughts and experiences regarding professional development reflected what can be found in the literature. A further purpose was to determine if the teachers' descriptions of effective professional development were reflected in the RESPECT program design and intervention. Additionally, some questions were devised to gain insight into the TSES. For example, one of the TSES subscales is Classroom Management, so one of the interview questions was "Are you doing anything different in regard to classroom management strategies this year? If so, how effective have they been?" The intent of this question was to determine if the teachers adopted any of the RESPECT curriculum

(some of which targeted behavior management), and if so, if they found it effective. Further, such questions allowed insight into reasons for positive and negative TSES subscale change scores.

Dr. Kim Fries and Dr. Steven Wright, both dissertation committee members, provided feedback on both the wording and content of the pilot year's interview questions. Piloting the interview protocol consisted of interviewing two teachers in Gunnison, CO. Because neither pilot participants were associated with the RESPECT study, five of the interview questions were not answered. However, so as to gain feedback about wording, the questions were asked, though the exercise did not result in changing the questions. The pilot participants thought the wording of all the questions was clear and flowed well. The pilot interviews were audio recorded, allowing the author to analyze her interviewing technique. She noted two main changes that needed to take place when conducting interviews as part of her research. One, upon seeking clarification, she should ask for further explanation, rather than paraphrase herself, for doing so could change the content of the message by leading or "putting words in someone's mouth"; there was also the danger of paraphrasing according to the researcher's bias. Two, she realized she needed to practice posing the questions, so as to be as clear and concise as possible. During the second year of interviews, most of the same interview protocol was used; however, one PA consultant asked that one question be changed, so as to gain better insight into the RESPECT curricular implementation.

The interviews ranged in length from 15 to 45 minutes, with most lasting from 25 to 30 minutes. Interviews were conducted during the teachers' lunch breaks or planning time. Interviews were started with warm–up questions, such as "What would you like your pseudonym to be?" and "How long have you been teaching?" The intent of these questions was to ease participants and the researcher into the relationship. These questions were followed with questions that required more insight and thought to

answer. Weiss (1994) asserted the need to pose questions in such a way that elicits concrete instances rather than generalized accounts, for the latter might reveal theory rather than direct experience/thought. As such, the questions that followed in the interview asked for specific examples from the participants' experience.[10]

Participants were asked to provide examples of both effective and ineffective professional development initiatives based on their experience. The next four questions pertained to the teachers' experiences and observations (e.g., changes in student achievement, classroom management, instructional practice, and student engagement). The final five questions of the interview focused on participants' experiences with and opinions about PA and the RESPECT Program. This format and flow allowed for further probing into answers when desired. Aiming for non-biased probing questions, the following were employed: "Would you please give an example," "Will you explain a bit more," and "Will you explain that another way, so I can be sure I understand?" Interview questions can be found in Appendix J[11].

During the pilot year, interviews were recorded and transcribed in their entirety. During the implementation year, interviews were recorded and selectively transcribed. Bogdan and Biklen (1998) explain "...alternative is to transcribe the first interviews more or less completely...then narrow what you transcribe in later interviews. As the study goes on, you should have a better idea about your focus and be more selective in what you type" (p. 133). After transcriptions were completed, the researcher sought themes across interview sources. As well, insightful anomalies were highlighted.

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[10] One exception to the specific questions asked "Why do you think your principal agreed to partner with PA?" The researcher's intent in asking this question was to gain insight into whether the participants felt support from their administrators.

[11] While the majority of interview questions remained the same from the pilot year to the implementation year, some did vary. Discrepancies can be found in Appendix J.

CHAPTER IV

RESULTS

This chapter reports the results of data analysis for both the quantitative and informing/corroborating data from this study. The sections include:

1. Teachers' Sense of Efficacy Scale Pilot and Implementation Participants' Demographics
2. Analysis of Quantitative Data, including:
    a. Analysis of TSES subscale pretest, posttest, and difference scores
    b. Analysis of TSES change scores between the four participating middle schools; and
    c. Analysis of the following demographic factors' influence on teachers' efficacy change: age, race, gender, number of years of teaching experience, months of student teaching experience, and level of job satisfaction.
3. Pilot and Implementation Interview Participants' Demographic Information
4. Analysis of Informing/Corroborating Data, including:
    a. Interview data analysis regarding elucidation of the TSES subscale findings;
    b. Interview data analysis regarding elucidation of both strengths and areas for growth of the RESPECT Program curricula and methods of implementation; and
    c. Implementation teacher questionnaire analysis regarding RESPECT Program fidelity
5. Summary of Results

6. Limitations to the Data Collection

Teachers' Sense of Efficacy Scale Pilot and Implementation Participants' Demographics

A total of 34 pilot and 34 implementation teachers participated in both the pretest and posttest administrations of the quantitative portion of this study and completed appropriate consent forms. Three study participants did not sign consent forms and therefore were not included in the analyses. Table 4.1 reports the number of teachers who participated in the pretest, posttest, and both administrations of the TSES.

Table 4.1 Participant Involvement in TSES Data Collection

Testing Wave	Pretest	Posttest	Pretest and Posttest
Pilot Year (2005-2006)	47	43	34
Implementation Year (2006-2007)	46	38	34

Difference scores (i.e., posttest minus pretest) could not be computed for participants who only completed either the pretest or the posttest (n = 38). One participant's Instructional Practices (IP) difference score could not be calculated because he/she failed to answer IP subscale items on the pretest.

Table 4.2 provides demographic data of the study sample. Teachers' ages ranged from 22 to 62 and the number of years teaching ranged from zero (i.e., 2005-2006 / 2006-2007 was their first year of teaching) to 34. Teaching certificates were earned in five different ways; some teachers gained no student teaching experience, while others gained several years of experience as paraprofessionals. African Americans, Caucasians, Hispanics, and one Pacific Islander participated; several people identified as "Other." Seventy-one (n = 71) females and 30 males participated in the

quantitative portion of the study. Over 80% of participants were either "fairly satisfied" or "satisfied" with their jobs.

Table 4.2 Study Sample Demographics of Quantitative Study Participants

	Pilot Year		Implementation Year	
	Mean / SD	Frequency/ Percent	Mean / SD	Frequency/ Percent
Age	39.4 / 10.5		37.6 / 11.5	
Years teaching	13.1 / 10.2		8.6 / 7.9	
Months Student Teaching	6.1 / 5		6.4 / 7	
Gender				
Female		34 / 59.6%		37 / 74%
Male		20 / 35.1%		10 / 20%
Missing		3 / 5.3%		3 / 6%
Race				
African American		23 / 40.4%		9 / 18%
Caucasian		22 / 38.6%		29 / 58%
Hispanic		5 / 8.8%		3 / 6%
Pacific Islander		1 / 1.8%		0 / 0%
Other		3 / 5.3%		6 / 12%
Missing		3 / 5.3%		3 / 6%
Teaching Certificate				
Graduate		20 / 35.1%		21 / 42%
Five year		3 / 5.3%		3 / 6%
Four year		25 / 43.9%		12 / 24%
Alternative Certification		4 / 7.0%		4 / 8%
Other		3 / 5.3%		7 / 14%
Missing		2 / 3.5%		3 / 6%
School				
Larch		15 / 26.3%		13 / 26%
Middle School Academy		6 / 10.5%		7 / 14%
Tupelo		22 / 38.6%		14 / 28%
Walnut		14 / 24.6%		16 / 32%

Table 4.2 is continued on page 70.

Table 4.2 Study Sample Demographics of Quantitative Study Participants (continued)

	Pilot Year		Implementation Year	
	Mean / SD	Frequency/ Percent	Mean / SD	Frequency/ Percent
Job Satisfaction				
Unsatisfied		0 / 0%		1 / 2%
A little		5 / 8.8%		2 / 4%
Neutral		6 / 10.5%		2 / 4%
Neutral / Fairly		1 / 1.8%		0 / 0%
Fairly		25 / 43.9%		14 / 28%
Fairly/Satisfied		1 / 1.8%		0 / 0%
Satisfied		19 / 33.3%		28 / 56%
Missing		0 / 0%		3 / 6%

Analysis of Quantitative Data

This section reports the results of statistical analyses conducted to answer the research questions stated in Chapter I.

Analysis of TSES subscale pretest, posttest, and difference scores

Teachers identified the degree to which they agreed with each TSES item statement on a scale from one to nine. TSES mean subscale scores for the pilot participants ranged from 3.44 to 9.0 for the pretest and 4 to 9.0 for the posttest. Implementation participants' subscale scores ranged from 4.13 to 9.0 for the pretest and 4.25 to 9.0 for the posttest.

Pretest and Posttest. Concerning the three specific subscales of the TSES, SE subscale scores increased from 6.57 to 6.65 for pilot participants and decreased from 6.98 to 6.35 for implementation participants. Classroom Management (CM) mean subscale scores increased from 7.12 to 7.20 for pilot teachers and decreased from 7.03 to 6.90 implementation teachers. The pilot participants' Instructional Practices (IP) mean subscale scores increased from 6.98 to 7.42, while implementation participants' mean IP subscale scores decreased from 7.43 to 7.26. It was hypothesized that the

implementation teachers' subscales would increase – particularly after the pilot teachers' subscale scores increased, yet the implementation teachers' scores decreased for all three subscales. Discussion regarding these findings can be found in Chapter V.

Difference Scores. Overall, the pilot sample experienced positive TSES subscale difference scores (i.e., posttest minus pretest) while the implementation sample experienced decreased TSES subscale difference scores. Mean SE subscale change scores were .099 for pilot participants and -.555 for implementation participants. Pilot participants also experienced increased CM (.045) and IP (.398) mean subscale score differences, while implementation participants experienced decreased CM (-.074) and IP (-.059) mean subscale score differences. Again, this decrease in implementation teachers' TE (as measured by the TSES subscales) over the course of the year was surprising and ran contrary to the hypothesis that their TE would increase over the course of the year.

Table 4.3 contains descriptive data from the pretest and posttest TSES subscales for both the pilot and implementation participants. As well, it summarizes study participants' mean TE change according to the three subscales.

Table 4.3 Mean Pretest and Posttest TSES Subscales and Difference Scores

Testing Times		N	Min.	Max.	M	SD	SEM
Student Engagement							
Pilot							
	Pretest	47	4.38	9.00	6.57	1.05	
	Posttest	43	4.00	8.88	6.65	1.14	
	Difference Score	34			.099		.163
Implementation							
	Pretest	46	4.38	9.00	6.98	1.13	
	Posttest	38	4.25	8.88	6.35	1.18	
	Difference Score	34			-.555		.163

Table 4.3 is continued on page 72.

Table 4.3 Mean Pretest and Posttest TSES Subscales and Difference Scores (continued)

Testing Times		N	Min.	Max.	M	SD	SEM
Classroom Management							
Pilot							
	Pretest	47	3.44	9.00	7.11	1.12	
	Posttest	43	4.5	9.00	7.20	1.00	
	Difference Score	34			.045		.170
Implementation							
	Pretest	46	4.13	9.00	7.03	1.19	
	Posttest	38	4.25	9.00	6.90	1.15	
	Difference Score	34			-.074		.201
Instructional Practices							
Pilot							
	Pretest	46	5.13	9.00	6.98	.99	
	Posttest	43	5.75	9.00	7.42	.77	
	Difference Score	34			.398		.168
Implementation							
	Pretest	46	4.88	9.00	7.43	1.01	
	Posttest	38	5.00	9.00	7.26	.95	
	Difference Score	34			-.059		.167

Analysis of TSES difference scores between pilot and implementation years and between schools

There were two areas of significance between 1) pilot and implementation years ($F(1, 66) = 8.08$, $p = .006$ for the SE subscale) and 2) between schools ($F(3, 30) = 5.66$, $p = .003$ for the SE subscale). These areas of significance, as well as amount and direction (i.e., positive or negative) of change are illustrated in Figure 4.1 and are discussed in more detail below.

Figure 4.1 Student Engagement Areas of Significance

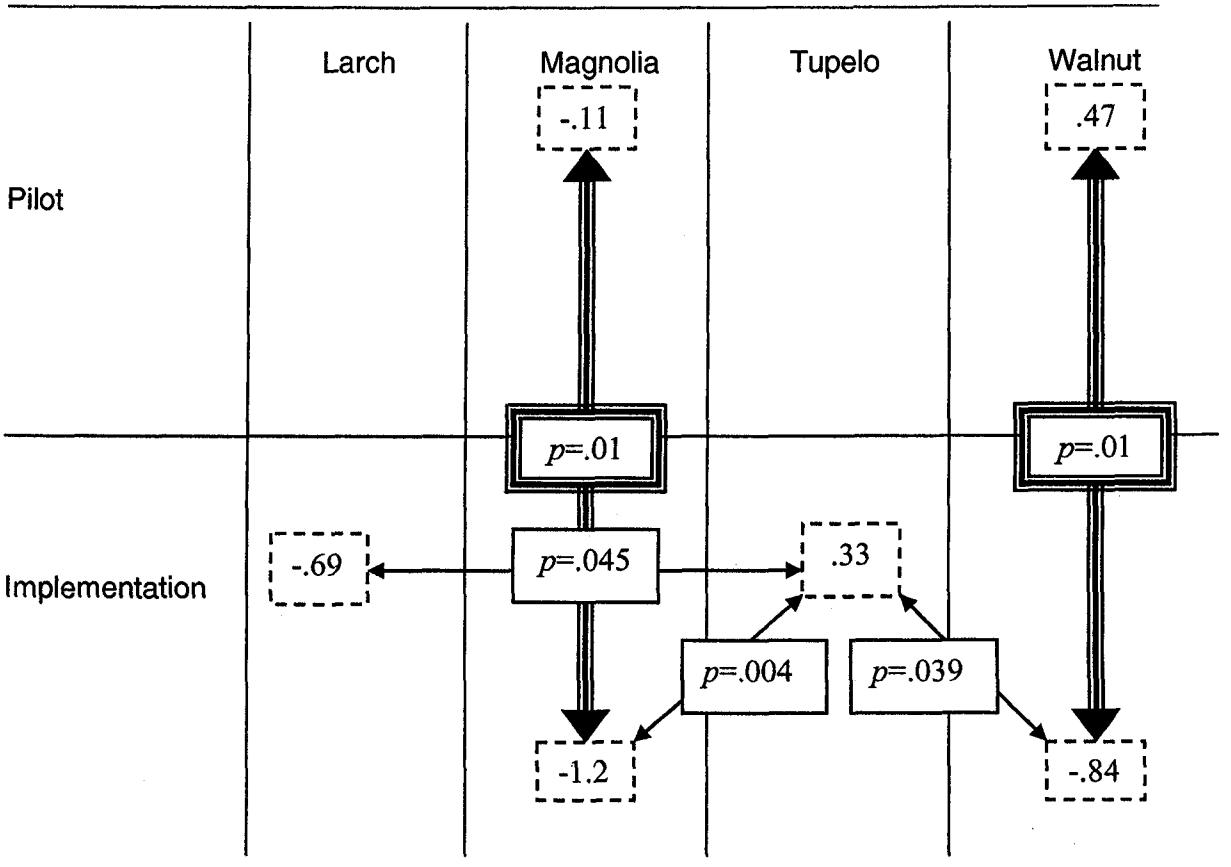


Figure 4.1. Mean Student Engagement subscale changes are indicated in the small, dash-line text boxes. Significant Bonferroni post hoc *p* scores (i.e., values smaller than the .05 level) are indicated in triple-line boxes for differences between pilot and implementation teachers within schools and in single-line boxes for differences between schools for implementation teachers.

Between pilot and implementation years TSES analysis. Employing a split-file (i.e., split via school) independent-sample *t*-test with pilot/implementation as the grouping variable, pilot and implementation participants' mean CM subscale change scores were not significantly different ($F(1, 66) = .204$, $p = .653$) with power of .073 and Cohen's *d* equaling 0.11 (an extremely small effect size). Pilot and implementation teachers' differences approached significance for the IP subscale ($F(1, 65) = 3.77$, $p = .057$) with power of .48 and Cohen's *d* equaling 0.056 (i.e., no effect). Their differences in the SE subscale were found to be significantly different ($F(1, 66) = 8.08$, $p = .006$) with power of .8 and effect size of Cohen's *d* equaling 0.7 (a medium to large effect size).

Magnolia's pilot teachers' mean SE subscale decreased (-.11) and implementation teachers' mean SE subscale decreased (-1.2). Wilson's pilot teachers' mean SE subscale increased (.46), while the implementation teachers' mean SE subscale decreased (-.84). Both Magnolia ($F(1, 10) = 8.54$, $p = .02$) with power of 0.084 and Cohen's d equaling 1.73 and Walnut ($F(1, 15) = 7$, $p = .01$) with power of 0.35 and Cohen's d equaling 1.39 revealed significant differences between their pilot and implementation teachers' mean SE subscale change scores. It was hypothesized that significant differences between pilot and implementation teachers would be due to a greater increase in implementation teachers' TSES subscale scores. However, it was the extreme decreases in both Magnolia's and Walnut's SE subscales during the implementation year that caused significance. Informing/corroborating data provided insight into these findings, which are discussed in Chapter V. Table 4.4 provides data regarding changes in both pilot and implementation teachers' TSES subscales.

Table 4.4 Pilot and Implementation Schools Mean Difference Scores

Teacher Efficacy Change	Sig.	N	M	SEM
Student Engagement				
Pilot	.247			
Implementation	.003			
Larch				
Pilot		12	-.276	.324
Implementation		11	-.693	.258
Magnolia				
Pilot		5	-.113	.264
Implementation		7	-1.2	.25
Tupelo				
Pilot		7	.370	.324
Implementation		9	.333	.191
Walnut				
Pilot		10	.465	.263
Implementation		7	-.839	.391

Table 4.4 is continued on page 75.

Table 4.4 Pilot and Implementation Schools Mean Difference Scores (continued)

Teacher Efficacy Change	Sig.	N	M	SEM
Classroom Management				
Pilot	.352			
Implementation	.053			
Larch				
Pilot		12	-.270	.251
Implementation		11	.04	.332
Magnolia				
Pilot		5	-.252	.091
Implementation		7	-.482	.319
Tupelo				
Pilot		7	.411	.406
Implementation		9	.674	.252
Walnut				
Pilot		10	.317	.392
Implementation		7	-.804	.579
Instructional Practices				
Pilot	.930			
Implementation	.120			
Larch				
Pilot		12	.295	.29
Implementation		11	-.209	.29
Magnolia				
Pilot		4	.281	.272
Implementation		7	-.518	.308
Tupelo				
Pilot		7	.589	.228
Implementation		9	.563	.315
Walnut				
Pilot		10	.434	.413
Implementation		7	-.161	.333

Between school TSES analysis. The amount of teachers' efficacy (TE) change also varied between schools. Both the pilot and the implementation teachers at Tupelo Middle School experienced positive gains in all three mean TSES subscales (varying between .33 and .67), while pilot and implementation teachers at the other three

participating schools all experienced both a much smaller degree of positive or negative mean TE change scores in their subscales. Magnolia's teachers experienced negative changes in the mean scores for all their TSES subscales except the pilot teachers' IP subscale (.28); their mean negative change scores ranged from -.11 for pilot teachers' SE subscale to -1.2 for implementation teachers' SE subscales. The only observed positive mean changes in pilot and implementation teachers' subscales at Larch Middle School was for implementation teachers' CM subscale (.04) and pilot teachers' IP subscale (.3); the greatest mean decrease was experienced by implementation teachers in their SE subscale (-.7). Walnut Middle School's pilot teachers experienced mean positive changes in all TSES subscale scores, while the opposite was true for the implementation teachers; they experienced mean decreases in all of the TSES subscale change scores.

Employing a factor split-file (i.e., by year) one-way ANOVA school was a statistically significant factor in SE subscale change ($F(3, 30) = 5.66$, $p = .003$) with power of 0.92 and Cohen's d equaling 1.41 for Larch and Tupelo, 2.47 for Magnolia and Tupelo, and 1.40 for Walnut and Tupelo, all of which are large effect sizes. Based on a hypothesis derived from anecdotal evidence during the pilot year (e.g., RESPECT consultants reported that some schools seemed to be embracing RESPECT more than other schools), it was expected that Tupelo's teachers would show the greatest mean positive TSES subscale changes.

Regarding Tupelo's teachers' SE subscale change, implementation teachers experienced a mean positive change (.333), while Larch (-.693), Magnolia (-1.2), and Walnut (-.839) all experienced mean negative changes in their SE subscale scores. A Bonferroni post hoc test revealed Tupelo was significantly different than Larch ($p = .045$), Magnolia ($p = .004$), and Walnut ($p = .039$) at the .05 level. School was not a significant factor in the TSES subscale change scores during the pilot year. Possible reasons for

these findings are discussed in Chapter V. Table 4.4 details mean changes for each school for both the pilot and the implementation years. As well, it provides *p*-values for the subscales for each sample.

Analysis of the following demographic factors' influence on teachers' efficacy change: age, race, gender, number of years of teaching experience, months of student teaching experience, and level of job satisfaction

None of the following factors correlated significantly with the TSES subscale change scores: age, race, gender, number of years of teaching experience, and job satisfaction. These analyses can be found in Appendix J. While implementation teachers' months of student teaching did show a negative correlation with the CM subscale (-.406, $p = .05$), the data was unreliable. For example, several teachers reported many years of student teaching experience (e.g., seven years) because they had served as paraprofessionals or substitutes. While this undoubtedly gave them much experience, it does not align with the usual perception of student teaching (i.e., teaching under the close supervision of an experienced teacher, while earning a degree).

Pilot and Implementation Interview Participants' Demographic Information

Pilot Year

Nine study participants granted interviews during the pilot year. They were asked to participate because they completed the pretest TSES. Three men and six women participated. Their ages range from 26 to 45. Five participants, the majority, taught at Tupelo Middle School, three taught at Magnolia Middle School, and one taught at Larch Middle School. Prior to participating in PA's RESPECT Program, five teachers reported being "fairy satisfied" with their job and four people reported being "satisfied." Also prior to the RESPECT Training, one person reported being only "a little invested" in the RESPECT Program, three teachers reported being "neutral," two reported being "fairly invested," and three were "fully invested."

During the implementation year of research, eight study participants granted interviews from three schools. There were three teachers each from Larch and Tupelo and two teachers from Magnolia who participated in their interview portion of the study. Their ages ranged from 22 to 62 years-old. Two of the men chose "Tom" to be their pseudonyms, so one is labeled "Tom2." There were equal number of novice and experienced teachers, who earned their teaching certificates through graduate, 4-year, 5-year, and alternate certification programs. Their student teaching experience ranged from none to 8 months (or one school year). Six teachers rated their job satisfaction as "satisfied" and two rated it as "fairly satisfied." Prior to their first training, one teacher reported being "neutral" about participating in the RESPECT Program, three reported being "fairly" invested and four reported being "fully invested." Table 4.5 summarizes the demographic data from both the pilot and implementation interview participants, with pilot participants being displayed in the top portion of the table.

Table 4.5 Pilot and Implementation Interview Participants' Demographics

Pseudonym[1]	Harley	Bob	Lisa	Monique	Papaya	Preacher	Reed	Renee	Fishdaz
Age	30	27	45	42	26	32	28	45	DNA[2]
Yrs. Teach.[3]	1	1	10	10	2	2	6	24	15
Months Stud. Teach.	0	3	2	DNA	0	0	27	16	9
Gender	M	M	F	F	F	M	F	F	F
Education	4-year	Alt. Cert.	Grad.	Alt. Cert.	4-year	Other	4-year/Grad.	4-year	5-year
School	Magnolia	Tupelo	Larch	Tupelo	Tupelo	Magnolia	Tupelo	Magnolia	Tupelo

Pseudonym	Tom2	Jessica	Angelica	Dominique	Sadie	Mr. P.	McKenna	Tom
Age	27	22	41	62	34	48	28	39
Yrs. Teach.	3	1	10	27	12	10	3	1
Months Stud. Teach.	0	8	8	2	5	DNA	6	8
Gender	M	F	F	F	F	M	F	M
Education	Grad.	4-year	Grad.	Grad.	4-year	5-year	Alt. Cert.	Grad.
School	Tupelo	Tupelo	Tupelo	Larch	Larch	Larch	Magnolia	Magnolia

[1] Note: Each interview participant chose their own pseudonym.

[2] DNA stands for did not answer.

[3] The number recorded represents the current year of teaching. For example, Harley and Bob were in their first year of teaching.

Analysis of Informing / Corroborating Data

This section discusses the findings of the interview[12] and teacher questionnaire[13] data analysis as it pertains to the findings of the TSES subscale changes for both the pilot and implementation teachers. Each research question is restated prior to associated discussions.

Analysis of interviews data in regard to the elucidation of TSES subscale findings

Teachers' SE subscale changes increased for pilot teachers (.099) and decreased for implementation teachers (-.542) and this difference was significant, $F(1,66) = 8.08$, $p = .006$. When asked if they were doing anything different in regard to student engagement during the 2005-2006 school year, pilot teachers gave examples of employing props/cues and keeping close tabs on their students. Harley said, "the kids love to see any objects you can bring in that relate to the [math] problems. You know, there was a lesson on brownies last week so I had my...[14]my wife baked two pans of brownies for the kids." Monique said she was employing more props or "weird things" with which the students were unfamiliar, so as to get their attention. She used the example of showing her blood donor as a prop when she was teaching about blood: "I even just took out my blood donor card one day to show them what it looked like because we were talking about blood types. And it just makes it a little more real." Papaya said she likes to employ hands-on lessons as much as possible as a means to get the students excited about the subject. Lisa used the example of engaging her students with reading by using picture books and having them create their own books: "they like picture books and actually creating their own picture books about themselves

[12] Not all teachers were able to answer all of the interview questions due to time constraints.

[13] Not all teachers who completed the pretest and posttest TSES completed any or all of the five teacher questionnaires.

[14] "..." indicates omission of verbal clutter (e.g., like, umm, you know).

and their memoirs. That's more engaging for them...they make a more personal connection."

Lisa and Reed said they kept close tabs on students as a means to ensure focus and understanding. When students lost focus, the teachers immediately got their attention and got them back on track, generally by calling their names and redirecting them. Lisa said,

> I am able to grab every student...if they're...doing something they're not supposed to be doing...while we're reading. I am able...[to] get them back on track because I see everything that's going on...calling their name and just re-grouping them...to help them re-focus on what they're supposed to be doing.

Reed articulated what helped was, "...actually going and talking to them...confirming that they understand and trying to get students to participate...get them involved." Both teachers were very proactive in maintaining their students' engagement. These findings suggest that SE for the pilot teachers incorporated both behavior management and inventive pedagogical practices.

The primary focus of the implementation teachers' differing student engagement strategies for the 2006-2007 school year was emphasis on incentives. During the pilot year, Tupelo Middle School implemented an incentive system for good behavior and social and academic achievement, which may have contributed to Tupelo's pilot and implementation teachers' increased SE subscale. For example, students who earned a certain amount of points were invited to attend a pizza party. Seeing positive student change prompted PA consultants to encourage teachers to implement school- or grade-wide incentive systems during the 2006-2007 implementation year. According to interview participants, this proved a successful strategy for positive student engagement during the implementation year, as interview participants from all schools[15] gave examples of their incentive initiatives. While all three schools had grade-wide incentive

[15] Wilson Middle School is not included in this discussion, as no Wilson teachers participated in the interviews; it is unknown whether or to what degree Wilson employs an incentive system.

systems, some teachers also provided mini incentives in their classrooms. Mr. P. rewarded students with pairs of movie tickets for extended good behavior. School-wide incentive system rewards included a trip to an amusement park at the end of the year, being allowed to go to a nearby store during lunch, pizza parties, baking them cookies, et cetera. Only students who earned a set amount of points could partake of the rewards. Though incentive systems were highlighted by implementation teachers, they did offer other examples of differing student engagement strategies.

Examples of other means of engaging students included using the students' names when telling stories or on exams, employing group work and cooperative learning, modeling desired behavior (e.g., being calm), and continually telling students they can achieve. Jessica said student engagement is intricately linked to instructional practices; she cited using her science kits which have a hands-on activity for very class. Tom2 had an "accountable talk" every class. He hung signs on the wall to use as prompts (e.g., offering a suggestion, disagreeing, asking for clarification, soliciting a response). Each prompt had examples of acceptable means of action. He used these prompts proactively and as tools for reflection. Implementation teachers' seeming confidence in their abilities to engage students did not align with their considerable drop in the TSES SE subscale (-.542). As such, it is important to note the incentive systems were solely implemented to reform severely distracting behavior. This, however, does not allow insight into why pilot teachers' mean SE subscale change score was positive and why implementation teachers' mean SE subscale change score was negative.

Some insight can be gained regarding Tupelo's implementation teachers significant rise in mean SE subscale change when compared to the other school's implementation teachers. For example, one of the TSES items was "How much can you do to get through to the most difficult students?" Jessica said, "the developmental / social-emotional is why I got into teaching." She went on to explain that once students

become comfortable with other students and the teachers, the content and risk taking is something they are much more willing to accept. Her goal was to continue to work with kids who have lost their direction. Tom2 said his job as a teacher entails being a mentor, disciplinarian, instructor, counselor, and police officer in addition to teaching the content; his view of supporting students is vast. Conversely, Tom said, "some kids can't be controlled" and he explained that sometimes teachers can listen and help and sometimes they cannot. By making such statements, Tom exemplified his low SE subscale efficacy. McKenna said some of the RESPECT curriculum was "just not possible with this population." She continued to explain that students who get expelled from other schools in the city go to Magnolia, resulting in students streaming into the school throughout the year. Each time a new student entered the school, the dynamic changed. McKenna said that the expelled students' bad behaviors influenced the "good" students. This undoubtedly was challenging for both the students and the teachers and may have been reflected in Magnolia's negative SE subscale change score.

Dominique's and Sadie's answer to the following TSES item likely contributed to their negative SE subscale change score: "How much can you do to assist families in helping their children do well in school?" Dominique explained her increasing need to call home when students did not complete their homework. The phone calls sometimes worked, but more often than not, things either remained the same or students' performances declined. Sadie surmised that students' lack of structure and not being "used to following rules and directions" at home challenged the students' performance at school. A story Sadie shared exemplified why teachers at Larch and Magnolia may not have reported high scores when answering the above question. The night before interviews were conducted, a young boy was stabbed to death. One of the victim's best friends attended Larch and his brother and cousin attended Magnolia. Of the students

who did attend school the next day, none of them were able to concentrate on school and they were being disruptive.

Implementation teachers' CM mean subscale change score was also negative (-.068), while pilot teachers' mean CM subscale score was positive (.045). Consistency and consequences were highlights of pilot teachers' interview answers when asked if they were doing anything different during the 2005-2006 school year regarding classroom management strategies. Teachers created routines and had clear expectations to maintain consistency. Examples included employing the RESPECT Program's five Full-Value Concepts to establishing morning routines to being explicit about consequences. Harley gave a specific example of the students' morning routine, and then reflected on its effectiveness:

> So I think I've done better establishing that routine...So there's nothing amazing about that, but it's um, you know, it's consistent, so at least the class starts off on the right foot...And there's been an improvement, definitely, from last year...in classroom management, in how the classes are running, there's been an improvement.

Harley attributed the positive changes to his actions, in essence exemplifying increased teacher efficacy in relation to classroom management.

Preacher spoke about the consistency of his words and actions in regard to both positive and negative consequences. He explained that he was only part time the previous year and had become full time the year the research was conducted. He was the security guard who greeted the students every morning and who patted down all the young men as a means to prevent drugs and weapons from entering the school. He linked the students' seeing him every morning, the clarity of expectations, and consistency in follow-through to students' sense of safety. He surmised this increased sense of safety resulted in less behavioral and classroom management issues.

Tupelo added RESPECT's five Full-Value Concepts to a form students were required to complete as a reflective exercise for disciplinary issues. Students were

expected to identify which of the five full-value concepts they violated. Monique said, "...every kid can tell you those concepts. And knows the hand signals[16]...so I think just having that also helps." Bob did not take credit for improved classroom management, but rather shared a peer's effective initiative with the form. He did, however, say that having the five full-value concept helped.

Conversely, Lisa identified lack of consistency with the five Full Value Concepts as being ineffective to classroom management. She said there was lack of consistency with teachers throughout the school; she said she tried to follow the RESPECT curriculum at the beginning of the year, but it was too hard when she felt like she was the only one doing it.

Comments about consequences encompassed both rewards and punishments, as well as the immediacy of implementing them. Papaya and Reed from Tupelo identified the importance and great success of implementing a rewards program (i.e., positive consequences) for good behavior. Papaya explained the system:

> we have these blue tickets because we had a lot of behavior issues. So, what the 6th-grade has come up with...is...we see students doing a nice job on their homework, or being responsible, we give them a blue ticket and they have to get 25 blue ticket to go to a party...it's been working...you know, some kids are still doing the same thing, but, umm, what I like about it is that...because we so many times we focus on the negative behavior that we're not praising the students who do, umm, a nice job. So, what this is doing is helping me, you know, focus on those students who are doing an excellent job. And they're getting rewarded. Because sometimes they just fall through the cracks because the other behavior just takes over...So, you know, it's boosting them up so that they don't...fall through the cracks, or go along with what everyone else is doing.

Like the pilot teachers, the implementation teachers also associated incentive systems with classroom management.

At Larch during the implementation year, RESPECT Rubric Level 1 students had no hallway privileges, such as using the bathroom during class. Level 2 students could

[16] Each of the five full-value concepts had an accompanying hand gesture, so as to help kinesthetic, auditory, and visual learners grasp the concepts.

have an assistant escort them to the bathroom during class. Level 3 students were allowed a hallway pass, and Level 4 students were rewarded with a hallway pass and homemade cookies. Tom2 encouraged good behavior in his classroom with his "RESPECT rocks" program. During each class, students had the opportunity to earn one rock to add to their jar. When students earned a Level 3 or Level 4 according to the RESPECT Rubric, they were rewarded with a rock. When the students' jar was full, the Tom2 gave them a pizza party. He said his system helped with significant social-emotional and behavioral issues.

It is important to note that while only Tom specifically cited employing the RESPECT language as something new he was doing regarding classroom management, the language is integral to all of the incentive systems at the schools. Because the points awarded in the incentive systems are based on the RESPECT Rubric, both students and teachers refer to the Rubric (and hence RESPECT language) when points are awarded – to justify why points were or were not awarded. Further, teachers gave examples of helping students maintain focus in class (and achieve high RESPECT Rubric levels) by employing RESPECT Full Vale Concepts, such as "be here." If something happened that was highly distracting to students, some teachers called a Quick Class to help students problem solve as a means to "let go and move on."

While the incentive system seemed to be a consistent initiative to help with CM, several teachers commented on the need to be flexible. Referring to the at-risk student population, Sadie said, "I change it up a lot" because "you have to be super flexible in this environment." Mr. P. said, "I react different ways in different situations." He also said he must be flexible. One school omitted detentions after school, which made giving consequences much more difficult. While Angelica said the incentives helped, another was still trying to find a system that worked.

Again, behavior was the issue underlying most of what implementation teachers discussed. Tom was blunt and said, "Some kids just can't be controlled." Dominique said she made more telephone calls to parents due to bad behavior and poor or absent academic work; she was in her 27th year of teaching, so her comment was made with perspective. This may be a contributing factor to why implementation teachers experienced a negative change in the CM subscale (-.068). However, teachers during the pilot year were also faced with behavioral issues, yet they experienced an increase in the CM subscale (.045).

Teachers during the pilot year experienced a mean positive gain in the IP subscale (.398), yet nothing in the interviews revealed trends among teachers besides the fact that they all tried new things. Examples of their newly-adopted instructional practices follow:

- organized small group work, individual work, and whole-class activities;
- used grading rubrics;
- employed wait time (i.e., waiting 30-45 seconds after asking a student a question before looking to another student for an answer);
- allowed the students more intellectual independence;
- employed more hands-on activities; and
- provided visual cues (i.e., vocabulary words) on the classroom walls and modeled questioning and summarizing when reading.

These examples provide insight into the pilot teachers' mean increased IP subscale change score; high teacher efficacy has been associated with experimentation with new and/or different instructional methods (Guskey, 1988; Smylie, 1998; Sparks, 1998). What is unclear is if the pilot teachers tried new strategies because they had high IP subscale efficacy, or if their IP subscale efficacy rose due to success with new strategies.

Implementation teachers experienced a mean drop in their IP subscale score (-.03). Besides the continuing issue of working with at-risk students, interviews with implementation teachers did not shed insight into why they experienced a negative change score. Sadie simply said "No" when asked if she did anything new regarding IP during the 2006-2007 year. With the exception of McKenna and Mr. P. stating the use of the RESPECT Full Value Concepts during classes, teachers provided an array of examples of their instructional practices, including the following:

- used technology and hands-on activities because middle school students struggle with abstract concepts;
- changed language with math curriculum, so it was less confusing for the students;
- leaned on question formation and facilitation prowess;
- provided more responsibility to students by facilitating via independent learning and cooperative learning, which were rarely successful strategies;
- guided students step-by-step through science experiments because they need "scaffolding" for their ideas; and
- addressed multi-sensory (e.g., hands-on and visual) needs of diverse learners.

None of the teachers referred to using the RESPECT activities provided to them in their RESPECT resource packet. This may be due to the lack of modeling such activities by RESPECT consultants during the implementation year.

Analysis of interview data regarding the elucidation of both strengths and areas for growth of the RESPECT Program curricula and methods of implementation

Strengths. No matter to what degree pilot interview participants employed the Full Value Concepts (i.e., on a spectrum from "not at all" to "consistently"), all of them found merit in them. Some teachers said the concepts were the most valuable

component of the RESPECT program and others witnessed changes in their students as a result of having them as behavioral guidelines. The following quotes exemplify this enthusiasm toward the Full Value Concepts:

- "I think it's great to have the five concepts that, you know, sort of school-wide that all of the kids can refer to and they all know" (Papaya).
- "I do like having the RESPECT model, especially the five Full Value Concepts because the students [snaps], they understand them. And they're simple enough and quick enough for them to, you know, they know what's right and wrong" (Renee).
- "...we tried to integrate it as much as possible and truthfully it has been working with the kids, I believe, with a lot less swearing, a lot less disrespect going on this year than there was last year. Last year it was rampant" (Reed).

The last quotation again elucidates the struggles teachers have with students' poor behavior.

Of the two people who referred to the Quick Class, Lisa identified observing an effective one led by a RESPECT consultant and Monique simply reported hearing that peers said the Quick Classes worked. While RESPECT consultants modeled Quick Classes for teachers in their classrooms during the pilot year, it was not modeled during the implementation year.

Other comments about the effective aspects of the RESPECT program included praising RESPECT consultants, commenting on the benefit of activities, and appreciating the ideology.

Interview data from the implementation teachers offered more insight and specific aspects of the RESEPCT Program they found effective. Several teachers praised the incentive systems. Something teachers were encouraged to do during the implementation year was to have students set weekly goals (as opposed to semester-

long) goals, so they were in the forefront of students' and teachers' minds. This strategy proved effective for teachers and they cited it as a strength of the RESPECT Program. McKenna hung the students' goals on the wall with boxes beside each one, so students could 1) see them everyday, and 2) check the box once their goal was achieved. Tupelo implemented RESPECT time every Friday; some of the teachers used that time to either set goals or reflect on goals. Jessica had students write their goals in a special notebook; sometimes students wrote a reflection of their progress with their goals and sometimes they traded notebooks with a peer and had conversations about their goals and their progress.

Most of the teachers praised one or all of the following aspects of the RESPECT Program: it is a good idea/ideology overall and a good idea for at-risk students; it helps teachers and students have a unified approach to things (e.g., increased communication); and it provides a common language (e.g., Full Value Concepts) and common expectations (e.g., RESPECT Rubric).

Areas for Growth. During the pilot year, interview participants commented on lack of consistency/buy-in, time constraints, classroom logistics, processing, and the Quick Class. The greatest concerns interview participants had with PA and/or the RESPECT program were time constraints and lack of consistency/buy-in. Many of the teachers felt the RESPECT program was an add-on to their extensive lists of responsibilities (e.g., Bob said, "I have not had the time to do as much as I would want to do with the activities." "...with everything else going on, it's hard to find time"). Reed articulated the intersection of lack of consistency with time constraints explaining that there were so many demands placed on teachers that it was hard to find the time to invest in the RESPECT Program and there was therefore a lack of consistent implementation both in classrooms and school-wide. Another observation/critique made by nearly all of the teachers is that a lack of consistency/buy-in prevented them from fully

realizing the potential of the RESPECT program. While some took responsibility for their own lack of follow-through after the initial curriculum implementation in September, others said their colleagues were not being consistent with the curriculum, which made it too challenging for them.

Comments regarding classroom logistics focused on the actual space of the classroom. Fishdaz, Monique, and Harley commented that facilitating activities was difficult simply due to a lack of classroom space. Monique reported, "one specific thing that teachers have commented about...it is good to do physical things...and this is an easier room because I am set up for science and groups. But, in a traditional room, sometimes it's hard to do those circles and the physical part of it." Lisa andHarley found the Quick Classes to be difficult to facilitate and, ironically, too long. Monique commented on processing being too "touchy-feely" and Papaya said, "The activities have been good, but the kids don't always make the connection." Some teachers wanted to see the RESPECT consultants more and have them provide more activities.

Time constraints were also a critique of the implementation teachers. In most schools, RESPECT is not the only non-academic initiative. Sadie said, "I can barely get through the [academic] curriculum" and another explained that she often falls behind with her curriculum due to behavioral issues. Mr. P. offered the suggestion – and perhaps a plea for help – of helping teachers implement RESPECT into lesson plans and curriculum. He showed an example of a chapter overview worksheet that had a step that instructed "Explain what you learned from this unit. Be honest." The final comment on the page was "Let's move on."

A few teachers felt their students were becoming immune to the RESPECT language and/or knowing the language but not internalizing or understanding it. Jessica suggested employing *Conflict Resolution in Middle School* by William Kreidler which offers activities to help students gain the language and practice of coping with conflicts in

their lives. McKenna and Tom liked the idea of the RESPECT activities but said they were not appropriate for their population of students (i.e., at-risk). McKenna explained that some of the activities necessitated a level of vulnerability, saying the games "give way to some kind of vulnerability and they just don't want that at all." Tom went so far as to say she gave up on RESPECT in January because it was "just not possible" with the population.

Tom2 and Dominique did not use the Quick Class due to time constraints, lack of classroom space and/or because the students did not buy into it. Jessica critiqued their colleagues for not practicing the RESPECT ideology they were asking their students to practice. An example of this included not showing up for responsibilities (i.e., violating the "be here" Full Value Concept).

Suggestions derived from ineffective aspects of the program and how it was introduced to the teachers included the following:

- Offering suggestions for both positive and negative consequences, including non-food incentives and non-disruptive rewards
- Holding the first training for all teachers in August, so:
    - newly hired teachers can experience the training with the returning teachers
    - returning teachers do not have to sacrifice their time at the end of the year when they usually address their responsibilities and cleaning their classroom
    - the RESPECT Program would be fresh in their heads just as school begins, rather than having the summer to forget it.
- Explaining the history and intent/goal of the RESPECT Program's pairing with the middle schools, as well as an overview of the program.

While it may be too late to implement some of these suggestions, they provide important feedback for future implementations with schools.

Analysis of implementation teachers' questionnaires regarding RESPECT Program fidelity. Teacher questionnaires were only administered to the implementation teachers. The teacher questionnaire revealed differing levels of fidelity that might best be described as teachers implementing parts of the program with some effort. None of the schools' teachers' consistently raised their fidelity levels on any questionnaire item throughout the five waves of reporting. Primarily, teacher questionnaires revealed oscillating levels of teachers' fidelity to the RESPECT Program. This section entails number of respondents from each school for each data collection wave and bar charts of mean fidelity scores for teacher questionnaire items for each school.

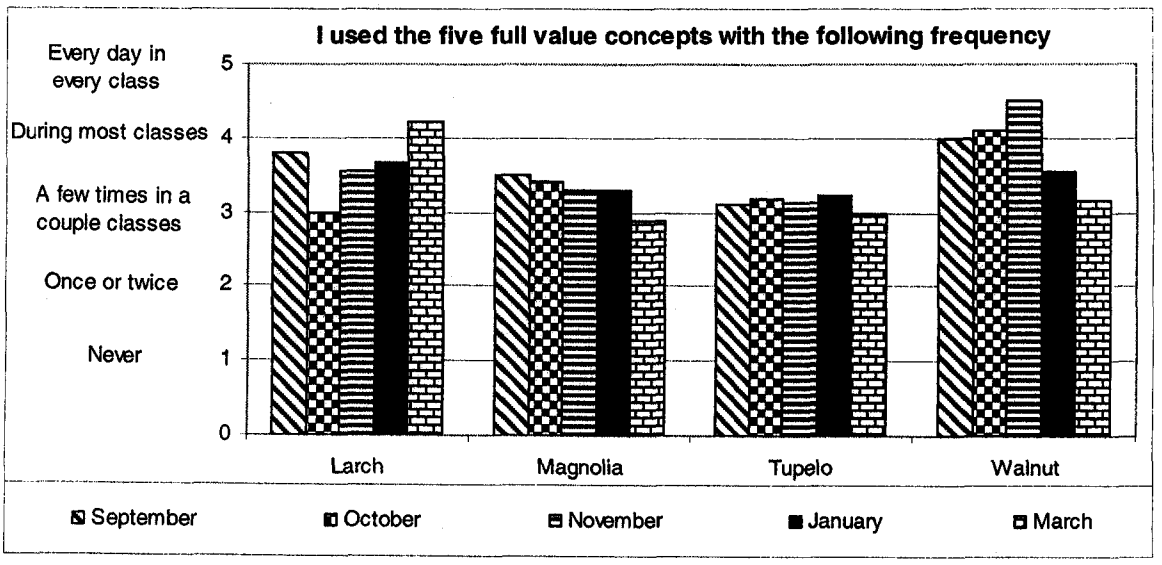
Walnut averaged the least number of respondents for each teacher questionnaire data collection wave (ranging from 3 to 10) and Tupelo had the most respondents (ranging from 13 to 30). It is important to note not all teachers responded to every item on every questionnaire. Table 4.6 reveals the respondent numbers from each school for each data collection wave.

Table 4.6 Number of teacher questionnaire respondents for each data collection wave

School	September	October	November	January	March
Larch	11	12	11	10	11
Magnolia	12	11	11	10	11
Tupelo	30	21	13	22	21
Walnut	3	10	6	9	6

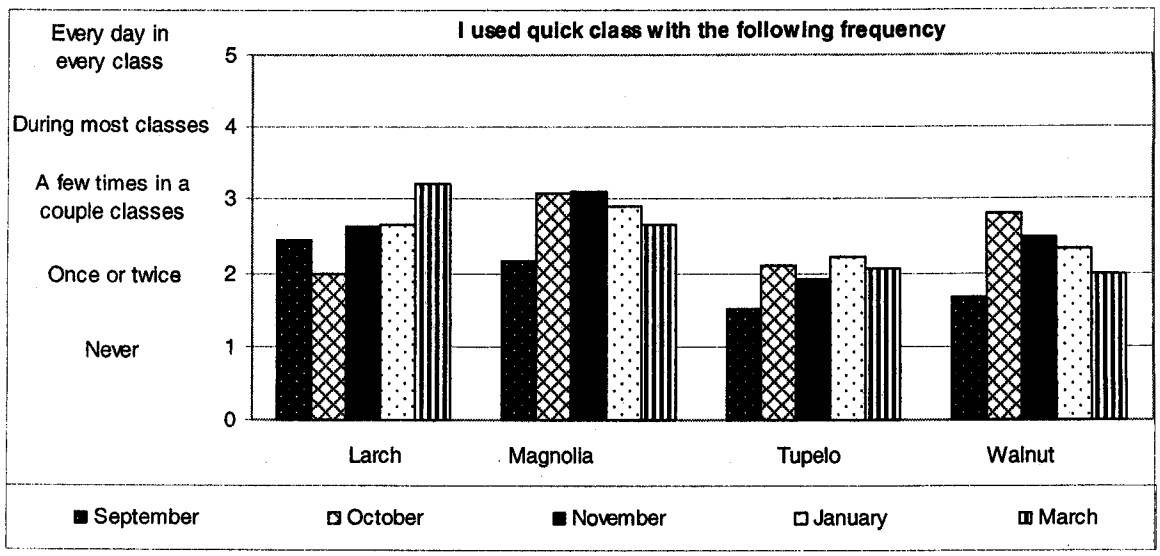
Tupelo's teachers reported the most consistent answers regarding use of the Full Value Concepts; their answers hovered around "a few times in a couple classes." Larch and Walnut reported the greatest range of use; Larch's teachers reported greater use in March than they did in September, while Walnut's reported use dropped from September to March. Magnolia's teachers reported a consistent decrease of Full Value Concepts use. On average, teachers used the Full Value Concepts more than once or twice (in one month), but less than every day in every class. Figure 4.2 depicts each schools' teachers' mean reporting regarding use of the Full Value Concepts.

Figure 4.2 Schools' Teachers' Mean Reporting Scores Regarding use of Full Value Concepts



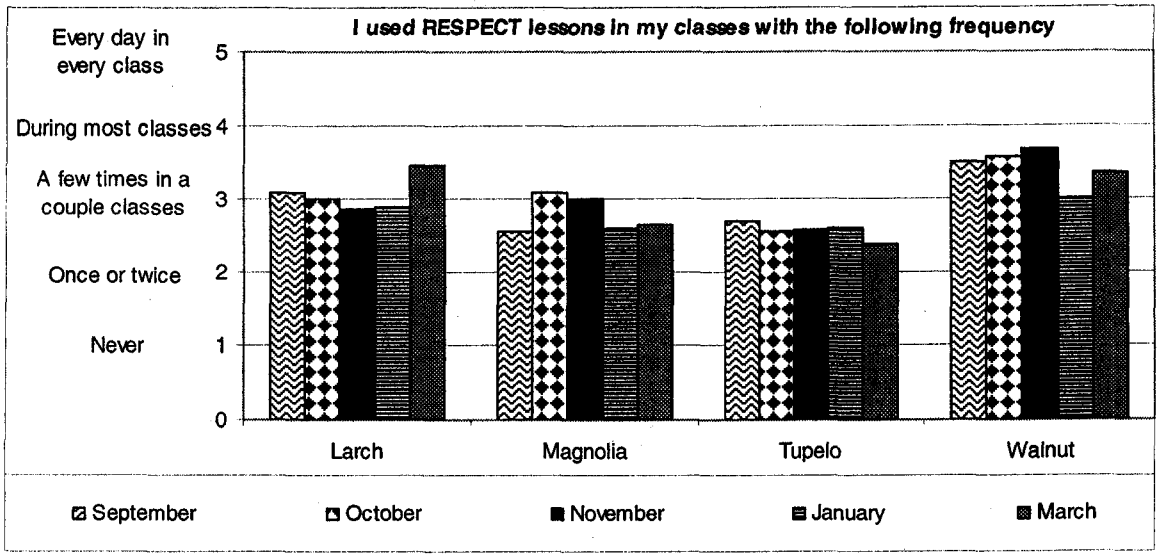
Teachers' use of the Quick Class was very low. On average, Tupelo's teachers reported using it the least and Magnolia's teachers reported using the Quick Class the most. Generally, teachers' mean reporting revealed they used the Quick Class between once and a few times in a couple of classes during the monthly to bi-monthly reporting periods. Figure 4.3 depicts each schools' teachers' mean reporting regarding their use of the Quick Class.

Figure 4.3 Schools' Teachers' Mean Reporting Regarding use of the Quick Class



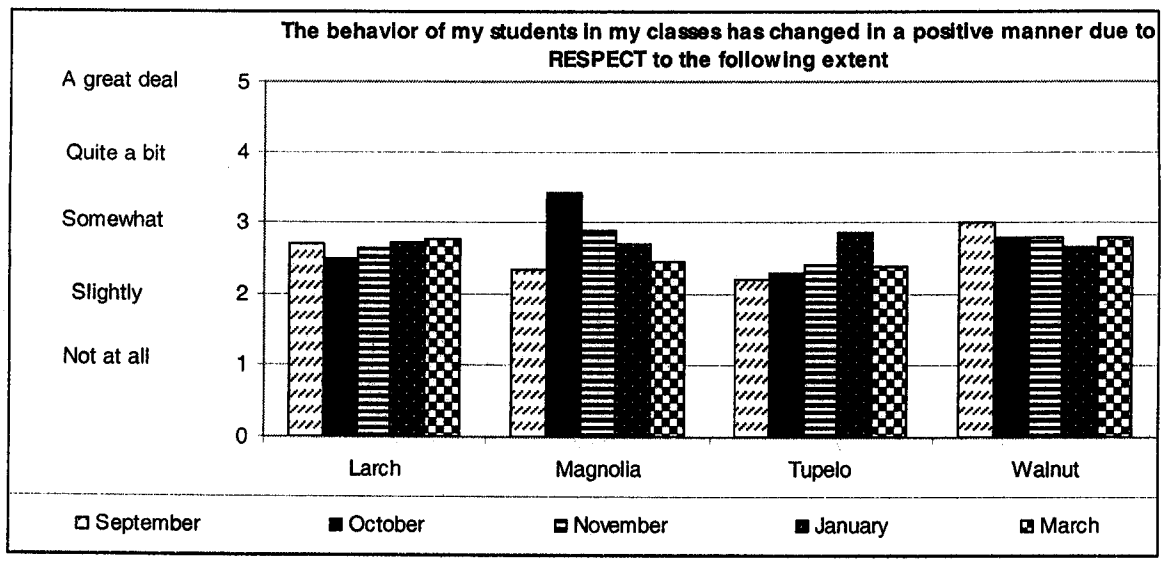
On average, teachers reported using RESPECT lessons in their classes more than they reported using the Quick Class; they reported using the lessons more than once or twice, yet less than during most classes. Walnut reporting using the RESPECT lessons the most. On average, Tupelo's teachers used RESPECT lessons the least and they also reported fairly consistent levels of use of the RESPECT lessons throughout the monthly and bi-monthly reporting times. Figure 4.4 depicts schools' teachers' mean reporting regarding their use of RESPECT lessons in their classes.

Figure 4.4 Schools' Teachers' Reporting Regarding use of RESPECT Lessons



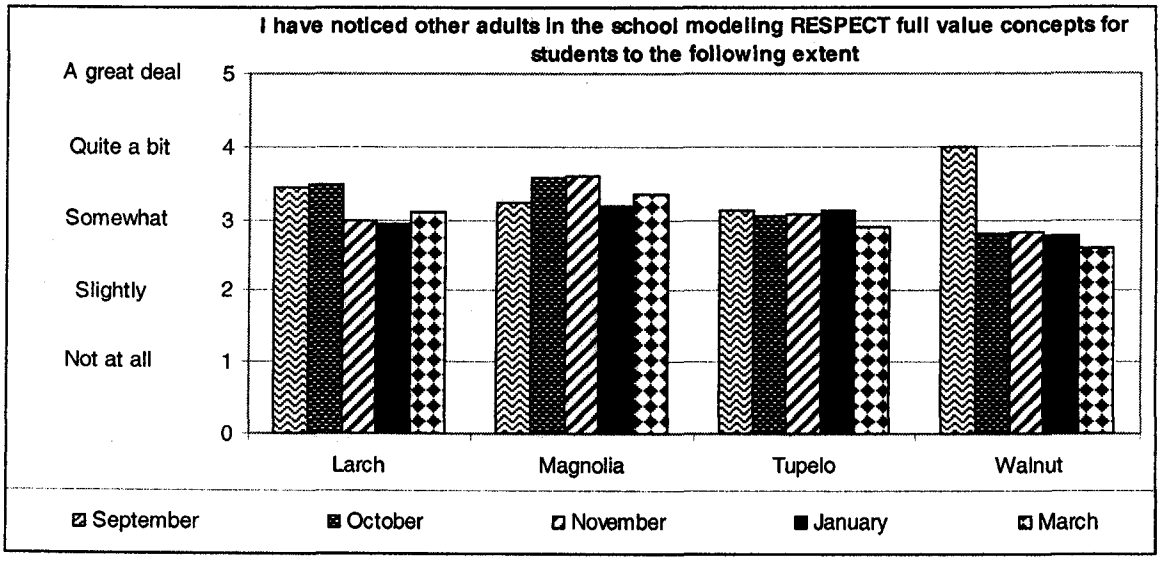
Only once during the five waves of data collection did a school's teachers report that their students' behavior had improved more than somewhat but less than quite a bit. Generally, teachers reported that their students' behavior had improved between slightly and somewhat. With the exception of the last data wave, Tupelo's teachers reported a small but steady increase in students' behavior. From the second to the fifth data wave, Larch's teachers reported steady increases in students' behavior. Magnolia's teachers reported a steady decrease for the final four data waves. Figure 4.5 depicts schools' teachers' reporting means regarding positive changes in their students' behavior.

Figure 4.5 Schools' Teachers' Mean Reporting Regarding Positive Student Behavior Changes



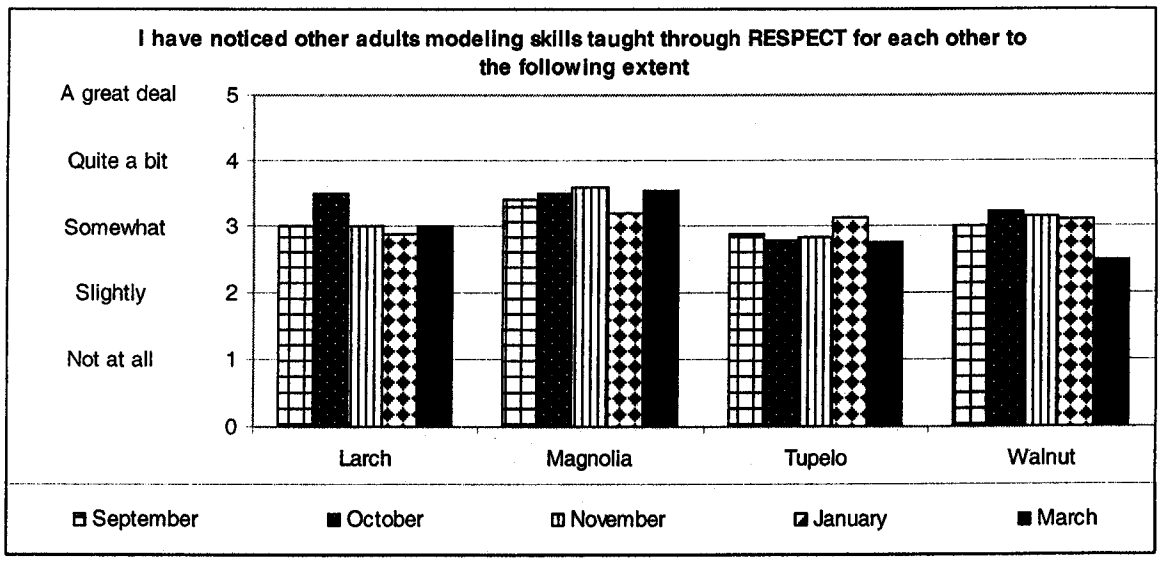
Teachers at all schools reported noticing other adults in their school modeling RESPECT's Full Value Concepts "somewhat" during at least one of the data collection waves. Magnolia reported the highest rates of noticing other adults modeling RESPECT's Full Value Concepts. Walnut's reporting was the most erratic; their first mean was the highest for all schools at all reporting times, while their remaining means were the lowest of all schools at all data reporting times. Figure 4.6 depicts schools' teachers' reporting means regarding noticing other adults modeling RESPECT Full Value Concepts for students.

Figure 4.6 Schools' Teachers' Reporting Means Regarding Noticing Adults in the School Modeling Full Value Concepts for Students



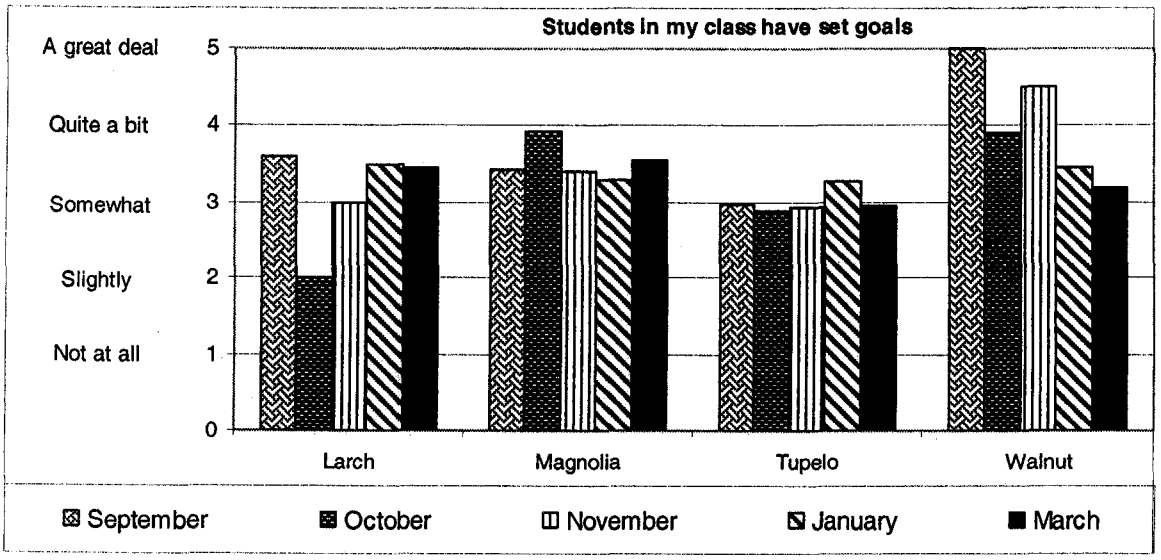
Generally, teachers noticed other adults modeling skills taught through RESPECT for each other less than they noticed other adults in their school modeling RESPECT Full Value Concepts for students. Magnolia's teachers reported noticing adults' modeling more so than teachers at other schools. Tupelo reported the least noticing. On average, teachers reported "somewhat" noticing other adults' modeling. Figure 4.7 depicts schools' teachers' reporting means regarding adults modeling skills taught through RESPECT for each other.

Figure 4.7 Teachers Noticing Other Adults Modeling Skills Taught Through RESPECT for Each Other



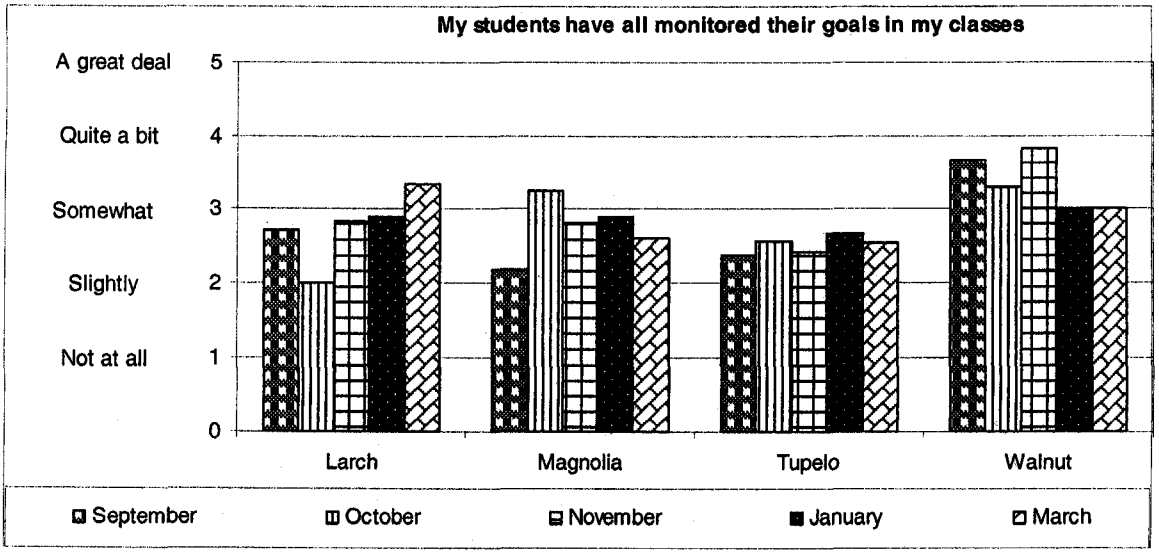
Students' goal setting seemed to be something teachers facilitated a fair bit. Only Larch's teachers reported their students had only "slightly" set goals during on monthly or bi-monthly data collection period. Walnut's teachers reported that their students had set goals "a great deal" during one data collection period and between "quite a bit" and "a great deal" during another data collection period. Most teachers, however, reported their students set goals between "somewhat" and "quite a bit. Figure 4.8 depicts schools' teachers' mean reporting regarding their students setting goals.

Figure 4.8 Schools' Teachers' Mean Reporting Regarding their Students Setting Goals



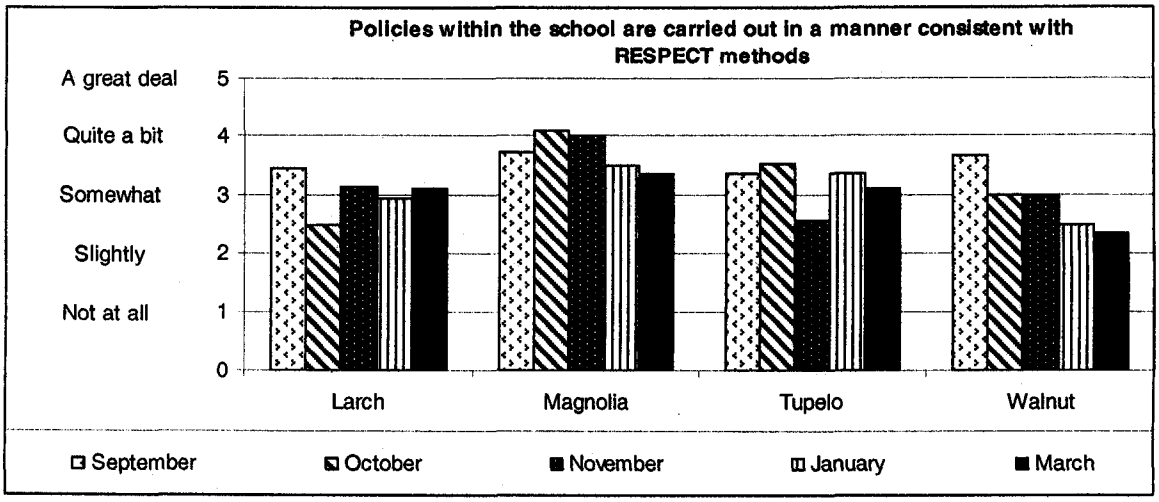
Teachers from all schools reported their students monitored their goals less than teachers reported their students setting goals. Walnut's teachers reported their students monitored their goals more so than other schools' teachers. During the second data collection time, Larch's teachers reported their students "slightly" monitored their goals, which was the teachers exact reporting regarding their students setting goals. Figure 4.9 depicts schools' teachers' mean reporting regarding their students monitoring of their goals.

Figure 4.9 Schools' Teachers' Mean Reporting of their Students Monitoring their Goals



Walnut's teachers reported steady decreases from the first to the fifth data collection wave regarding policies within the school having been carried out in a manner consistent with RESPECT methods. Magnolia's teachers also reported a steady decrease for the final four data collection waves. All schools' final reports were lower than their first reports. Figure 4.10 depicts schools' teachers' mean reporting regarding policies within their schools being carried out in a manner consistent with RESPECT methods.

Figure 4.10 Schools' Teachers' Mean Reporting Regarding Consistency of School Policies and RESPECT Methods



With the exception of Larch in October, more teacher questionnaire respondents reported "yes" than "no" regarding if they received sufficient RESPECT training to implement it effectively. It is important to note the lack of attention to this item on the questionnaire. For example, one teacher from Larch did not respond to this item in September or October, and there were only two respondents in October. It is interesting to note Walnut only reported "no" once in all of the data collection waves, despite being the only school that decreased in all three TSES subscales. Table 4.7 reveals the frequency and percent of respondents from each school for the five data collection waves.

Table 4.7 Frequency answers to the following statement: The training I have received in the RESPECT model is sufficient for me to implement it effectively

	Frequency / Percent				
	September	October	November	January	March
Yes					
Larch	9/24%	0/0%	14/38%	16/43%	8/22%
Magnolia	10/77%	9/69%	9/69%	7/54%	8/62%
Tupelo	17/19%	13/15%	9/10%	21/24%	20/23%
Walnut	3/13%	10/44%	6/26%	7/30%	5/22%
No					
Larch	1/3%	1/3%	1/3%	2/5%	0/0%
Magnolia	2/15%	2/15%	1/8%	2/15%	1/8%
Tupelo	12/14%	6/7%	3/3%	1/1%	2/2%
Walnut	0/0%	0/0%	0/0%	0/0%	1/4%

Summary of Results

Two important statistically significant findings were discovered in this study. One, Tupelo's implementation teachers' SE subscale change score was significantly different, $F(3, 30) = 5.66$, $p = .003$) than the remaining schools' SE subscale change scores. Two, Walnut's ($t(15) = 2.88$, $p = .011$) and Magnolia's ($t(10) = 2.92$, $p = .015$) pilot teachers' SE subscale change scores were significantly different than their implementation SE

subscale change scores. It is important to note the lack of more statistically significant findings was also very telling and was brought into greater light by the informing/corroborating data. For example, the teacher questionnaire analyses revealed low use of key curricula of the RESPECT Program and interviews elucidated the overwhelming environmental and behavioral impediments to RESPECT implementation. Further, interviews allowed some insight into varying TSES subscale score changes between schools. While interview participants reported myriad benefits of the RESPECT Program, both interviews and TSES analyses suggest RESPECT was not appropriate for this population.

Limitations to the Data Collection

1. Lack of face-to-face time between the researcher and the study participants;
2. Teachers presuming their participation in the study might calculate into their annual evaluation, despite assurances to the contrary. Sara Amadon (personal communication, September 2005), former coordinator of the Project Adventure RESPECT Program research study, surmised this was due to poor presentation/explanation when introducing the research project immediately prior to the first wave of data collection.[17]
3. Lack of teacher investment in the study, resulting in total lack of participation, and/or inconsistent participation in data collection;
4. Limited time to conduct interviews;
5. Unanswered TSES items, demographic information, and/or teacher questionnaire items, whether items were inadvertently skipped, or items were intentionally skipped for reasons unknown; and
6. Attrition (e.g., maternity leave, changing schools).

[17] Amadon surmised her explanation/wording of the research project was intimidating, based on potential participants' responses and questions; she said she should have said "participating" rather than "experimental" schools.

CHAPTER V

DISCUSSION

The purpose of this chapter is to:

1. Provide a research summary, including procedures, study sample, and analysis;
2. Provide a summary of the findings with associated discussion;
3. Identify potential implications of the study;
4. Cite limitations; and
5. Recommend directions for future research.

Research Summary

The aim of this study was to determine what, if any, impact PA's RESPECT Program curricular intervention had on middle school teachers' efficacy (TE) from underperforming urban public middle schools during the program's pilot and implementation years. While studies have been conducted on the effectiveness of PA in public schools (e.g., Dyson, 1996; Dyson & O'Sullivan, 1998), no studies have focused on the RESPECT Program or the program's effect on TE. A number of studies have provided insight into the intricacies of teacher efficacy, including attempts to raise TE through interventions (e.g., Stein & Wang, 1988; Tschannen-Moran et al., 1998). However, research studies have not focused on adventure-based learning, or experiential education curricular interventions, in regard to longitudinal TE change.

It was hypothesized that implementation teachers' TE change would be greater than pilot teachers' TE change due to curricular and methodological changes made to the RESPECT program during the pilot year, which was aimed at enhancing program

effectiveness. Descriptive statistics and statistical analyses of pretest-posttest scores and demographic data, in conjunction with informing/corroborating data, allowed insight into the sample participants' experiences and program fidelity. Analyses revealed mean TE changes of the sample (as measured by the TSES subscales), varying levels of TE change between schools, as well as differing levels of TE change within schools from the pilot to the implementation year. Interviews and the teacher questionnaires allowed for a greater depth of understanding regarding various observed TE changes.

Summary of Procedures. Tschannen-Moran and Woolfolk Hoy's (2001) Teachers' Sense of Efficacy Scale (TSES) was used to compare pilot and implementation teachers' efficacy change via TSESs three subscales. There were 107 pilot and implementation teachers (68 of whom completed both the pretest and posttest TSES) from four schools who received the RESPECT Program training participated in the quantitative portion of the study. The study's participant volunteers and their non-participating colleagues were expected by their administrators to implement the RESPECT curriculum into their classes. All teachers who completed the first TSES were invited to provide interviews. During the pilot year nine teachers participated in interviews, and eight teachers participated during the implementation year (note: no teachers from Walnut participated in the interview portion of the study for either year). Interviews ranged from 15 to 45 minutes, with the typical interview lasting 25 minutes. All interviews took place in the teachers' home schools; some of the interviews occurred in teachers' home classroom, while others took place in an area of the school that was not being used. Some implementation teachers also completed one to five teacher questionnaires, though attaining an exact number of participants was not possible as some teachers did not write their names on the questionnaires and could not be tracked.

Summary of Study Sample. The sample consisted of novice and experienced teachers, educators with different racial backgrounds, teachers who earned their teaching

certificates by different training avenues, teachers ranging in age from 22 to 62, et cetera. The participants, however, also shared two commonalities: all taught in a large American northeastern city's public school system; and all of the schools in which they taught were deemed "underperforming" per the No Child Left Behind Act.

Summary of Data Analysis. Descriptive analyses of pretest, posttest, and teacher questionnaire answers were conducted. Frequencies allowed insight into demographics, such as educational and teaching-related information (e.g., number of years teaching, number of pre-service teaching months, means of earning teaching certificate) and variables related to each individual (e.g., age, gender, race). One-way ANOVAs and Independent-Sample *t*-tests were employed to investigate differing amounts of teachers' TSES subscale change between and within both pilot/implementation years and schools. Interviews were recorded and information was synthesized through a process of listening to the recordings, writing notes, and then determining themes in various subject areas. Means of teacher questionnaire items were calculated and bar graphs crafted in Excel.

Summary of Findings with Associated Discussion

There were three objectives within the quantitative inquiry associated with this study: 1) to investigate potential changes in pilot and implementation teachers' TSES subscale scores; 2) to investigate the impact of specific schools on TSES subscale changes; and 3) to investigate the potential impact of demographic factors on TSES subscales. Informing/corroborating data were employed to further inform the quantitative analyses findings. The discussions of the informing/corroborating data findings and analyses have been incorporated into the discussions of the quantitative areas of inquiry. Each area of inquiry is stated below prior to the associated discussions.

TSES Descriptive Statistics of Pilot and Implementation Teachers. According to the three TSES subscales, pilot teachers' mean efficacy increased and implementation

teachers' mean efficacy decreased. Contrary to the hypothesis, pilot teachers experienced positive mean changes in all three subscales (.099 for the SE subscale, .045 for the CM subscale, and .398 for the IP subscale) and implementation teachers experienced negative mean changes in all three subscales (-.555 for the SE subscale, -.074 for the CM subscale, and -.059 for the IP subscale). This was a surprising finding for two reasons. First, it was hypothesized the RESPECT Program and means of delivery would become more effective in the second year of implementation, helping teachers more effectively grasp and implement the curriculum and result in increased teacher efficacy. Second, it was hypothesized that the pilot teachers would have a harder time introducing and using the RESPECT curricula than the implementation teachers, for the implementation teachers' students had been exposed to the RESPECT curricula for one year by the pilot teachers.

While the findings were surprising, there are possible explanations. Bandura hypothesizes (1977) that mastery experience help shape efficacy beliefs and Tschannen-Moran et al. (1998) found that teachers experienced increases in TE when they implemented curriculum successfully, while teachers who struggled with the implementation of new curriculum experienced decreased TE. While this may be logical to most readers, its significance is augmented when considering that mentoring and coaching having been found to increase TE – even in experienced teachers (e.g., Gagen & Bowie, 2005; Ross, 1992; Yost, 2002). This fits Bandura's (1977)'s assessment that vicarious experiences help form efficacy beliefs. Watching a RESPECT consultant model a Quick Class was seen as beneficial by some pilot interview participants because it helped them grasp the process. Besides some additional curricula, the major difference between the pilot and implementation years could have been the type and level of coaching, modeling, and mentoring by RESPECT consultants.

For example, during the pilot year RESPECT consultants helped teachers

implement the RESPECT curricula during the first week of school; they coached teachers, as well as modeled curriculum (e.g., Quick Class) with students in the teachers' classes. Modeling also occurred during the summer training, and RESPECT consultants continued to visit teachers' classes throughout the year. With the intent of establishing a higher degree of ownership and in-school leadership of the RESPECT Program during the implementation year, the consultants only modeled some of the curriculum (e.g., Quick Class, activities) during the summer training. There was a lack of coaching and modeling both in the beginning of the school year with the teachers' students and throughout the year by RESPECT consultants for implementation teachers. This may have been a contributing factor as to why implementation participants experienced decreases in all three subscale means and the pilot participants did not. It may be that this modeling, or one not yet implemented, could be a major contributing variable to the successful integration of the RESPECT Program.

Changes Between Pilot and Implementation Years. Of the subscales, only the pilot and implementation teachers' SE subscale scores were significantly different ($F(66) = 2.842$, $p = .006$). It is important to note that SE was found to be significant because posttest scores diverged, with pilot participants' scores slightly increasing and implementation participants' scores decreasing. Figure 5.1 illustrates this divergence.

Figure 5.1 Comparison of Pilot and Implementation Teachers' Student Engagement Subscale Changes

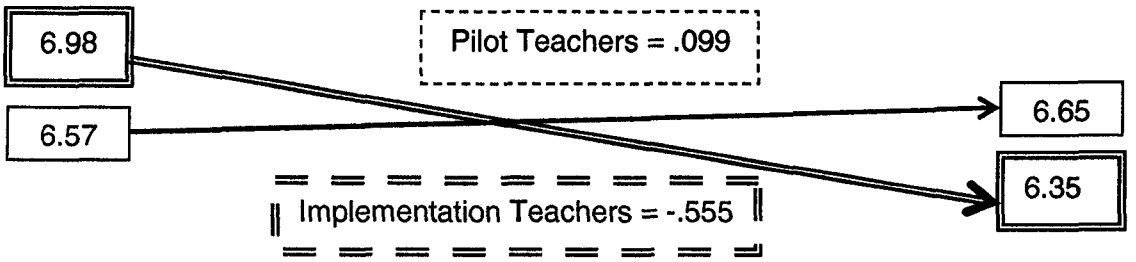


Figure 5.1 Pilot teachers' mean SE subscale scores are indicated in the single-line boxes and implementation teachers' mean SE subscale scores are indicated in the double-line boxes. Pretest scores are on the left side of the figure and posttest scores are on the right side of the figure. Mean change scores are indicated in the dash-line boxes and the arrows depict the direction of change. The double-line arrow represents the implementation teachers' mean SE subscale score change trajectory, and the single-line arrow depicts the pilot teachers' mean SE subscale change trajectory.

A Bonferroni post hoc test showed the significant SE subscale differences between the pilot and implementation teachers' efficacy change derived from the Magnolia Middle School ($t(10) = 2.92$, $p = .015$) and Walnut Middle School ($t(15) = p = .011$) teachers. Magnolia's pilot and implementation teachers' difference scores were significantly different because implementation teachers' mean SE subscale difference score (-1.2) decreased more drastically than pilot teachers' mean SE difference score (-.113). Walnut's pilot and implementation teachers' SE subscales scores were significantly different because pilot teachers experienced a mean increase (.465) and implementation teachers experienced a mean negative decrease (-.839). There was over a one-point difference in both Magnolia's and Walnut's pilot and implementation teachers' difference scores, which were 1.09 and 1.30, respectively.

Consistency and collaboration (or lack thereof) likely contributed to the decrease in implementation teachers' subscales. For example, Angelica and Dominique suggested holding the initial training in August so both new as well as returning teachers could experience it together. Such an arrangement would seem to be more conducive to

collaboration than teachers receiving the trainings at different times. Sadie explained she was required to attend the RESPECT training during the last few days of her school year. She believed teachers resented participating in this training because it detracted from the small amount of time they had to contend with end-of-the-year details. She also said there did not seem to be much forethought on the part of the administrators. Given this, implementation teachers may have harbored resentment toward the RESPECT Program and/or toward their administrators, resulting in exhibited lackluster effort to embrace and implement the curricula. Fullan (2001) explains "top down" approaches do not work; buy-in from teachers is integral to educational change. He further explains that eventual adoption of principal-initiated, top-down innovation by teachers could happen if 1) the innovation is a good idea and 2) if choices and empowerment become part of the process. Some teachers did not think RESPECT was a good fit for their student population and seemingly they were not empowered during their introduction to RESPECT. Such realities may not only affect teachers' efficacy, but also the hope for school-wide educational change. Lack of interview data from Walnut's teachers prohibited exploration into the school's quantitative findings.

Between School Change. The findings above suggest that teachers' school environment may have a strong bearing on teacher efficacy change, which is reflected in the TE literature (see Figure 2.2). For example, Tupelo Middle School was the only school whose pilot and implementation teachers' showed positive changes for all three subscales. While school was not a significant factor in the pilot sample, it was in the implementation sample for the SE subscale ($F(3, 30) = 5.66$, $p = .003$). A Bonferroni post hoc test revealed the Tupelo Middle School was significantly different than Larch Middle School ($p = .045$), Magnolia Middle School ($p = .004$), and Walnut Middle School ($p = .039$). The significance derived from the increased SE subscale at Tupelo Middle School

and decreased SE subscale at all other schools. Figure 5.2 illustrates implementation teachers' SE subscale change.

Figure 5.2 Implementation Teachers' Student Engagement Subscale Change

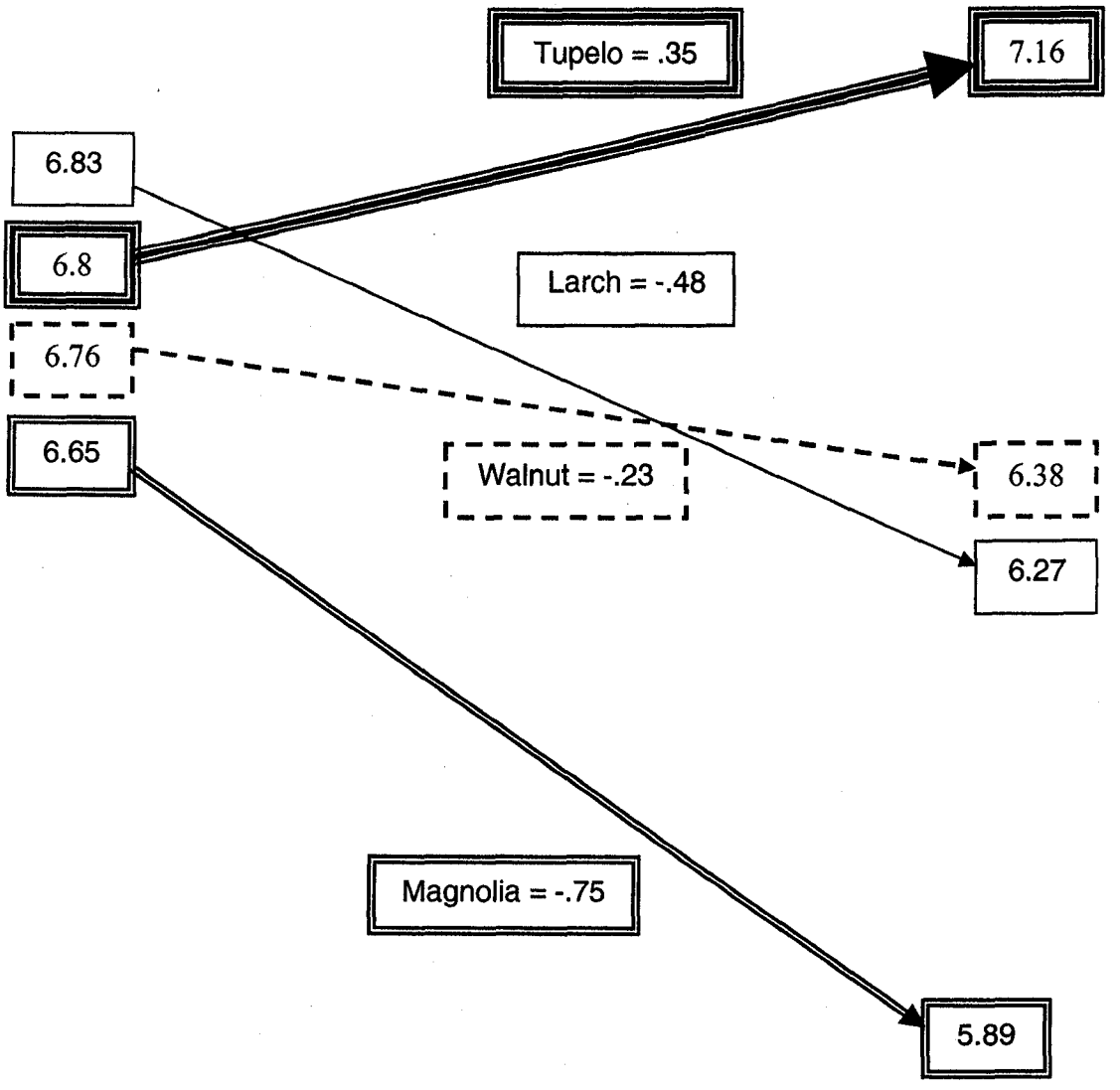


Figure 5.2 Larch's (single-line boxes), Magnolia's (double-line boxes), Tupelo's (triple-line boxes), and Walnut's (dash-line boxes) pretest (left), posttest (right), and change (middle) mean SE subscale scores have associated arrows that depict the change trajectory.

Like Larch Middle School and Magnolia Middle School, Tupelo Middle School created an incentive system for positive behaviors[18]. Examples ranged from earning hallway privileges to being given homemade cookies to being awarded pizza parties to earning the right to go to an amusement park. However, based on interview data, Tupelo seemed to possess the most consistent incentive system. For example, the students knew for several months that they were eligible to go to the amusement park, depending on their behavior. In addition, Tupelo's teachers offered regular pizza parties to reward shorter-term behavioral achievements. Teachers at Magnolia said they tried various rewards throughout the year and were not always diligent tallying students' points at the end of the week. Teachers at Larch seemed inconsistent with their incentives and were not acting as a unified staff until part way through the year. The original idea of an incentive system came from Tupelo during the pilot year, so it was not surprising their system seemed the most effective. However, there are other factors that may have contributed to Tupelo's implementation teachers' SE increase and the other schools' decrease.

Collaboration and participation of teachers in professional learning have been associated with higher levels of TE than situations where teachers participate in neither (Chester & Beudin, 1996; Henson, 2001; Midgley, Feldlaufer, & Eccles, 1989; Shachar & Shmuelevitz, 1997; Warren & Payne, 1997). Teachers at Tupelo had regular meetings where they discussed issues in their grade, as well as took time to concentrate on RESPECT. Further, teachers agreed to dedicate one period on Fridays to RESPECT. Some teachers used the time to have their students set goals for the coming week, and others used it as a reflection time for the students (e.g., on their goal progress over the course of the week) and yet others facilitated a RESPECT activity. In general, Tupelo's

[18] The same may or may not have been true for Walnut; it is not possible to report as no Walnut teachers granted interviews.

teachers seemed to have some "collective teacher efficacy" (Goddard, Hoy, & Woolfolk Hoy, 2000) wherein they had a united perception that they could have a positive affect on student achievement. This is not to say that Tupelo did not struggle. One Tupelo teacher (and one Larch teacher) called for greater unification of teachers (and staff and administrators) to model and live the RESPECT philosophy. Both teachers said not all of their colleagues embraced the Full Value Concepts themselves.

The teacher questionnaire regarding teachers' fidelity to the RESPECT curricula did not reveal different reporting from any of the schools. However, Tupelo was generally the most consistent with their program fidelity. While other schools oscillated in their implementation of various aspects of the curricula, Tupelo remained largely the same throughout the five waves of data collection. As such, teachers at Tupelo may have been in a better position to see the affect of consistent RESPECT Program implementation on their students. According to several Tupelo interview participants, the RESPECT Program had some positive affect on their students; seeing the positive changes may have led teachers to believe more deeply in their abilities to positively affect student achievement (i.e., seeing the positive changes may have raised their TE).

Demographic factors' influence on teachers' efficacy change: age, race, gender, number of years of teaching experience, months of student teaching experience, and level of job satisfaction. As previously stated, none of these variables were found to be significant. It was not surprising that age and gender were not highly correlated with TSES subscale difference scores, as they have been found to be significant in some studies, but not others. In past studies, race has not been found to be correlated with TE change. Because experienced teacher tend to possess more stable TE than novice teachers, it was hypothesized that number of years of teaching experience could have been a significant factor in amount of TE change. Months of student teaching was added as a factor because it has not been explored in other studies, but discrepancies in reporting

prevented this from being a reliable factor in analysis. Specifically, some teachers reported being a student teacher during their paraprofessional careers, one of which spanned seven years; such experience is not traditionally thought to be student teaching experience. Lastly, the author wanted to gain insight into the relationship between job satisfaction and TE change; there was no correlation between the two in this study.

Additional Insights Gained through Interviews. The following two bullets provide information that was not directly tied to the quantitative data, but that helps provide context and deeper understanding of both the RESPECT Program and the schools' students.

- Pilot teachers were asked about what elements proved to be beneficial in their professional development initiatives. Common themes derived from participants' answers included collaboration, long-term interventions, and practical skills. The RESPECT Program curricula intervention was long-term, asking teachers to collaborate (e.g., incentive systems), and provided practical components (e.g., RESPECT Rubric, five Full Value Concepts). As such, while other aspects of the RESPECT Program may need improvement, these aspects may provide strength in the program.
- Both pilot and implementation teachers cited the increasing responsibilities of teachers as difficulties. Not only are they expected to teach their content area, but they also have to be good listeners, parents, helpers with social skills, referees, coaches, mentors, disciplinarians, instructors, counselors, police officers, et cetera[19]. Examples of challenges contributing to these required roles include the following: students not being able to drink water from the taps at schools due to lead poisoning danger because there is not enough money to replace the pipes (dehydration does not lend to good learning); Magnolia closing

[19] This list was compiled from teachers' interview data.

its doors at 1 p.m. because they do not have enough money to pay for electricity longer than a certain number of hours in the school day; students' parents and siblings involvement in gangs and lack of presence due to serving time in correctional facilities. Preacher said Magnolia would have a security system/metal detector to prevent students from bringing weapons to school – if they could afford it. Please note the example was given to illustrate the fear and violence with which some students may live, which does not lend to a safe and nurturing educational environment. It would also be reasonable to presume that many of these low-income families may not have health care. These tragedies echo Kozol's (1991) discoveries about the vast inequalities in the American public school systems due to the allowance of gross interplay between race, class, and economics. Until these inequalities are remedied, children will continue to be "left behind."

Implications

The findings in this study depict the complexities of school reform that entail a dynamic interplay between town's/city's social context, students, teachers, administrators, the school's physical and social environment, the fit of interventions to the population and context, and state and federal standards (e.g., standardized tests, No Child Left Behind), among other factors. According to Alison Rheingold (personal communication, May 2007), lead Project Adventure RESPECT consultant, the three following factors hindered RESPECT sustainability:

- Differing levels of administrative support (both between schools and between the pilot and implementation year);
- Emphasis on high stakes standardized testing, resulting in pressure to teach academic content and maintain the perception that there is no time to employ the RESPECT Program to the full extent; and

- Lack of follow up training and meeting with teachers.

Due to these myriad complexities, it is important to remember that change typically takes a great deal of time, considerable effort, and continual evaluation.

If the pilot teachers' increases in all three TSES subscale scores were due to the coaching, mentoring, and modeling by RESPECT consultants, this suggests that new curricular interventions should have similar and extensive support for the teachers by the provider. Likewise, it would be important to incorporate a collaborative component into the implementation design, so teachers could share their ideas with one another, ask questions, and share successes and failures. Inherent in these suggestions is a call for administrative support; without it, there is no leadership.

This study may also provide an example of intervention programs needing to be appropriate for a specific population. Melde, Esbensen, & Tusinski (2006) purport lack of programmatic impact can be due to the following reasons:

- "the program, as designed and implemented, has no effect;
- the program, as designed, is not well suited for the implementation in the given setting; and
- the program is not being delivered as intended (implementation failure)" (p. 720).

Based on the interviews, the relative lack of the RESPECT Program's impact was likely due to interplay between the second and third reasons. While teachers spoke highly of various aspects of the RESPECT Program, they also cited examples wherein the RESPECT curriculum was not the right fit for their population (e.g., a student cannot be expected to "Be Here" when their friend was stabbed to death the previous night). Both the teacher questionnaire and interviews revealed lack of program fidelity. For example, the RESPECT Program was designed such that the Quick Class would be employed each time a disruptive behavioral issue arose in class, yet during the five waves of

teacher questionnaire collection, teachers reported using the Quick Class between "once or twice" and "A few times in a couple of classes" within the month to bi-monthly reporting period; this is less than was expected. Further, both pilot and implementation interview participants cited struggling with the Quick Class (e.g., it was too long, they did not have enough physical space, the students did not buy into it), resulting in little to no use. Without program fidelity by teachers the effectiveness of the RESPECT program cannot be accurately assessed. Further, several teachers cited lack of unification between staff, teachers, and administrators.

In the continuing relationship between PA and the participating schools, there are several elements that if implemented may lead to a greater chance of success. Several of these may include:

- establish greater teacher fidelity to the RESPECT Program within classrooms and schools;
- come to a common understanding that teachers' roles may include life coaching, in addition to and perhaps prior to the transmission of content;
- ensure schools only have one add-on at a time (e.g., only RESPECT Program and content curriculum, rather than several programs at a time);
- be sure administrators arrange a time for the first RESPECT training that is convenient for teachers;
- be sure to incorporate the following four sources of efficacy information:
    - mastery experiences (e.g., practice running a Quick Class and gain immediate feedback from a RESPECT consultant and/or a more experienced peer);
    - vicarious experiences (e.g., resume RESPECT consultants' coaching, mentoring, and modeling for teachers);

- physiological and emotional states (e.g., create opportunities wherein both students and teachers can experience fun and success with RESPECT); and
- social persuasions (e.g., invite teachers who have had success with RESPECT to share their experiences with teachers who are new to RESPECT)

- only endeavor to engage in long-term professional development interventions; and
- encourage collaboration and mentoring between teachers.

Limitations

Internal Validity. The greatest limitation of this longitudinal pretest-posttest study was teacher attrition, resulting in inadequate numbers in some cases (e.g., one Pacific Islander) of participants to investigate demographic factors' role in teacher efficacy change. Another limitation entailed an inability to interview any teachers from Walnut over the course of the two-year study. Anecdotally, Walnut seemed to have the least investment in RESPECT and interviews could have provided some explanation for this. Lastly, due to the longitudinal design, maturation was a threat to internal validity (e.g., increased mastery experiences).

Self-Selection Bias. Another study limitation was solicitation methods regarding the inability to reduce the self-selection bias in a voluntary study. This was a factor in the quantitative portion of the study at each data collection wave, as well as with the corroborating portion of the study. Of the quantitative teachers who participated during the pilot year, they may have been enticed to do so solely for the chance to win a raffle prize.

Teachers' Sense of Efficacy Scale. The TSES measures what teachers report. As such, how teachers regard their abilities may vary from day to day, week to week, et cetera.

While this is helpful in that it accounts for variances in teachers' performances, it might also impede understanding. While it seems logical that teachers, like all other human beings, have days when they feel more efficacious than others, the question arises: Did teachers complete the TSESs on average days, or when they were feeling abnormally efficacious or inefficacious? It was a question that could not be answered.

Another limitation in regard to the TSES was the cause of changes it measured. While the methodology delineated that TSES subscales were the dependent variables and PA's RESPECT Program was the independent variable, there were other independent variables at play. For example, several interview participants were taking graduate classes. Other influencing variables included differing levels of support from administration, lack of PA's RESPECT Program buy-in by teachers, and other professional development initiatives.

Non-Representative Interview Sample. While the interviews did slightly off-set the inability to establish causality and history threat to internal validity, no teachers from Walnut Middle School were interviewed. As such, insight gleaned from interviews and applied to the quantitative findings came from teachers representing three schools.

Teacher Questionnaire. The teacher questionnaire was only administered during the implementation year and therefore could not help explain the differences in pilot and implementation teachers' change scores. It did, however, elucidate possible violations of truthful reporting, particularly in the case of Walnut. Despite Walnut's implementation teachers experiencing mean decreases in all of the subscales, of 34 returned questionnaires over the five data collection waves, only one person answered "no" to the following statement: "The training I have received in the RESPECT model is sufficient for me to implement it effectively." Conversely, 44 of Larch's 55 respondents, 43 of Magnolia's 55 respondents, and 80 of Tupelo's 107 answered "no." Again, lack of interview data from Walnut prevented understanding of this finding.

Quasi-Experimental Design. Employing pilot teachers, rather than a true control group (that received no treatment) weakened the study design. It is difficult to adequately evaluate the two forms of the RESPECT curriculum on teachers' efficacy when both the pilot and implementation teachers were exposed to it and implemented it at least to some extent. The initial study design included three control schools. However, when one school withdrew from the study, the remaining control sample was too small. A larger control sample from the beginning would have allowed for some attrition without making the remaining sample size detrimental to the study. Another means of maintaining the control sample might have been to reward participation with small gestures and/or tangible benefits.

Recommendations for Future Research

As this is the only study on the effects of an adventure-based curriculum (ABC) intervention as it relates to TE, researchers are encouraged to conduct more studies on ABC and TE to determine levels of effectiveness of similar interventions. Qualitative, quantitative, and mixed-method studies on ABC and TE would all allow insight into the phenomenon of TE. However, depending on the intended audience, the researcher might endeavor to choose a specific methodology. For example, research on TE (Henson, 2001), as well as the field of experiential education, of which adventure education is a part, could benefit from more experimental studies (Gass, 2005). In doing so, it will be crucial to have a large sample size, so as to have the statistical power to determine significance.

Henson (2002), Ross (1992), and Tschannen-Moran and Woolfolk Hoy (2001) each called for research that includes the following: longitudinal research; experienced teachers; implementation of new curriculum; and teacher efficacy enhancement. While this study incorporated the former three, the findings are only a beginning.

Wheatley (2005) calls for observations in TE research. While they are time consuming, they can also provide invaluable insight that cannot be gleaned from quantitative research or from interviews. For example, an objective eye could determine if and how the curriculum is being implemented, what challenges arise, what tone the teachers set, how it is being received by the students, et cetera. While such things could be espoused by teachers, their actions could be very different – whether purposely or not.

Conclusion

Teacher effectiveness and student achievement continue to be central concerns and goals in the American public education system. As student achievement is considered to be, at least partially, a product of teacher effectiveness, and teacher effectiveness has been linked to TE, it is on the latter that the fields of education and experiential education ought to continue to focus. Researchers and theorists are charged with determining what are significantly contributing factors to the formation of TE, as well as how TE can be successfully raised, while being cautious to not cause it to drop (Wheatley, 2005). That is precisely what this study was designed to do: provide insight into and fodder for the TE discussion.

APPENDICES

APPENDIX A

Permission to use the School Based Model for Teacher Expectations

You have my permission to use the graphic file. The correct citation for the article is

Huitt, W. (2000, August). Teacher efficacy. *Educational Psychology Interactive.* Valdosta, GA: Valdosta State University. Retrieved August 2007, from http://chiron.valdosta.edu/whuitt/col/teacher/tcheff.html

Make a great day.

Brooke Moran wrote:

Dear Dr. Huitt,

I am a Ph.D. student in Education at the University of New Hampshire. I would like to use your "School Based Model for Teacher Expectations" that you adapted from Proctor (1984) in my dissertation. May I please have your permission to do so?

Regards,

Brooke Moran

Brooke Moran
Assistant Professor of
Outdoor Leadership & Resort Management
Ph.D. Candidate in Education
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--
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APPENDIX B

Teachers' Sense of Efficacy Scale

Teacher Beliefs	How much can you do?
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.	Nothing / Very Little / Some / Quite A Bit / A Great
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 behavior 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 schoolwork?	1 2 3 4 5 6 7 8 9
5. To what extent can you make your expectations clear about student behavior?	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 you 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 C

RESPECT Rubric

Level 5 – Socially Responsible

- □ Does more than what is required
- □ Helps others be successful
- □ Is a positive leader
- □ Resolves conflict
- □ Sets, works on, and evaluate goals

Level 4 – Personally Responsible

- □ Actively participates
- □ Follows directions without reminders
- □ Listens when then teacher and other talk
- □ Demonstrates safe physical behavior
- □ Sets and works on goals

Level 3 – Involved

- □ Tries new lessons without complaining
- □ Helps when asked
- □ Follows directions most of the time with or without reminders
- □ Demonstrates safe physical behaviors most of the time
- □ Sets goals

Level 2 – Emerging Awareness

- □ Participates some of the time
- □ Easily gets off track
- □ Occasionally follows directions
- □ Demonstrates safe physical behaviors some of the time
- □ Aware that behavior needs to change

Level 1 – Lacking Responsibility

- □ Disengaged
- □ Disruptive
- □ Argues and blames
- □ Demonstrates unsafe physical behaviors
- □ No evidence of goals

APPENDIX D

Agreement to Participate in Research

Boston Public Middle Schools
Project Adventure, Inc.
University of New Hampshire

In partnership with Project Adventure Inc. from Beverly Massachusetts and the University of New Hampshire, the [City] Public School system is in the process of evaluating how well teacher training programs assist educators in their professional development. One area that is being examined is teacher self efficacy, or a teacher's belief of how her/his efforts can affect student achievement.

To help us in this process, we are inviting you to participate in this research study. If you agree, you will complete the *Teacher Sense of Efficacy Scale* at the time of your first Project Adventure training, and again at the end of the school year. The scale takes roughly 10 minutes to complete each time you fill it out. Your input will provide us with guidance whether certain programs work and what elements may prove to be valuable in helping you address the needs of Boston Public School students. This particular study will be managed by Brooke Moran, Doctoral student at the University of New Hampshire, and her advisor, Dr. Michael Gass from UNH.

While you will be asked to label the scale with your name each time you complete it, your identity will only be used by researchers as a means to track changes in teacher efficacy; when your information is entered into a computer, your name will be replaced with an identification number. In no way will your identity be revealed to your peers, your employers, the BPS System, parents, nor any other entity other than the researchers. Participation in this study is strictly voluntary. If you choose not to participate in this study, it will have no negative impact on you. If you would like to begin the study and then you change your mind, you may stop participating at any time during the study without any consequences. A summary of what happened in the study will be available to you at the completion of the project, if you so desire.

If you have any questions about this research project or would like more information before, during, or after the study, you may contact Brooke Moran or Dr. Michael Gass (please see contact information below). If you have questions about your rights as a research subject, you may contact Julie Simpson in the UNH Office of Sponsored Research (see information below).

Brooke Moran	Dr. Michael Gass	Julie Simpson
223 Wright Gym	NH Hall, 124 Main Street	University of NH
Western State College	School of Health & Human Services	Serv. Bldg, Rm 102
Gunnison, CO 81231	Durham, NH 03824	Durham, NH 03824
(970) 943-2118	(603) 862-2024	(603) 862-2003
bmoran@western.edu	mgass@unh.edu	julie.simpson@unh.edu

CONSENT TO PARTICIPATE FROM BPS TEACHER

By signing below, this signifies that you have been informed of the research project and you agree to participate in the study.

Participant name (please print): _____

Signature: _____ Date: _____

APPENDIX E

Agreement to Participate in Research Interviews

Boston Public Middle Schools
Project Adventure, Inc.
University of New Hampshire

In partnership with Project Adventure Inc. from Beverly Massachusetts and the University of New Hampshire, the Boston Public School system is in the process of evaluating professional development initiatives for educators. One area that is being examined is teacher efficacy, or a teacher's belief of how her/his efforts can affect student achievement.

To help us in this process, we are inviting you to further participate in this research study. You are being invited to grant an interview for two reasons: 1. you have been participating the Project Adventure's RESPECT Program; and 2. you completed both the first and second administration of the Teachers' Sense of Efficacy Scale. If you agree to participate, Brooke Moran will interview you about 1. your experiences as a teacher this year; and 2. your experiences with Project Adventure's RESPECT Program. The interview will last 30-45 minutes and will be conducted at a time that is most convenient for you. Your input will provide us with guidance whether certain programs work and what elements may prove to be valuable in helping you address the needs of Boston Public School students. This particular aspect of the study will be managed by Brooke Moran, Doctoral student at the University of New Hampshire, and her advisor, Dr. Michael Gass from UNH.

With your permission, the interview will be recorded. To insure confidentiality, only Brooke and Michael will have access to the interviews. When transcribing and reporting on interviews, pseudonyms will be used. Participation in this study is strictly voluntary. If you choose not to participate in this study, it will have no negative impact on you. If you would like to begin the study and then you change your mind, you may stop participating at any time during the study without any consequences. A summary of what happened in the study will be available to you at the completion of the project, if you so desire.

If you have any questions about this research project or would like more information before, during, or after the study, you may contact Brooke Moran or Dr. Michael Gass (please see contact information below). If you have questions about your rights as a research subject, you may contact Julie Simpson in the UNH Office of Sponsored Research (see information below).

Brooke Moran	Dr. Michael Gass	Julie Simpson
223 Wright Gym	NH Hall, 124 Main Street	University of NH
Western State College	School of Health and Human Services	Serv. Bldg, Rm 102
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(970) 943-2118	(603) 862-2024	(603) 862-2003
bmoran@western.edu	mgass@unh.edu	julie.simpson@unh.edu

CONSENT TO PARTICIPATE IN AN INTERVIEW FROM BPS TEACHER

By signing below, this signifies that you have been informed of the research project and you agree to participate in the study.

Participant name (please print): _____

Signature: _____ Date: _____

APPENDIX F

Research Approval from Boston Public School District

Boston Public Schools

Research, Assessment and Evaluation

Maryellen Donahue, Director

June 2, 2005

Michael A. Gass, Ph.D.
University of New Hampshire
Project Adventure, Inc.
NH Hall, 124 Main Street
Durham, NH 03824

Dear Dr. Gass:

I am in receipt of your research proposal entitled "Evaluation of Project Adventure's RESPECT Program with Boston Public Middle Schools".

Enclosed please find copies of the Cluster Leader and Principal or Headmaster approval forms for conducting research in the Boston Public Schools. It is your responsibility to take these forms and have them signed by the Cluster Leader and the Principal or Headmaster of each school in which you plan to conduct research. Approval for this study is contingent upon your returning the signed consent forms to me.

If you have any questions about this matter, please feel free to contact me at (617) 635-9450.

Sincerely,

Maryellen Donahue rs

Maryellen Donahue, Director
Office of Research, Assessment and Evaluation

Encls.

26 Court Street
Boston, MA 02108

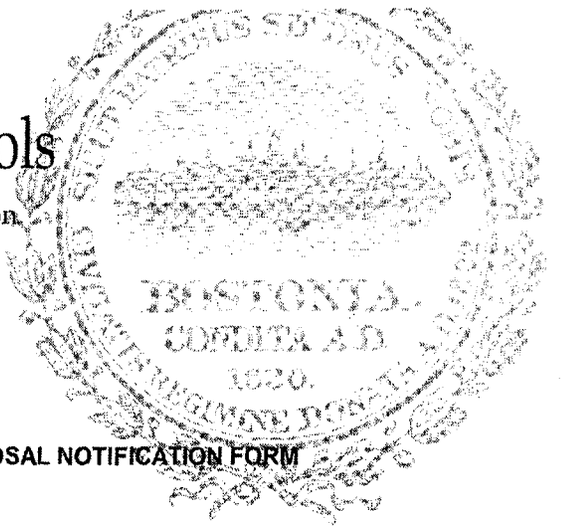
617-635-9450 Voice
617-635-9416 Fax

www.bostonpublicschools.org

FOCUS On Children
Boston Public Schools

Boston Public Schools

Research, Assessment and Evaluation
Maryellen Donahue, Director



RESEARCH PROPOSAL NOTIFICATION FORM

The research proposal described below has been:

X *APPROVED* _____ *DISAPPROVED*

Maryellen Donahue, Director
Office of Research, Assessment, and Evaluation

Name of Researcher	Michael A. Gass, Ph.D.
Affiliation:	University of New Hampshire, Project Adventure, Inc.

Title of Proposed Research Project:
"Evaluation of Project Adventure's RESPECT Program with Boston Public Middle Schools"

Comments:

26 Court Street
Boston, MA 02108

617-635-9450 Voice
617-635-9416 Fax

www.bostonpublicschools.org

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Boston Public Schools

APPENDIX G

Approval from the University of New Hampshire Institutional Review Board

UNIVERSITY of NEW HAMPSHIRE

June 27, 2005

Gass, Michael
Kinesiology, New Hampshire Hall
Durham, NH 03824

IRB #: 3478
Study: Project Adventure's RESPECT Program Training & Seven Boston Public Schools' 6th Grade Teachers & Students
Approval Date: 06/24/2005

The Institutional Review Board for the Protection of Human Subjects in Research (IRB) has reviewed and approved the protocol for your study as Expedited as described in Title 45, Code of Federal Regulations (CFR), Part 46, Subsection 110.

Approval is granted to conduct your study as described in your protocol for one year from the approval date above. At the end of the approval period, you will be asked to submit a report with regard to the involvement of human subjects in this study. If your study is still active, you may request an extension of IRB approval.

Researchers who conduct studies involving human subjects have responsibilities as outlined in the attached document, *Responsibilities of Directors of Research Studies Involving Human Subjects.* (This document is also available at http://www.unh.edu/osr/compliance/irb.html.) Please read this document carefully before commencing your work involving human subjects.

If you have questions or concerns about your study or this approval, please feel free to contact me at 603-862-2003 or Julie.simpson@unh.edu. Please refer to the IRB # above in all correspondence related to this study. The IRB wishes you success with your research.

For the IRB,

Julie F. Simpson
Manager

cc: File
Brooke Moran

Research Conduct and Compliance Services, Office of Sponsored Research, Service Building, 51 College Road, Durham, NH 03824-3585 * Fax: 603-862-3564

UNIVERSITY of NEW HAMPSHIRE

February 9, 2006

Gass, Michael
Kinesiology, New Hampshire Hall
Durham, NH 03824

IRB #: 3478
Study: Project Adventure's RESPECT Program Training & Seven Boston Public Schools' 6th Grade Teachers & Students
Approval Expiration Date: 06/24/2006 **Modification Approval Date:** 2/6/2006
Modification: Request to add interviews with teachers

The Institutional Review Board for the Protection of Human Subjects in Research (IRB) has reviewed and approved your modification to this study, as indicated above. Further changes in your study must be submitted to the IRB for review and approval prior to implementation.

Approval for this protocol expires on the date indicated above. At the end of the approval period you will be asked to submit a report with regard to the involvement of human subjects in this study. If your study is still active, you may request an extension of IRB approval.

Researchers who conduct studies involving human subjects have responsibilities as outlined in the document, *Responsibilities of Directors of Research Studies Involving Human Subjects.* This document is available at http://www.unh.edu/osr/compliance/irb.html or from me.

If you have questions or concerns about your study or this approval, please feel free to contact me at 603-862-2003 or Julie.simpson@unh.edu. Please refer to the IRB # above in all correspondence related to this study. The IRB wishes you success with your research.

For the IRB,

Julie F. Simpson
Manager

cc: File
Brooke Moran

Research Conduct and Compliance Services, Office of Sponsored Research, Service Building, 51 College Road, Durham, NH 03824-3585 * Fax: 603-862-3564

UNIVERSITY of NEW HAMPSHIRE

June 9, 2006

Michael Gass
Kinesiology
New Hampshire Hall
Durham, NH 03824

IRB #: 3478
Study: Project Adventure's RESPECT Program Training & Seven Boston Public Schools' 6th Grade Teachers & Students
Review Level: Expedited **Approval Expiration Date:** 06/24/2007

The Institutional Review Board for the Protection of Human Subjects in Research (IRB) has reviewed and approved your request for time extension for this study. Approval for this study expires on the date indicated above. At the end of the approval period you will be asked to submit a report with regard to the involvement of human subjects. If your study is still active, you may apply for extension of IRB approval through this office.

Researchers who conduct studies involving human subjects have responsibilities as outlined in the document, *Responsibilities of Directors of Research Studies Involving Human Subjects.* This document is available at http://www.unh.edu/osr/compliance/IRB.html or from me.

If you have questions or concerns about your study or this approval, please feel free to contact me at 603-862-2003 or Julie.simpson@unh.edu. Please refer to the IRB # above in all correspondence related to this study. The IRB wishes you success with your research.

For the IRB,

Julie F. Simpson
Manager

cc: File
Brooke Moran ✓

Research Conduct and Compliance Services, Office of Sponsored Research, Service Building, 51 College Road, Durham, NH 03824-3585 * Fax: 603-862-3564

APPENDIX H

Demographic Questionnaire
Public Middle School Teachers

Name:_____ School: _____

Age:____ # of years teaching:_____

Are you **male** or **female** (please circle one)

Please indicate your race (if you are a combination, please circle all)

Asian	Caucasian
Hispanic	African American
Native American	Pacific Islander
Other: _____	

How much student teaching did you do prior to being employed professionally?

_____ weeks _____ months _____ years

What type of training did you receive to become a teacher?

4-year undergraduate program	5-year undergraduate / graduate
Graduate	Alternative certification
Teach for America	Other: _____

How satisfied are you with your job?

Unsatisfied	A little unsatisfied	Neutral	Fairly satisfied	Satisfied
1	2	3	4	5

What is your current level of investment in the PA RESPECT professional development training?

Not at all	A little invested	Neutral	Fairly invested	Fully invested
1	2	3	4	5

APPENDIX I

RESPECT Teacher Questionnaire (Please return to RESPECT Coordinator)
Name: _____ Cluster/Grade: _____ Date: _____

Please respond to the following questions considering the ***past four weeks*** of school:

1	I used the five Full Value Concepts with the following frequency (circle one):				
	Never	Once or twice	A few times in a couple classes	During most classes	Every day in every class
2	I used Quick Class with the following frequency (circle one):				
	Never	Once or twice	A few times in a couple classes	During most classes	Every day in every class
3	I used RESPECT lessons in my classes with the following frequency (circle one):				
	Never	Once or twice	A few times in a couple classes	During most classes	Every day in every class
4	Students in my classes used the RESPECT language (Full Value Contract, Quick Class, etc) with the following frequency (circle one):				
	Never	Once or twice	A few times in a couple classes	During most classes	Every day in every class
5	The behavior of students in my classes has changed in a positive manner due to RESPECT to the following extent (circle one):				
	Not at all	Slightly	Somewhat	Quite a bit	A great deal
6	I have noticed other adults in the school modeling RESPECT Full Value Concepts *for students* to the following extent (circle one):				
	Not at all	Slightly	Somewhat	Quite a bit	A great deal
7	I have noticed other adults modeling skills taught through RESPECT *for each other* to the following extent (circle one):				
	Not at all	Slightly	Somewhat	Quite a bit	A great deal
8	Students in my classes have set goals (circle one):				
	Not at all	Slightly	Somewhat	Quite a bit	A great deal
9	My students have monitored their goals in my classes (circle one):				
	Not at all	Slightly	Somewhat	Quite a bit	A great deal
10	Policies within the school are carried out in a manner consistent with RESPECT methods (circle one):				
	Not at all	Slightly	Somewhat	Quite a bit	A great deal
11	The training I have received in the RESPECT model is sufficient for me to implement it effectively (circle one):			Yes	No

APPENDIX J

Informing Interview Questions

Pilot Teachers' Interview Questions

- Questions for me? Pseudonym? Position in school? How long teaching?
- Please describe the least effective professional development initiative of which you have been a part. What made it so ineffective?
- Please describe the most effective professional development initiative of which you have been a part. What made it so effective?
- Have you noticed any changes, positive or negative, in your students' achievement levels this year? If so, to what, specifically, do you attribute the changes?
- Are you doing anything different in regard to classroom management strategies this year? If so, how effective have they been?
- Are you doing anything different in regard to instructional practices this year? If so, how effective have they been?
- Are you doing anything different in regard to engaging students this year? If so, how effective have you been?
- What did/do you think of PA's RESPECT training?
- Why do you think you principal agreed to partner with PA?
- What have been the least effective aspects of the program?
- What have been the most effective aspects of the program?
- Have you noticed any changes, positive or negative, in your role as a teacher as a result of participating in the RESPECT Program? If so, to what, specifically, do you attribute those changes?
- Since beginning the RESPECT Program, has your view of your role as a teacher changed? If so, how?

Implementation Teachers' Interview Questions

- Questions for me? Pseudonym? Position in school? How long teaching?
- Have you noticed any changes, positive or negative, in your students' achievement levels this year? If so, to what, specifically, do you attribute the changes?
- Are you doing anything different in regard to CM strategies this year? If so, how effective have your efforts been?
- Are you doing anything different in regard to IP this year? If so, how effective have your efforts been?
- Are you doing anything different in regard to SE this year? If so, how effective have you been?
- Prior to the Project RESPECT training, please describe your beliefs in your abilities to have a positive affect on students in regard to CM, IP, SE.
- Now, at the end of your first year with PA's RESPECT Program, have your beliefs in your abilities to have a positive affect on students changed in regard to CM, IP, SE?
- In general, please rank how well you can affect CM, IP, SE, from lowest to highest.
- What have been the most effective aspects of the RESPECT program?
- What have been the least effective aspects of the RESPECT program?
- Are you doing anything different this year with your IP, specifically in the area of teaching social emotional competencies? If so, how effective have they been?
- What would allow / encourage you to implement RESPECT even more?
- Do you have anything to add, or do you have any questions for me?

APPENDIX K

Correlation Analysis of TSES Subscale Change and Demographic Factors

	Age	Race	Gender	Years of Teaching Experience	Months of Student Teaching	Job Satisfaction	How Earned Teaching Cert.
Student Engagement Change							
Pilot	-.060	.118	-.093	-.140	-.150	-.309	-.070
Implementation	.298	-.198	.063	.055	-.311	-.072	.195
Classroom Management Change							
Pilot	.012	.167	-.191	-.111	.128	-.169	-.003
Implementation	.319	-.270	.114	.187	-.406*	-.059	.251
Instructional Practices Change							
Pilot	.189	.165	-.156	.121	.222	-.083	.179
Implementation	.181	-.180	.108	-.133	-.346	-.110	.130

* Correlation is significant at the 0.05 level (2-tailed).

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