Teacher Efficacy and Classroom Management among Botswana Junior Secondary School Teachers

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Dedication

Dedicated to my dearly loved children Shammah Onalerona, Shalom Kagiso, and Shaddai Arona, you are forever my inspiration.

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"I can do all things through Christ who strengths me and gives me power" Phillipians 4: 13.

Abstract

Teacher efficacy – the beliefs of teachers in their capabilities to have an impact on students' accomplishments in learning – has been researched for 30 years. This issue has been viewed as an important dimension of teacher professionalism, teacher practice, leadership, and collaboration as it is one of the teacher attributes associated with teaching and learning. Founded on Bandura's self-efficacy theory (1997), those earlier findings suggested that self-efficacy involves "beliefs in one's capabilities to organize and execute the course of action required to produce given attainments" (p. 2).

This study investigated Botswana junior secondary school teachers' responses on the three subscales of the Teacher Sense of Efficacy Scale (TSES): Efficacy in Student Engagement, Instructional Strategies, and Classroom Management.

Data were collected via a survey administered to 1006 Botswana participants. The survey consisted of three sections. Part 1 requested demographic data; Part 2 contained 12 items of the TSES (Short Form instrument); and Part 3 had 24 items of Teacher Practices. The researcher and research assistants gathered data from junior secondary school teachers in Gaborone (the capital city of Botswana) and surrounding areas. Letters of permission to conduct research and teacher letters accompanied the survey. The response rate was 95% with only 6 out of 1006 participants not completing the survey.

Pearson-product moment correlation was computed to analyze the data using the Statistical Package of Social Sciences. All bivariate correlations among the three subscales were statistically significant at 0.01 level (2- tailed). For Instructional

Strategies and Student Engagement, r = .412; Student Engagement and Classroom Management, r = .589; and Instructional Strategies and Classroom Management, r = .589. The correlations are consistent with those that Tschannen-Moran and Woolfolk-Hoy, (2001) obtained. Efficacy in Student Engagement showed significant results, and teachers with postgraduate qualifications rated themselves higher than their colleagues in engaging students in learning.

For teacher practices, results showed no significant relationship between the positive and negative practices reported by the teachers regarding classroom management, student engagement, and instructional strategies. Bonferroni adjustment, which changed alpha from .05 to .017, showed no significant relationships. Recommendations and educational implications for future research are discussed.

Key words: Student Engagement, Classroom Management, Instructional Strategies, Teachers' Sense of Efficacy, Teacher Efficacy, Teacher Self-Efficacy, Self-Efficacy, Social Cognitive Theory

Table of Contents

Dedication……..iii
Acknowledgement……iv
Abstract……...……vi
Chapter 1 Introduction……1
Overview of Botswana 1
Research about Botswana Pre-service Teachers 4
Teacher Effectiveness 5
Teacher Practices and Good Teaching 6
Classroom Management 10
Student Engagement 11
Instruction 12
Teacher Efficacy and Teacher Effectiveness 13
Teacher Self-Efficacy 18
Statement of the Problem 19
Statement of Purpose 21
Research Questions 21
Limitations 23
Delimitations 24
Definition of Terms 24
Summary/Organization of the Dissertation 26
Chapter 2 28
Literature Review 28
Definitions of Teacher Efficacy 29
Theoretical Framework of Teacher Efficacy 31
Human Agency 33
Teacher Efficacy and Education 38
Methods in Teacher Efficacy Research 40
Culturally Responsive Teaching Efficacy Scale 44
Early Work of Teacher Efficacy 48
Collective Efficacy 51
Instructional Strategies, Student Engagement and Ideas in the Literature 62
Ecological Research on Classroom Management and Student Engagement 65
Apprenticeship Model, Student Engagement and Instruction 69
Instructional Strategies 71
Culture's Impact on Teacher Efficacy 73
Research on Teacher Efficacy in Other Countries 74
Teaching Experience and Best Practices 76
Problems with Measurements of Teacher Efficacy 77
Tschannen-Moran and Woolfolk's Scale (TSES) 80

Bandura's Scale 81
Teacher Efficacy Scale of Nigerian Teachers 82
Wolters and Daugherty's Goal Structures Research 85
Summary 89
Chapter 3 Method 91
Research Design 91
Population 91
Instrumentation 94
Procedures for Data Collection 96
Data Analysis 99
Summary 101
Chapter 4 Results 103
Research Question 1 103
Demographic characteristics and ANOVA Results 105
Efficacy in Student Engagement 105
Teaching Experience 110
Efficacy in Instructional Strategies and gender 113
Efficacy in Classroom Management and Teaching Experience. 115
Research Question 2 116
Summary 129
Chapter 5 131
Summary and Discussion 131
Statement of Purpose 131
Results 132
Teacher Practices 138
Additional Results 143
Factors Influencing Botswana Teachers' Responses 147
Class Size 154
Conclusion 156
References 160
Appendix 178
Appendix A 179
Appendix B 180
Appendix C 184
Appendix D 185
Appendix E 186
Appendix F 187
Appendix G 189
Vita 190

List of Tables

Table 1. Correlations of TSES subscales in Botswana and United States of America.109
Table 2. Showing Student Engagement by Qualification……...…….111
Table 3. Student Engagement by Teaching Experience……..… 115
Table 4. Instructional Strategies by Gender ……117
Table 5. Classroom Management by Teaching Experience ……...119
Table 6. Descriptive results of the three groups of teachers ……...122

List of Figures

Figure 1. Efficacy in Student Engagement and Age……. 125
Figure 2. Efficacy in Instructional Strategies and Age ……..128
Figure 3. Efficacy in Classroom Management and Age……..…131

Chapter 1

Introduction

This dissertation reports the findings from a study investigating efficacy beliefs and classroom practices of Botswana junior secondary school teachers. The first chapter introduces the reader to Botswana's location, the history of Botswana education, research about Botswana pre-service teachers, teacher effectiveness, teacher practices and good teaching, classroom management, student engagement, instruction, teacher efficacy, teacher self-efficacy, and five major attractions to teaching. This chapter also includes the statement of the problem, statement of purpose, research questions, and the study's significance, methods, limitations, and delimitations, definitions of terms, and summary and organization of the dissertation.

Overview of Botswana

Botswana is a country in Southern Africa, located to the north of South Africa. It is a landlocked country bordered by Zimbabwe, Zambia, South Africa, Namibia, and Angola. Its area is 602,957 square kilometers (232,802 square miles), about the size as Texas (Prates & Eames, 2012). In 1885, Botswana was a British protectorate known as Bechuanaland. In 1966, it gained its independence from Britain and was renamed Botswana, which refers to a collective group of the Tswana people living in the country. With a population of 1.84 million, Botswana consists of multiple ethnic groups, including Tswana (79%); Kalanga (11%); Basarwa (San 3%); Herero, Bayeyi, Hambukush, Kgalagadi and White (7%) (Index Mundi, 2011).

English is the official language in education and commerce; and Setswana is the national language, which is spoken by 85 % of the Batswana (the people of Botswana). Other tribes speak their native languages. English is the medium of instruction from primary school Standard Three, the third year at primary school, through tertiary education and is required for students entering tertiary education; those enrolling in science majors "must have passed English in their final examination in senior secondary school" (Magogwe & Oliver, 2007, p. 339).

Botswana's history, both before and after independence, is relevant to any discussion of its education practices. Botswana was a British protectorate for 87 years. During the colonial era, teachers were trained in South Africa and other neighboring countries (Vanqa and Bayona, 1999). Botswana, Lesotho, and Swaziland established a joint university in 1966, when Lesotho and Botswana gained their independence from Britain (University of Botswana, 1984-1985). However, in 1975, Lesotho chose to operate independently of Botswana and Swaziland. Botswana's and Swaziland's universities offered education degrees, including the following: Post Certificate in Primary Education (PCE), Certificate in Concurrent Education (CCE), and Diploma and Bachelor of Education and other disciplines (Makwinja & Molosiwa, 1997). Today, Botswana and Swaziland have separate institutions, but maintain educational relationships. Student exchanges between the two countries are common.

Botswana is very committed to developing its education system. Attaining quality education is perceived as being dependent upon teacher training, particularly through

initial training and in-service. Since 1993, Botswana's government has maintained its objective of improving the quality of teaching personnel (Report on National Commission on Education, 1993). The report from the National Commission on Education argued that "The social, economic and technical changes taking place will require teachers, in the near future; to be even better prepared than is possible with the two year Certificate programme and the current admission standards for this programme" (p. 345). Botswana's Long Term Vision 2012 emphasizes that "the quality and training of teachers must be improved as soon as possible" (p. 30). In keeping with Botswana's mission to improve education, the primary teacher-training colleges have upgraded their teaching programs from a two-year to a three-year diploma. Secondary school teachers' training colleges also offer a three-year diploma in secondary education.

Important to improving Botswana's education system is the emphasis on high quality teaching. Though the above-mentioned plans for upgrading programs and producing qualified personnel will help serve the nation at large, it is unknown whether these trained teachers believe they can impact student learning through their classroom management, instructional strategies, and student engagement. The educational vision advocates for all Botswana's citizens to be offered "equitable lifelong education and training that is relevant and responsive to the rapid technological development and the changing socio-economic environment, and that produces knowledgeable, skilled, enterprising, and independent individuals" (National Development Plan, 2009, p. 268).

Pre-service teachers' reasons for choosing teaching as a career show that some teachers are not committed to their profession. Existing research regarding those reasons motivated this writer to investigate efficacy beliefs among junior secondary school teachers. Reasons for becoming teachers are discussed in the following section.

Research about Botswana Pre-service Teachers

O'Mara (1996) studied the reasons first-year students at Molepolole's College of Education (Botswana) gave for becoming teachers. Many students expressed mixed feelings about their chosen profession. Some students seemed to be fully aware of their responsibilities as future teachers, but did not appear entirely committed to their profession.

Although these trainees were concerned about teachers' low salaries, they were mainly interested in job security. Furthermore, some of the reasons students gave for becoming teachers indicated no motivation for imparting knowledge and skills to help students learn (O'Mara, 1996). These findings raise doubts about whether effective instruction can occur when some teachers do not show passion for and commitment to their profession.

Dibapile (2005) analyzed the reasons University of Botswana's trainee teachers listed for choosing the teaching profession. Three categories of reasons for entering the teaching profession emerged: intrinsic, altruistic, and extrinsic. Intrinsic reasons included interest in particular subject matter, knowledge, or expertise. Altruistic reasons included seeing teaching as a socially worthwhile and important job; other responses in this

category indicated a desire to help children succeed and to help society improve. Extrinsic reasons for entering the teaching profession included many external issues not inherent to the work itself, such as long holidays, pay level, and social status. Dibapile's study found that teacher trainees at the University of Botswana chose teaching primarily for extrinsic reasons. Brown (1992); Chuene, Lubben, Newson (1999); Kyriacou and Kobori (1998) reported similar findings.

Teacher Effectiveness

Teacher effectiveness is a solution to the problem of inadequate reasons for choosing the teaching profession because it can contribute to high teacher efficacy. Teachers can impact students to become lifelong learners. Effective teachers develop student learning through interactive instruction, and teachers increase students' accomplishments by facilitating active learning. Effective teachers are viewed as experts in classroom management, which includes "non-instructional personal interactions" (p.98). Relationships can be formed when a teacher respects students as well as effectively manages the classroom. According to Danielson (1996), "…effective teachers attend to elements of the classroom environment, creating and maintaining an atmosphere of respect, caring, and commitment to important work" (p. 123).

Engagement is important to students' learning. Students should be involved in tasks that will provide knowledge and skills enabling them to succeed. Research clearly reveals that students who are engaged earn high grades, perform better on tests, and are unlikely to drop out of school, whereas low student engagement results in students having

poor attendance and undesirable classroom behaviors as well as leaving school (Appleton, Christenson, & Furlong, 2008). Also, school engagement has been associated with students who leave school in large numbers and those who are highly engaged in finishing their schooling (Sharkey, You, & Schnoebelen, 2008).

Engaging students in learning does not simply keep them busy, make the classroom less noisy, or reduce bullying behaviors. Instead, research has shown that "students who are affectively engaged at school hold positive attitudes towards academic activities and achievement striving" (Hudley, Daoud, Polanco, Wright-Castro, & Hershberg, 2003, p.4). This writer agrees. In Botswana junior secondary schools, more students are failing than passing (see the statement of the problem discussed later in this chapter). If those students could be highly engaged in learning, they could develop more critical thinking skills, be motivated, and improve their grades.

Teacher Practices and Good Teaching

Teachers' classroom practices are important to learning because they enable students to succeed in their education. Finding teachers whose practices benefit learners, however, is difficult. Most importantly, teachers should use classroom practices that promote learning as well as the value of learning. Thus, good teaching is essential and is associated with student "outcomes." Therefore, teachers should clarify their instructions. Brophy (2006) reported some "generic features of good teaching" that can be applied in classrooms and enhance student learning:

- Opportunities to learn: Students learn more when most of the available time is allocated to curriculum-related activities and the classroom-management system emphasizes students' engagement in those activities.
- Curricular alignment: All components of the curriculum are aligned to create a cohesive program of accomplishing instructional purposes and goals.
- Strategic teaching: The teacher models for students and instructs students in learning and self-regulation strategies.
- Practice and application: Students have sufficient opportunities to practice and apply what they are learning, and to receive improvement-oriented feedback.
- Achievement expectations: The teacher establishes and follows through on appropriate expectations for learning outcomes. (p.776)

The above principles, which cover classroom management, instructional strategies and student engagement, are useful for teacher practices and are beneficial to students. Students exposed to classrooms characterized by these principles of good teaching will be aware of learning's purpose and value; in turn, they will be less likely to display undesirable behaviors that interfere with the other students' learning.

Teaching competence, as revealed in generating and retaining order in the classroom, has also been viewed as important (Evertson, 1985). Gaining competence can be a problem for teachers who enter the profession for reasons other than providing knowledge and skills to students. For example, teachers who chose to teach only to earn

a living and who are not passionate about helping students learn may give up easily when facing challenges of unruly classroom behaviors.

This writer supervised teacher trainees during a teaching practicum in conjunction with the University of Botswana from 2000 to 2006. The trainees lacked classroom management skills; thus, the students did not pay attention and played during class. The practice teaching was held in junior and senior secondary schools across the country, including the capital city. The practicum was only for ten weeks, so the problems with classroom management may have been with the teachers rather than the trainees. Dibapile's (2005) study revealed Botswana teaching practices, which may be better understood in relation to the practices of other continents, such as Europe and America. Investigating classroom management procedures in the United States and Greece, Little-Akin, Little, and Laniti (2007) reported, "…the high percentage of schools utilizing corporal punishment in both countries is disturbing given the amount of research findings regarding the lack of effectiveness of such a technique" (Little-Akin et al., p. 60). For example, using corporal punishment, sending students out of class, sending them to the school head's office, or sending them home interferes with students' gaining the most from their learning. Corporal punishment is a common discipline method in Botswana (Molefe et al., 2010), though the Ministry of Education forbids it.

Teachers need to use other methods of teaching to engage students in learning and control unnecessary disturbances in learning without using corporal punishment, which is often ineffective. When the teacher cannot control student behavior, instruction as well as

the students' learning will be affected negatively. Thus, the more disruptive students are in classrooms, the more their understanding of the subject matter will be negatively affected. In contrast, when students participate in their assigned tasks, they gain more from the learning experience. Therefore, engaging students in learning is vital.

Educators perceived student engagement in the 1970s and 1980s as related "to students participation and time spent on the task: the more frequently students exhibited behaviors that suggested they were on task (e.g. maintaining direct eye contact, not fidgeting), the more engaged in learning they were believed to be" (Edwards, 2011, pp. 1-2). These researchers focused on students' participation, which is useful because it can enable students to be engaged in learning. Harris**'s (**2008**)** qualitative study investigated teachers and students' engagement in learning and reported the following categories:

- participating in classroom activities and following school rules
- being interested in and enjoying participation in what happens at school
- being motivated and confident in participation in what happens at school
- being involved in thinking
- purposefully learning to reach goals
- and owning and valuing learning. (p. 65)

This writer thinks that these ideas are related to classroom management because when students actively participate, disruptive behaviors are reduced. Students develop interest in their learning, develop critical thinking skills, and have a sense of owning their

learning. A student-centered approach diminishes the teacher's control in the learning process. Thus, students are engaged in learning and have ownership in the tasks.

Classroom Management

Teachers generally view classroom management, which is one element of teacher efficacy, as difficult to learn. For example, Sanford and Evertson (1981) argued that classroom management is a major difficulty for "teachers and administrators in junior high schools" (p. 34). The same difficulty exists at other levels of education. Teachers employ different strategies to control disruptive classroom behaviors. Such control as a way to enhance learning is viewed as a priority in the education community (Lewis, Romi, Qui, & Katz, 2005). Teachers find achieving their teaching goals difficult when they interact with students displaying undesirable behaviors, like bullying. Engaging students in learning is the most important factor in education because they have to be involved in what they are learning to achieve the learning goals. For students to be engaged in their activities, the teacher should be a facilitator as well as having efficacious beliefs that will influence student learning.

A teacher's efficacy belief is "a judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (Armor et al., Bandura as cited in Tschannen-Moran, & Woolfolk Hoy, 2001, p. 783). Teachers with such beliefs are perceived as having a high teacher efficacy, which affects student achievement (Armor et al., 1976; Ashton & Webb, 1986).

Student Engagement

Student engagement is viewed as the ability to encourage students to learn (Harlin, Roberts, Briers, Mowen, & Edgar, 2007). Teachers who encourage students to learn are viewed as having teaching efficacy beliefs, that is, they believe in their abilities to produce desired student learning (Tschannen-Moran & Woolfolk Hoy, 2001). Tschannen-Moran and Woolfolk Hoy found that teachers' sense of efficacy "was best conceptualized as three related dimensions reflecting teachers' sense of efficacy for instruction, management and engagement" (Wolters & Daugherty, 2007, p. 190). Additionally, the teacher's sense of efficacy for student engagement suggests the conviction of an individual that he/she assists students to "become and remain involved, invested or motivated for learning" (p. 182).

Students who are not engaged and not interested in learning are easily discouraged; therefore, teachers who can motivate them to learn are needed. Research emphasizes motivation's importance for engaging students in learning tasks. Motivated students are focused and engaged as they learn. The ability to motivate involves "knowing what kinds of tasks support and feedback encourage students to put forth effort and strive to improve" (Darling-Hammond & Baratz-Snowden, 2006, p.8). Engaging students in learning is important; research clearly shows that students should participate and make decisions that will benefit them in their careers. Fredericks, Blumenfeld, and Paris (2004) classified 44 studies of engagement into three categories: "behavioral engagement encompasses doing work, and following the rules; emotional engagement

includes interest, values, and emotions; and cognitive engagement incorporates motivation, effort and strategy use" (p. 65).

These categories are helpful in better understanding classroom management. Students' participation in academic activities reduces distractions caused by students with idle minds. Cognitive engagement is also related to instruction because students who are engaged will concentrate on the subject matter. Thus, learning requires students to take responsibility for their work (a student-centered approach) rather than looking to teachers to assume all the responsibility.

Instruction

The relationship between the students and the instructional matter is referred to as instruction (Tournaki, Lyublinskaya, & Carolan, 2009). Teachers need to use different instructional methods that will engage students in learning. These methods are also called instructional strategies or "the mechanism of teaching" (Harris et al., p. 79). Having knowledge of various teaching methods enables teachers to plan and prepare their work to meet students' learning needs. Effective teachers plan and prepare, are knowledgeable about their teaching materials, have a clearly defined pedagogy, choose their instructional objectives, and evaluate students as they teach (Tournaki et al.,). Teachers, however, who choose teaching because of job security, may not take much responsibility in planning and preparation; therefore, problems emerge. Effective teachers are viewed as experts in classroom management. However, with a large class, seeing the teacher's expertise may not be easy to see. Yazedjian and Kolkhorst (2007) argued that although large classes

"accommodate" many students, students are denied learning opportunities through relationships. These researchers also reported the "The lack of rapport that students feel [in large classes] with the instructor and with other students can prevent students' motivation to engage in the learning process" (p. 164).

In helping students learn, effective teachers may act as mediators as they interact with learners. Effective teachers' instruction can be perceived as "scaffolded," supporting learners in benefiting from objectives. Learners may not benefit from the goals of learning without the support of effective teachers (Ashman & Conway, 1997). Using the scaffolding metaphor, learning can be thought of as an endeavor "mediated by an expert guiding a novice through a task to ensure the learner acquires the expert's skills" (p. 137). Brophy (2006) recommended "scaffolding students' task engagement," which is one of the principles of good teaching that teachers can use to support students in learning as well as engaging them in tasks effectively. Darling-Hammond and Baratz-Snowden (2006) suggested "understanding of the *subject matter* and skills to be taught in light of the social purposes of education" (p.5). This writer thinks that teaching is sharing knowledge and skills with students and that teacher must be knowledgeable of their materials to impart knowledge effectively to students.

Teacher Efficacy and Teacher Effectiveness

Teacher efficacy is defined as the teacher's belief in his or her ability to organize and execute the course of action required to successfully accomplish a specific teaching task in a particular context (Tschannen-Moran et al., 1998). This definition has

implications for student engagement, instructional strategies, and classroom management because the beliefs of the teacher in himself or herself can have positive effects on student learning.

Bandura's theory of self-efficacy comprises two expectancies: self-efficacy and outcome efficacy. Self-efficacy expectancy allows a teacher to determine if he or she is capable of engaging in a given activity based on his/her abilities. Outcome expectancy enables a teacher to decide if he or she has completed a task to the level desired (Tschannen-Moran & Woolfolk Hoy, 1998). Positive self-efficacy evaluations positively influence students' learning, which, in turn, are vital to teachers' sense of efficacy. Teacher commitment is essential in the teaching profession; teachers who are committed make not only their students, but also the employer and their society at large proud when their students do well at school. Teachers who desire to impact student learning tend to show commitment to their work. Research in educational psychology shows that teachers who are highly efficacious believe they have control or have an impact on students' accomplishments as well as motivating them (Tschannen–Moran & Woolfolk Hoy, 1998).

Motivation is important in the teacher efficacy construct because it is where teachers will feel efficient to assist students in learning. Motivation can also influence the efforts of teachers regarding their instruction, particularly in how they choose their "activities, level of effort, and persistence with students" (Tschannen-Moran & Woolfolk

as cited in Ware & Kitsantas, 2007, p. 303). Research has clearly shown that t teacher efficacy has an impact on "performance, commitment, and professional retention"

High self-efficacy enables teachers to be responsible in their work. Self-efficacious teachers are viewed as having the ability to organize relevant activities and to be patience with students who are struggling. In turn, "the teachers will exhibit good performance and probably remain committed to their work" (Ware & Kitsantas, p. 303). When teachers organize appropriate teaching activities, they are engaging students in learning and are committed to their work. Furthermore, Podel and Soodak (as cited in Erawan, 2010) reported that teachers with high self-efficacy keep students on task. Cousins and Walker found that teachers with high self-efficacy are likely to perform better than those with low self-efficacy because they "implement didactic innovations in the classroom and use classroom management approaches and adequate teaching methods that encourage students' autonomy and reduce custodial control" (p. 252).

Effective teachers should believe in themselves, their instruction, and their student management skills. Teachers who do not know why they are teachers feel confused and stressed in their work. Ng, Nicholas, and Alan (2010) proposed that "teachers' beliefs are the ideas that influence how they conceptualize teaching" (p. 278). This self-conception is central to teacher efficacy. Furthermore, personal beliefs can motivate teachers and affect their ability to engage students, even disruptive ones, in learning. As Pajares (1992) noted, the ability to reflect on personal beliefs is "what it takes to be an effective teacher

and how students ought to behave" (p.322). Personal beliefs are important because they enable teachers to have different ideas regarding students' behavior.

Lack of commitment to the teaching profession implies that teachers have a low teacher efficacy. Such teachers may fail to apply various instructional strategies, and their instruction may be ineffective. This writer argues that some Botswana community junior secondary school teachers may have low teacher efficacy, not applying effective instruction or successfully engaging students in learning. Fuller, Snyder, Chapman, and Hua (1994) reported, "First, teacher behavior in Botswana classrooms is generally simple, involves few instructional tools, and is teacher centered. Most communication occurs between the teacher and the full class of students; instructional routines rely on didactic instruction" (pp. 152-153).

Research has shown that teachers choose the teaching profession for different reasons. Lortie (1975) identified the following five major attractions to teaching:

- Interpersonal: the desire to work with young people or people in general
- Service: teaching is a valuable service of moral worth
- Continuation: fondness for the school setting or a medium for expressing interests, for example, drama or athletics
- Material benefits: job security or comparable salaries
- Time: compatibility preference for hours and vacations. (pp. 27-32)

Teachers attracted by material benefits, time, and service may not maintain efficacious beliefs about being teachers. Lacking various instructional methods in their

work, they fail to engage students in learning and fail to manage disruptive classroom behavior. To help teacher trainees develop more teaching skills and teacher efficacy beliefs, teacher educators can use the continuation attraction, whereby school is viewed as a place for expressing interests. This attraction to teaching can help teacher educators in regard to teacher efficacy because teachers with low teacher efficacy may have entered the teaching profession because of material benefits and not because of a passion to teach (O'Mara, 1996).

In his theory of self-efficacy conception, Bandura (2006a as cited in Skaalvik & Skaalvik, 2007) insisted that individuals are "self-organizing, proactive, self-regulating, and self-reflecting" (p. 611). If teachers displayed the above characteristics universally, fewer complaints about students' low performance would occur. This observation implies that teachers need to be confident in their work to organize learning activities, regulate student behaviors (particularly negative behaviors that hinder learning), evaluate-progress and offer hands-on work to enhance students' learning. Furthermore, Bandura's descriptions have provoked research concentrating on teacher efficacy beliefs. Expanding Bandura's views to educational environments, Ashton and Ashton et al., (as cited in Poulou, 2007) found that "teachers' outcome expectations about the consequences of teaching are reflected in a dimension they labeled teaching efficacy (outcome expectation in Bandura's terms") (p. 192).

Researchers in education have applied Bandura's social cognitive theory, which will be discussed in Chapter 2, and reported on its implication regarding educational

success. Therefore, a teacher's sense of self-efficacy has been acknowledged as essential in relation to successful teaching and is associated "with teachers' and outcomes" (Woolfolk Hoy & Hoy, 1998). Teacher self-efficacy and instructional efficacy are essential in education and can play a major role in overcoming the above-mentioned problems.

Teacher Self-Efficacy

Schunk (2012) defines teachers' self-efficacy as instructional self-efficacy, referring to "personal beliefs about one's capacity to help students learn" (p. 153). Accordingly, instructional self-efficacy should affect the teacher's activities, effort, and persistence with students (Ashton & Webb, 1986). This definition implies that for students to learn effectively, teachers must believe in their own abilities to enhance learning. If a teacher does not have instructional self-efficacy beliefs, students can be disadvantaged in learning. Teachers with low self-efficacy may not plan or prepare their teaching materials. Thus, teacher efficacy influences the effect teachers have on students' learning (Henson, 2002; Tschannen-Moran, & Woolfolk Hoy, 2001). Also, teachers' self-efficacy beliefs and source of motivation positively impact students' learning (Schunk, 2012). Teacher efficacy is also vital to what is described as an intentional teacher (Slavin, 2006).

Higher teacher efficacy has been associated with teachers who assume more responsibility for their. Research has found that "teachers with higher self-efficacy were likely to have a positive classroom environment, support students' ideas, and address

students' needs" (Schunk, 2012, p.153). This writer thinks that teachers who are highly efficacious are effective in their work and that effective teachers teach not only to earn a salary, but also to develop students' learning; also, in the context of teacher efficacy research, teacher self-efficacy is perceived as a "predictor of student achievement" (p.153).

This writer found no studies addressing teacher efficacy beliefs among Botswana secondary school teachers; the absence of such data influenced this writer to investigate those teachers' efficacious beliefs. Problems regarding limited research on teacher efficacy are discussed below.

Statement of the Problem

Research on teacher efficacy and classroom management is lacking in Botswana as well as in other African countries. Klaseen, Tze, Betts and Gordon (2011) investigated studies of teacher self-efficacy from 1998 to 2009, using Psyc info, Web of science and Eric databases to search for articles written in English. They reported only 2% of such studies were conducted in Africa, but did not mention the specific countries where the research occurred.

While examining teacher efficacy in the University of Botswana Library's Botswana Collection section, this writer did not find any work related to teacher efficacy. Hence, teacher efficacy needs to be investigated. Magogwe and Oliver (2007) researched "the relationship between language and learning strategies, proficiency, and self-efficacy beliefs of students in Botswana" and found that the students used average self-efficacy

beliefs in "their learning of the English language although not consistently so" (p. 350). Brandon (2000) investigated gender differences' effect on self-efficacy of prospective teachers in Botswana's four primary teacher colleges. Her study focused on "male and female students' beliefs about their ability to perform specific teaching competences before going into the classroom" (p. 37). The instrument used in Brandon's study was Likert-type and included 16 items that measured students' behaviors. Brandon found that female pre-service teachers had lower self-efficacy in "specific teaching competences" than males prior to going into the field. Both these studies analyzed students' self-efficacy, leaving teacher efficacy under researched.

Since no study exists on teacher efficacy in Botswana, this researcher investigated Botswana junior secondary school teachers' sense-of efficacy and classroom management. The present study's results will benefit teacher educators, the ministry of education, and stake holders and will point to ways to improve Botswana's teacher education in general.

In 2009, a higher percentage of students failed the Junior Certificate examination than passed it (see Appendix A for summary of results). Students who fail this exam are not admitted to senior secondary schools. The larger number of failing students provided the writer additional motivation to investigate junior secondary teachers' efficacy beliefs.

Botswana's government has made quality education and teacher training priorities. As a result, teacher educators must use effective methods to ensure the curriculum encourages high teacher efficacy. The curriculum should include classroom

management skills that can enable teachers to use various instructional approaches to promote learning. The present study's purpose is discussed below.

Statement of Purpose

The study's purpose was to examine three aspects of teacher efficacy: student engagement, instructional strategies and classroom management among Botswana junior secondary school (JSS). The Teachers' Sense of Efficacy Scale only measures teachers' self-efficacy. Tschannen-Moran and Woolfolk's (2001) Short Form instrument was used to assess the Botswana junior secondary school teachers' responses. In addition, teachers were asked to respond to statements about the practices they use to manage disruptive classroom behaviors. The researcher's intent was to explore types of teacher practices and determine whether they relate to a high or low level of self-efficacy.

Research Questions

The following research questions guided the study

1. For Community Junior Secondary School teachers in Botswana, what relationships, if any, exist among the three sub-scales of the TSES: Student Engagement, Instructional Strategies and Classroom Management? Previous research in the United States of America showed significant relationships among the three subscales. This study is being conducted to determine whether this relationship also exists in Botswana?
2. Is there a relationship between the use of positive and negative practices reported

by teachers regarding Student Engagement, Instructional Strategies and Classroom Management and their level of teacher efficacy?

Significance of the Study

The present study is important because teacher efficacy has been found to be a vital construct in the development of education "in every part of the world" (Cheung, 2008, p.103). Berman, McLaughlin, Bass, Paully and Zellman (1997) described teacher efficacy as "the extent to which the teacher believes he or she has the capacity to affect student performance "(p.4).

Research about teachers' sense of efficacy in Botswana is essential because academic-setting investigations have shown that self-efficacy beliefs have a major impact on students' behavior and success in learning. In addition, more studies have suggested that teachers' sense of efficacy is a key factor in students' accomplishments and motivation (Bandura, 1997). The present study's findings can assist in solving educational problems as well as influence teachers with low self-efficacy to be productive in their work. Betoret (2006) found that teachers with low self-efficacy experienced more job-related stress than teachers with high self-efficacy

Method

In the present study of Botswana's junior secondary school teachers, a questionnaire was used along with a checklist of teacher practices for classroom management, instructional strategies, and student engagement (see Chapter 3 for details).

This writer shares Poulou's (2007) belief that classroom management, instructional strategies, and student engagement are aspects of the teaching profession that should be further investigated. Therefore, this study will reveal whether Botswana teachers have high or low teacher efficacy and whether they manage their classrooms and engage students in learning. The study will also reveal any relationships among the types of practices teachers reported using for classroom management, instructional strategies, and student engagement.

Limitations

Nardi (2006) suggested that a questionnaire is "…ideally suited for respondents who can read, measuring people's opinions, and when we want to get very large number of respondents too difficult to observe with qualitative methods" (p. 17). The study's quantitative approach is the main limitation. The lack of a random sample implies that the researcher used a convenience sample of teachers available to participate in the study; therefore, the findings cannot be generalized to all Botswana teachers. The researcher believes that a questionnaire as a method of collecting data from teachers is relevant.

The other limitation is the TSES (Short Form) Instrument, which was designed in the United States of America and not used in the past with Botswana teachers. However, the TSES has been used in other non-Western countries, where its reliability and validity have been noted (Klassen, Bong, Usher, Chong, Huang, Wong, & Georgiou, 2009). Woolfolk Hoy and Spero (2005) considered TSES to be "superior to previous measures of teacher efficacy in that it has a unified and stable factor structure" and is related to

self-efficacy theory (p. 354). To overcome this limitation, the researcher and research assistants were available during completion of the questionnaire to clarify the meaning of specific items.

The teacher-practices items added to the questionnaire were drawn from research (see Lewis et al., 2005; Little et al., 2007; Melnick, 2008; Weinstein, 1998; & Woolfolk, 2010). They are informal measures because no psychometric analyses have been done to create a formal instrument.

Delimitations

The study has been delimited to junior secondary school teachers in Gaborone and surrounding areas in Botswana. Limited time and funds for the researcher as a sponsored student restricted her from surveying other junior secondary school teachers and senior secondary school teachers across the country. The study is further delimited to the TSES (Short Form), consisting of three subscales for measuring teacher efficacy and its twelve items. Buehl and Fives (2010) reported that "the 3 factor structure-efficacy" for classroom management, instructional practices, and student engagement is relevant to in-service teachers.

Definition of Terms

Terms used in the present study are defined below:

Agency: "acts done intentionally" (Bandura, 1997, p. 3).

Collective Efficacy: "a group's shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainments" (Bandura, 1997, p. 477).

Teacher Efficacy: "teacher's belief in his or her ability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context" (Tschannen-Moran, Hoy, & Woolfolk Hoy, 1998, p. 233).

Symbolizing Capability: the ability for people to use symbols in order to understand and manage their surroundings (Bandura, 1997).

Mastery Experiences: one of the sources of information from which self-efficacy beliefs are formed are useful in the educational context because they are successful teaching experiences, increasing a teacher's belief in his /her own self- efficacy (Bandura, 1997).

Perceived Self-Efficacy: "beliefs in one's capabilities to organize and execute a course of action required to produce given attainments" (Bandura, 1997, p. 3).

Social Cognitive Theory: Proposed by Albert Bandura, this theory views people's behavior from a model of triadic reciprocality. It assumes that cognitive, personal factors and the environment function and interact with each other, determining an individual's behavior (Bandura, 1986 & 1989).

Verbal Persuasion: engaging people to accept that they have abilities that can enable them to accomplish whatever they want. Verbal persuasion brings fruitful results when individuals believe they control their future through their own behavior.

Physiological State: Humans depend partially on their physiological being. According to Bandura, "They read their somatic arousal in stressful or taxing situations as ominous sign of vulnerability to dysfunction" (1986, p. 401).

Vicarious Experience: Observing others' accomplishments can influence the observer to perform better.

PGDE: Postgraduate Diploma in Education, a one-year teaching certification offered by the Department of Educational Foundations, University of Botswana, to students who have a degree in Bachelor of Arts Humanities and who want to train as teachers or seek related degrees.

JSS: Junior Secondary School (Public Secondary schools in Botswana that offer three years of secondary education). The age range of students enrolled in these schools is 12-15 years.

Summary/Organization of the Dissertation

Chapter 1 introduces the present study of teacher efficacy and classroom management conducted among Botswana junior secondary school teachers. Since Botswana was liberated from Britain, the government has tried to improve education. As a result, teacher-preparation programs have been upgraded. Previous research in

Botswana has involved not only trainees and their reasons for choosing a teaching career but also students' self-efficacy beliefs. While such research is beneficial, research on teachers' sense of efficacy is lacking. That deficit in the research led to the present study investigating teacher efficacy and classroom management among Botswana junior

secondary school teachers. Chapter 1 includes the following sections: introduction, Botswana's history of education, research about pre-service teachers, teacher effectiveness, teacher practices and good teaching, classroom management, student engagement, instruction, teacher efficacy, teacher self-efficacy, and major attractions to teaching. This chapter also includes the following: statement of the problem, statement of purpose, research questions, and significance of the study, method, limitations, and delimitations, definitions of terms, summary, and organization of the dissertation. Chapter 2 provides the following: literature review, research on teachers' sense of efficacy, student engagement instructional strategies and classroom management, and theoretical framework. Chapter 3 describes the research design, instrument, population, data collection, and analysis. Chapter 4 presents the study's findings. Chapter 5 summarizes the research findings, discusses the findings, and makes recommendations for future research.

Chapter 2

Literature Review

Chapter 2 examines the literature reviewed and presents evidence supporting lack of research in teacher efficacy and classroom management in Botswana. Specifically, this review includes studies of the following: teachers' sense of efficacy and its relation to education, collective efficacy, classroom management, ecological research on classroom management, cultural impact on teacher efficacy, teacher efficacy in other countries, methods of teacher efficacy research, and problems associated with its measurements.

From 2000 to 2006, this writer supervised the University of Botswana's Post Graduate Diploma in Education trainees (PGDE) during their field work in junior and secondary schools. The trainees lacked classroom management skills as evidenced by learners not paying attention during class. (Because the trainee teachers' practicum was only 10 weeks, classroom-management problems could have been the regular teachers' fault rather than the trainees'). As a result of these observations, this writer began exploring the research literature, only to find that few studies had been conducted in relationship to teacher efficacy and classroom management in Botswana as well as in all of Africa. Thus, what influenced the literature search of teacher efficacy and classroom management also provoked the need to study the teacher efficacy construct in Botswana.

Investigating teacher self-efficacy from 1998 to 2009, Klaseen, Tze, Betts and Gordon (2011) used Psyc INFO, Web of Science, and Eric databases searching for articles written in English and reported that only 2 % of the studies were done in Africa.

However, the researchers did not mention the specific African countries. Based on Magogwe and Oliver's (2007) study of "the relationship between language and learning strategies, proficiency and self-efficacy beliefs of Botswana students, they "used average self-efficacy beliefs in 'their learning of the English Language although not consistently so" (p. 350). Brandon's (2000) study involving Botswana's four primary teacher colleges focused on "male and female students' beliefs about their ability to perform specific teaching competencies before going into the classroom" (p.37). Using a Likert-type instrument that included 16 items measuring students' behaviors, Brandon found differences between male and female pre-service teachers. Prior to entering the field, female students had lower self-efficacy in "specific teaching competences" than males. Both of these studies analyzed efficacy of students, but not of teachers. Researchers of teacher efficacy have different views of its definition; the definitions are discussed below.

Definitions of Teacher Efficacy

While teacher efficacy is essential and can play a major role in overcoming problems in education, education researchers disagree on its definition and how it should be measured. These disagreements have brought confusion and have resulted in different descriptions of the concept in the field. Dellinger, Bobbett, Olivier, and Ellett (2008) argued that the manner in which the term *teacher efficacy* has been used by various researchers guided by Rand Corporation's studies has brought about confusion because of their narrow description of the concept. Also the description of the term *teacher self-efficacy* in reference to educational writings appeared with Bandura's definitions; the

measurements “the instruments used in many of the studies did not validly assess teacher self-efficacy beliefs (Dellinger et al., 2008, p.752). For example, Ashton (1985) proposed that teachers’ sense of efficacy involves “their beliefs in their ability to have a positive effect on student learning” (p. 142).

On the other hand, Dellinger noted that the following Rand items provided a research channel for a long time: (1) “When it comes right 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.” (2) “If I really try hard, I can get through to even the most difficult or unmotivated students” (Tschannen-Moran, Woolfolk Hoy, & Hoy et al., 1998, p. 203). Other researchers continue to use the following terminology: *teacher sense of efficacy*, *teacher efficacy*, and *teacher self-efficacy*. Tschannen-Moran, Hoy, and Woolfolk Hoy (1998) defined *teacher efficacy* as the “teacher’s belief in her and his ability to organize and execute the course of action required to successfully accomplish a specific teaching task in a particular context” (p. 233). *Teacher efficacy* has also been described as “teachers’ beliefs in their abilities to affect student performance” (Armor et al.; Gibson & Dembo (as cited in Dellinger et al., 2008, p.753). The following terms were used during the literature search: *teacher efficacy and classroom management, teachers’ sense of efficacy, teachers’ beliefs about self-efficacy*, *teacher efficacy and Botswana secondary schools teachers, teaching and teacher efficacy, teachers’ sense of efficacy and classroom management in Botswana, teacher efficacy in Africa, and classroom management and teachers*. Those terms were narrowed by using the following: *teachers’*

sense of efficacy and beliefs, teacher efficacy and Botswana. The term *classroom management and teachers* is used throughout this chapter; the terms *teacher efficacy, teachers' sense of efficacy* and *teacher self-efficacy* are used interchangeably.

This writer used Education Full Text, Eric, and Google Scholar in the search for teacher efficacy studies on the University of Tennessee library's website. Searching these databases showed more studies and information related to teacher efficacy even by different subjects for example, mathematics, science and agriculture. Thus, research on teacher efficacy has also investigated teachers' efficacy beliefs in relation to the above-mentioned subjects. This writer met with the University of Tennessee's Education Librarian for assistance with other sources, including interlibrary loans. The literature reviewed was guided by two early theories of teacher efficacy—Bandura's social cognitive theory and Rotter's internal locus of control theory—which are discussed below.

Theoretical Framework of Teacher Efficacy

Two theories have guided this literature review. Bandura's (1977) social cognitive theory is considered the foundation of teacher efficacy and, therefore, has been used in other teacher efficacy studies. Rotter's (1966) locus of control theory is included because Rand Corporation's researchers first used it to build on their research about teacher efficacy.

Bandura (1977) proposed that "teacher's efficacy is a type of self-efficacy," which he defined as "the outcomes of cognitive process in which people construct beliefs

about their capacity to perform at a given level of competence" (p. 480). He suggested that beliefs of people have an effect on their efforts, particularly their determination or flexibility when encountering problems, as well as the ways they cope with their anxiety in challenging situations. His social cognitive theory with its model of triadic reciprocal causation, assumes that personal factors and the environment interrelate to influence an individual's behavior and the environment is also influenced by behavior. Bandura's convictions about how humans function have led education researchers to apply the self-efficacy theory to teacher-efficacy investigations (Dellinger et al.,).

The social cognitive theory assumes that teachers who believe they are unsuccessful with students will not usually put more effort into planning and teaching. When confronted with problems for the first time, they are discouraged easily, although they may be aware of approaches they can use to help students. High self-efficacy beliefs are important because they are perceived as satisfying predictions that support an individual's abilities or inabilities (Tschannen-Moran & Woolfolk Hoy, 2007). Negative beliefs cause teachers to have low teacher efficacy, even if they know how to engage students in learning. If these teachers believe they will not be successful, they may get stuck and not use different methods in teaching or in managing unruly behavior. Additionally, Bandura suggested that teacher efficacy can be classified as either personal or professional. Personal efficacy refers to accountability and how a teacher acknowledges student learning. Professional efficacy is the conviction that every teacher is capable of affecting external factors (Wheatley, 2002).

Human Agency

Part of Bandura's theory is the concept of human agency, which is discussed as it relates to teacher efficacy. According to Bandura (1997), *agency* implies "acts done intentionally" (p. 3). This concept is important because if teachers take responsibility for their work, their positive attitude toward their work will add to effective teaching, thus enhancing student learning.

Human agency is also important in understanding the concept of reciprocal determinism. Although individuals determine what to do, rather than what will actually happen, behavior is perceived as being influenced by other factors as well. Social cognitive theory assumes that people are capable of influencing and changing their actions. Bandura also noted that efficacy beliefs have a major impact on human agency. He asserted that "unless people believe they can produce desired effects, by their actions; they have little incentive to act" and then concluded, "Efficacy belief, therefore, is a major basis of action" (pp. 2-3). Bandura also asserted that self-efficacy beliefs are active, individual characteristics that are important to "human agency"; thus, self-efficacy beliefs are viewed as facilitating connections between knowledge and behavior while interrelating in environmental settings (Dellinger et al., 2008).

The notion of self-efficacy beliefs is essential regarding reciprocal causation because of their effect on achieving tasks and objectives. Human agency enables people to take responsibility for their work; and with teachers, it encourages them to be effective and have positive intentions regarding their jobs. Efficacy beliefs are not thought of as

firm personality attributes but instead as "active and learned systems of beliefs held in a context" Dellinger et al., 2008 (p.752). Thus, those beliefs can be different in relation to the "content and specificity of the tasks" (p.752). Teachers' self-efficacy beliefs will vary within their environments, in behaviors, as well as in the knowledge obtained in their educational settings. Therefore, teacher educators are challenged with preparing teachers to be task oriented to achieve their goals.

Teachers are viewed as directing their lives by believing in their personal efficacy. Perceived self-efficacy, according to Bandura (1997), includes "beliefs in one's capabilities to organize and execute the courses of action required [in] producing given attainment" (p.3). This definition also implies that individuals believe they are capable of doing what is required in preparing and completing excellent assignments (Dellinger et al., 2008). To succeed, humans need to understand clearly what they are doing. For example, teachers need to understand the curriculum they teach if they are to engage students effectively in learning. To enhance students' learning, they must also use different methods as well as manage classroom behavior.

In the context of social cognitive theory, people have various abilities enabling them to function. In relation to human agency, Bandura (1989) suggested the notion of symbolizing capability, the ability to use symbols as a way of offering people an important tool to raise awareness of understanding and to have control over their environment. Environmental factors affect behavior through cognitive functions. According to Bandura, "Symbols serve as the vehicle of thought" (p. 6). Symbols

provide people with meaning, help in understanding how to survive, and enable individuals to converse with each other regardless of "any distance, in time and space" (p.9). Therefore, in learning settings, teachers' conversations with students are important. Positive communications, rather than verbal abuse or corporal punishment, can enhance learning. Using symbols enables people to manage and change "transient experiences into internal models that serve as guides for future action" (Bandura, 1986, p. 18). The ability of teachers to think and reflect on their work is important because it enables them to be focused in their daily preparation, to have objectives, and to set work-related goals. Teachers who are not committed to their work often go to classrooms without lesson plans, suggesting that they have neither thought about nor set goals for their work. On the other hand, efficacy beliefs cause teachers to put more effort into teaching and to be motivated to set goals for themselves (Allinder as cited in Tschannen-Moran & Woolfolk Hoy, 2001). Thus, because thought serves as the foundation for success, concerns, and disappointments, behavior should be goal-oriented and controlled by forethought (Bandura, 1986).

Exercising forethought, according to Bandura, leads to predictions, greater motivation and guidance of actions. Thus, people can set goals for their actions and predict those actions' outcomes. Bandura added, "Most human behavior, being purposive is regulated by forethought" (1986, p.27). Teachers' ability to set objectives leads to self-regulation, which enhances teacher efficacy. Teachers can take responsibility for their work, not because the school administration is going to assess it, but because

they have objectives to achieve as they impact student learning. They are guided by their thoughts about and motivation for their work. Forethought is related to teacher efficacy because teachers with greater efficacy are perceived as doing well in planning and organizing their work Allinder (as cited in Tschannen-Moran & Woolfok Hoy, 2001). Teacher efficacy is also related to motivation (Midgley, Feldlaufer; & Eccles as cited in Tschannen-Moran & Woolfolk Hoy, 2001). Self-regulation capability is another component of social cognitive theory. Individuals, accordingly, sometimes act in certain ways to please others (Bandura, 1986). Most behavior involves motivation and is adjusted by inner patterns and self-assessment responses. Personal guidelines are set and responses are self-assessed, affecting future behavior. Self-regulation assists people in controlling their motivation and actions. For example, paternal assistance and restrictions affect "socialization processes," but assistance from families or adults is not always available to direct children throughout life. Symbols, forethought, and self-regulation as discussed above are useful not only to teachers but also to students, who can take responsibility in their learning without ongoing support from significant others. In fact, children should be able regulate their behavior without continuous support. Bandura (1989) adds, "Once the capability for self-direction is achieved, self-demands and self-sanctions serve as major guides, motivators and deterrents" (p. 32).

Teachers' positive use of cognitive ability is essential; thinking consciously is important and adds to high teacher efficacy. Teachers with high teacher efficacy can assess their performance in classroom settings and explore ideas that affect student

learning. They can also accept the abilities of all learners, including low performers, rather than punishing students who do not do well academically. Moreover, strong teacher efficacy deters teachers from criticizing students when they make mistakes (Ashton & Webb, 1986). Teachers who do not criticize students when they make mistakes are doing a good job because they concentrate on students' academic needs. Self- refection has been perceived as unique to a person's character and the ability to think consciously. Individuals are able to evaluate their abilities and reflect on their "thought process" (Bandura, 1986).

When people reflect on their different experiences based on their knowledge base, they have developed their own concepts about information available to them. Although reflection is not the only channel through which humans acquire knowledge, it is a means through which they constantly assess and adjust their thoughts. When people engage in self-assessment, they modify their thoughts and plan events, evaluate their cognitive ability based on outcomes, and make appropriate adjustments (Bandura, 1986). Self-efficacy is most relevant to these types of self-reflection. Belief in self-efficacy acts as a mediator between knowledge and behaviors while connecting to environmental situations. Self-efficacy can provide useful information for teachers who maintain certain knowledge and skills; if they have high teacher efficacy, they can affect students' behavior as well as overcome certain environmental challenges. In addition to motivation and patience with low performing students, the beliefs that teachers have in relation to

their work, especially potential beliefs to enhance students' learning is vital. Teacher efficacy and its relation to education are discussed below.

Teacher Efficacy and Education

Teacher-efficacy beliefs need to be investigated in an educational setting because research has revealed that teacher efficacy is lowest among teacher attributes associated with teaching and learning (Woolfolk & Hoy, 1990). In its application to educational settings, teacher efficacy means teachers possess ideas regarding their abilities to have an impact on students (Tournaki & Podell, 2005). Teacher efficacy has been researched extensively, and conclusions have been drawn that are relevant to student achievement as well as classroom management (Armor, Conroy-Oseguera, Cox, King, McDonnell, Pascal, Paully, and Zelman, (1976). Such research can reduce some problems in education, especially when teacher efficacy is investigated in relation to other factors. For example, lack of experience in teaching has been associated with low teacher efficacy. Rizvi and Elliot (2005) analyzed their data from Karachi teachers in Pakistani primary schools and found various "dimensions of teacher efficacy, teacher practice, teacher collaboration, and teacher leadership" (p. 46).

Having teachers with high teacher-efficacy beliefs is important because they can affect student learning positively. Also, research has reported that "when teachers are highly efficacious, their students are found to have a high level of academic achievement, autonomy and motivation, and a firm belief in their own efficacy" Cheung, 2008, p. 104). These teachers are also ambitious, comfortable with new ideas, and patient when facing

challenging situations because they are influenced by their efficacious beliefs. They are stay longer in their vocation, devote more time in teaching, put more effort into organizing their classrooms, and are passionate about teaching.

Additionally, teachers with a high efficacy are perceptive regarding students' needs in the learning environment (Cheung, 2008). High efficacious teachers engage students in learning, use various instructional methods, and control undesirable classroom behavior. Unfortunately, some teachers use corporal and other sorts of punishment when their students make mistakes. This punishment is contrary to what teacher- efficacy research reveals as being effective; highly efficacious teacher criticize their students errors less, devote extra time in assisting struggling students, and show interest in students' education (Ho & Hau, 2004; Tschannen-Moran & Woolfolk Hoy, 2001).

By making recommendations, teacher-efficacy researchers can assist teachers that are insufficiently confident about their teaching abilities. For example, coaching in-service teachers with various instructional methods promotes effective teaching. Also, teaching efficacy has been viewed as having an impact on the growth of beliefs about being a good teacher (Ng, Nicholas, & Alan, 2010). Efficacy is the ability to bring about desired results (Tschannen-Moran & Hoy, 2007). Therefore, teacher self-efficacy can motivate teachers to be effective and to manage difficult students.

Researchers who investigated teacher efficacy had different views, even regarding the methods and instruments measuring the construct. Teacher-efficacy research methods

as well as the questions some researchers asked in their investigations are discussed below.

Methods in Teacher Efficacy Research

Because teacher efficacy research is broad and individual researchers have pursued individual interests, preparing a coherent literature review was challenging. Furthermore, some researchers did not have clearly defined research questions, but simply used modified teacher-efficacy instruments. For example, in researching Taiwanese elementary teachers' views of science teaching self-efficacy, Liu, Jack, and Chiu (2007) posed the following questions:

- How do the years of teaching experience, both general and science-specific, influence Taiwanese elementary teachers' personal science teaching efficacy?
- What environmental factors influence the teachers' sense of science teaching efficacy and teaching outcome expectations as they relate to student achievement? (p. 23)

Using Gibson and Dembo's (1984) Teacher Efficacy Scale (TES), these researchers identified two dimensions of teaching efficacy: personal teaching efficacy (PE) and teaching efficacy (TE).

Other researchers have challenged the reliability of TES (see, for example, Cantrell, Young & Moore; Denzine et al.; Gibson & Dembo; Henson, Smolleck, Zembal-Saul &Yoder as cited in Liu et al., 2007). Viewing TES as an unreliable and invalid measurement of teacher efficacy, Riggs and Enocks designed two forms of the Science

Teaching Efficacy Belief Instrument (STEBI) (as cited in Klassen et al., 2011). Form A is for in-service teachers while Form B for pre-service teachers. STEBI has limitations too since it was based on Gibson and Dembo's (1984) scale (see Klassen et al., 2011).

Researchers have also developed scales to measure Personal Science Teaching Efficacy beliefs (PSTE) and Science Teaching Outcome Expectancy (STOE). Gencer and Cakiroglu (2007) researched Turkish pre-service teachers' efficacy beliefs about teaching science and managing classroom. Using the STEBI and ABCC instruments, these researchers based their studies on Bandura and Tschannen-Moran et al.,'s (1998) concept that teacher efficacy is about "context" and specialized subject matter. Liu et al., (2007) found that experience in teaching science does not determine that an individual will have a high efficacy in teaching science. Other researchers translated TSES instrument into their participants' native language. For example, in the comparative study of Hong Kong and Shanghai in-service teachers, Cheung (2008) used the term *JiaoShi XiaoNeng*, which means "teacher efficacy". The translation allowed participants to understand the meaning of teacher efficacy in their primary language.

Liaw (2009) explored the impact of classroom teaching and group discussion on pre-service teachers' teacher efficacy. The primary question asked was "How does the exposure to various sources of teacher efficacy affect the confidence level of pre-service elementary teachers in Taiwan?" Liaw used the Teacher Efficacy Scale (Short Form), which Hoy and Woolfolk (1993) developed and different researchers primarily used to measure elementary teachers' teacher efficacy. Liaw believed that the instruments' items,

as well as quantitative and qualitative approaches, were relevant to Taiwan's subject matter. Liaw found that Taiwan elementary school teachers had a high personal teaching efficacy (PTE) and that they valued group discussion as a channel of collaboration promoting personal teaching efficacy.

Cheung (2008) had similar results. Collective efficacy's importance is evident in Cheung's study, in which teachers learned from each other and shared ideas that could improve their teaching. Collective efficacy's influence is relevant to Bandura's self-efficacy theory (1997), which proposed perceived collective efficacy and suggested that it is "a group's shared belief in its conjoint capabilities to organize and execute the course of action required to produce given levels of attainments" (p. 477). Though participants were uneasy about classroom management when they were teaching, they were comfortable with "performance accomplishment," particularly when they assisted students in learning English (Liaw, 2009). The pre-service teachers felt uncomfortable being present when others were receiving feedback; these teachers felt they "might be creating an uneasy moment because of a culture that emphasizes group harmony more but individualism less" (p.179). This situation is an example of collective self-view.

Face-to-face evaluations also caused distress in some cultures. For instance, Chinese culture values well-mannered behavior and is not comfortable with conflict and close contact (Liaw, 2009). Like the Chinese, Botswana culture is also interdependent; valuing privacy, Botswana teachers believed that feedback should be given privately. Therefore, as discussed earlier, teacher efficacy research should adopt measures suited

for collective cultures. Longitudinal studies may be helpful with more participants addressing group work related to the trainees' culture.

Gencer and Cakiroglu (2007) reported that pre-service teachers were confident in teaching science, Personal Science Teaching Efficacy (PSTE), and believed that effective instruction does impact students' learning, Science Teaching Outcome Expectancy (STOE). Their results for classroom management revealed that pre-service teachers preferred flexible approaches to classroom management to maintain a good relationship with students. They noted, for example, that "respondents agree in giving students opportunities to create their own daily routines, to judge the quality of their own work, to pursue their own interest and select their own seats" (p. 670). The trainees were reported "to be more interventionist on instructional management subscale, which addresses aspects of classroom management, such as monitoring seatwork, instructing daily routines and allocating materials" (p. 670).

These studies' findings are consistent with those of Woolfolk et al., (1990) and Ho and Hau (2004). Regarding classroom management, Gencer and Cakiroglu's (2007) results are related to those of Evertson, Evertson, and Emmer; Morris-Rothschild; Guskey and Passaro; Chen; Brophy; Hoi, Woolfolk, and Hoy; Kounin and Doyle (as cited in Brophy, 2006). Tschannen-Moran and Hoy (2007) compared in-service and prospective teachers on efficacy expectancies and on "the differential and antecedents of self-efficacy beliefs" (p.944); Torre- Cruz and Casanova's researched Spanish participants. Both studies used Tschannen-Moran and Hoy's (2001) TSES instrument to

measure teachers' efficacy. Torre Cruz and Casanova (2007) translated this instrument into Spanish to facilitate their participants' understanding. Two items from the Rand scale were also incorporated, as well as Emmer and Hickman's (1991) nine items for classroom management and discipline efficacy.

Tschannen-Moran and Hoy (2007) investigated four sources of collective efficacy among prospective teachers. They found that the teacher trainees preferred materials used for teaching social interactions and that their associates' assistance was important to their self-efficacy. Liaw (2009) reported the same results.

Research on teacher efficacy has grown, and other researchers have designed instruments to investigate the construct in other cultures. Measures of responsive teaching efficacy are discussed below.

Culturally Responsive Teaching Efficacy Scale

Siwatu (2007) investigated culturally responsive teaching self-efficacy and outcome expectancy beliefs among pre-service teachers. The following questions were asked:

- How efficacious are pre-service teachers in their ability to execute the practices of culturally responsive teaching?
- Do pre-service teachers believe in the positive outcomes associated with culturally responsive teaching?
- What is the factor structure of culturally responsive teaching self-efficacy and outcome expectancy scales?

- What is the relationship between pre-service teachers' culturally responsive teaching self-efficacy and outcome expectancy beliefs? (pp. 1086-1101)

Like Siwatu's (2007) study, many of the previously mentioned studies also advocated for instruments that would measure culturally responsive teaching. Many of these studies researched teachers' sense of efficacy and outcome expectancy beliefs (Bandura, 1977). Those "outcome expectations concern the likely consequences of engaging in the specified behavior" (Siwatu, 2007, pp. 1086-1101).

Siwatu designed the Cultural Responsive Teaching Efficacy Scale (CRTSE) using items from Bandura's (1977) self-efficacy concept. Siwatu (2006a) also designed the Cultural Responsive Teaching Outcome Expectancy (CRTOE) and was guided by Bandura's (1977) description of outcome expectancies: "a person's estimate that a given behavior will lead to a certain outcome" (p.193). According to Siwatu (2007), the 26-item scale was constructed to evaluate teachers' beliefs in employing culturally responsive teaching performance that would result in effective classroom and student outcomes.

According to Siwatu's study, pre-service teachers had high efficacy and capabilities in assisting students. These teachers perceived themselves as valued classroom members and reflected on how they related personally with students. Also scoring higher on outcome expectancy than in-service teachers, pre-service teachers established trust with their students that helped to influence the growth of teacher-student relationships (Siwatu, 2007). The CRTSE and CRTOE instruments showed reliability with pre-service teachers. Siwatu reported the following results:

- Confidence to execute the practices of culturally responsive teaching
- Beliefs about the expected outcomes of engaging in culturally responsive teaching. (pp.1086-1101)

Based on these findings, Bandura's social cognitive theory has contributed to different studies of teacher efficacy, even within different cultures.

Gibson and Dembo (1984) developed a 30-item teacher efficacy instrument. Those items were converted into two factors, similar to Rand's, involving personal teaching (PTE), trust in one's teaching capabilities, and general teaching efficacy (GTE). Gibson and Dembo asserted that these factors relate to Bandura's theory, suggesting that PTE is related to self-efficacy, while GTE "measures outcome expectant dimension" (Liu et al., p. 24). However, they also reported the limitations of the Teacher Efficacy Scale (TSE) when they researched in-service teachers' science teaching efficacy in Taiwan. These researchers drew from Bandura's theory and Tschannen-Moran et al.,'s (1998) assumptions that "teacher efficacy is both context- and subject-matter specific" (Liu et al., 2007, p. 33). Liu et al., used Riggs and Enoch's (1990) Science Teaching Efficacy Belief Instrument (STEBI). The researchers chose the STEBI based on the literature reviewed and the instrument's relevancy to science (Liu et al.,). However, items were altered in their translation from English to Chinese.

Gibson and Dembo (1984) focused on Bandura's social cognitive theory. Their extension of the TSE instrument advanced teacher-efficacy research. Investigators used the instrument to explore the effect of the teachers' sense of efficacy regarding their own

behavior and their view of student accomplishments, and to evaluate the relationship of teachers' efficacy to the school's overall structure and the environment (Tschannen-Moran et al., 1998). Various studies, such as those of Guskey and Passaro, Hoy, and Woolfolk Hoy (1993), also have reported on personal and general teaching efficacies.

Teacher-efficacy researchers extended each other's work to develop more valid and reliable instruments. For example, Emmer and Hickman added six items to Gibson and Dembo instrument's previous 30, including considerations of efficacy for classroom management/discipline, personal teaching, and external influences (as cited in Cheung, 2008). The expansion of other researchers' work contributed to the perspective that teacher self-efficacy, as reported by Cheung, particularly regarding Bandura's 30 items, characterized seven subscales: efficacy to influence decision making, efficacy to influence school resources, instructional efficacy, disciplinary efficacy, efficacy to enlist parental involvement, efficacy to enlist community involvement, and efficacy to create positive school climate. These subscales show that "teacher efficacy is not uniform across different subject matters or different types of tasks they [teachers] are asked to perform" (p 105).

Teacher-efficacy research is broad with various ideas. This study, however, focused on ideas identified from the literature as suggested by Rotter and Bandura, whose work guided most researchers investigating teacher efficacy.

Early Work of Teacher Efficacy

Rotter's (1966) theory of an internal locus of control provided fertile ground for teacher self-efficacy theory (Goddard, Hoy, & Woolfolk Hoy, 2000). This theory became a foundation for teacher efficacy research. For example, the Rand Corporation's researchers investigated "the effectiveness of reading instruction" and defined "teacher efficacy as the extent to which teachers believed that they could control the reinforcement of their actions" (p. 481). Berman, McLaughlin, Bass, Pauly, and Zellman (1997), the Rand Corporation researchers, reported they developed their two research questions from Rotter's theory of locus of control.

Locus of control is a concept in Rotter's attribution theory (1954), concentrating on how individuals define the causes of their successes and failures. The theory attempts to explain people's excuses, especially regarding success or failure. Therefore, this theory is vital to education (Slavin, 2006.) Locus of control can be perceived as external or internal. People with an "external locus of control is more likely to believe that other factors, for example, luck, task difficulty, or other people's actions, cause success or failure" (p. 322). In contrast, individuals with an "internal locus [referring to location] of control" believe their success or failure depends on their accomplishments or capabilities (Slavin). Internal locus of control is also called *self- efficacy*, the idea that an individual's behavior can cause the difference between success and failure (Bandura, Pajares, & Schunk; Pajares & Zimmerman as cited in Slavin). Self- efficacy is perceived as vital to explaining the students' academic performance. The concept of teacher efficacy in the

past 20 years was developed from the theory of Rotter's (1966) locus of control "and Bandura's (1977, 1986, 1997) social cognitive theory" (Goddard et al., 2000, p. 480). Rotter (1966) published an article that led Rand Corporation researchers to include two items he proposed in their questionnaire (Yesim, 2005). Goddard et al. added, "Some educators have assumed that Rotter's internal locus of control and Bandura's perceived self-efficacy and locus of control are roughly the same" (p. 481).

Guided by Rotter's theory, the above-mentioned researchers asked, "Does control of reinforcement lie within the teachers themselves or in the environment?" (Goddard et al.,2000, p. 481). Student "motivation and performance" were viewed as the foundation of the teacher's "reinforcement," which in these contexts motivates and encourages teachers. Accordingly, reinforcement contributed to higher teachers' self-efficacy. Goddard et al. perceived teachers who were confident in affecting students' success and inspiration in learning as managing their activities and possessing a higher degree of efficacy. Teachers were asked to respond to two statements: (1) "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 home environment." (2) "If I try hard, I can get through to even the most difficult or unmotivated students" (Cheung, 2008, p. 104). Teachers who agreed with the former statement believed that a student's family had more influence on "motivation and performance" than teachers. On the other hand, teachers who responded positively to the latter statement perceived themselves as having control over issues that sometimes have a negative impact on learners (Tschannen-Moran et al., 1998).

Self-efficacy theory is founded on Bandura and Rotter's views, though opinions about self-efficacy differ. Bandura emphasized the distinctions between these theories when he implied that individuals trust themselves to perform some activities (perceived self-efficacy) that differ from the "beliefs about whether actions affect outcomes (locus of control)" (Goddard et al., p. 481). In contrast, Rotter's theory of internal-external locus of control explores underlying beliefs and associations "between actions and outcomes, not with personal efficacy" (p. 481). An individual may believe that a specific outcome is "internally controllable caused by actions of people" (p. 481), though he or she may still lack confidence in achieving the desired actions (Goddard, et al., 2000). Bandura's and Rotter's respective notions about self-efficacy are indistinguishable from earlier theories. For example, Bandura mentioned mental abilities with which people can formulate their beliefs; he defined "teacher efficacy as a type of self-efficacy—the outcome of a cognitive process in which people construct beliefs about their capacity to perform at a given level of competence" (p. 481). Rotter investigated teachers' internal and external beliefs. Bandura's and Rotter's theories address thinking and are not very different from earlier theories.

Drawing on Bandura's and Rotter's theories, Gibson and Dembo (1984) designed a 30-item instrument based on Rand Corporation researchers' two items (Tschannen-Moran et al., 1998). Through their instrument, Gibson and Dembo found that teacher efficacy consists of personal teaching efficacy and general teaching efficacy. According to Cheung (2008), "Personal teaching efficacy refers to the confidence individual

teachers have in their teaching ability, while general teaching efficacy is the global idea that educators can affect student learning" (p. 105). Gibson and Dembo's findings were consistent with those of the Rand studies.

Teachers need to work together to learn from each other and to increase their efficacy beliefs. Bandura views such collaboration, as helping teachers to understand how working with others can enhance their efficacy. Sharing teaching ideas enables teachers to learn from each other and promotes their cognitive development.

Collective Efficacy

Collective efficacy, as defined by Bandura (1997), is "a group's shared belief in its conjoint capabilities to organize and execute the courses of action required producing given levels of attainments" (p. 477). Fives and Looney (2009) suggested that, like a personal sense of efficacy, collective-efficacy beliefs for groups can have an effect on their "goal setting, motivation, effort and persistence with challenging tasks or situations" (p.183). According to Bandura, four sources of information affect individual efficacy: mastery experience, vicarious experience, social persuasion, and affective states. They are fundamental for collective efficacy and are central to individuals' formation of collective teacher efficacy (Goddard & Goddard, et al., 2000). Collective teacher efficacy enables teachers to share ideas, thus becoming more productive and effectively influencing student learning. However, students' performance will differ among schools (Bandura, 1993, 1997; Goddard & Goddard, 2000). Therefore, collective teacher efficacy can be different among schools in "rural, urban and suburban." Goddard and

Goddard (2001) reported a higher sense of efficacy as well as a higher collective efficacy among teachers in 47 schools they investigated.

Furthermore, these four sources of information are viewed as having an impact on teacher self-efficacy (Chang, 2009). Collective efficacy's importance in influencing teacher efficacy beliefs has contributed to research, including that of Bandura, Goddard and Goddard Fives and Looney (2009). Therefore, these researchers worked from a collective efficacy model and yielded fruitful results regarding teacher efficacy's construct.

Mastery experiences are vital to a school as an organization, especially in how teachers within the school setting encourage achievements and avoid potential disappointments. Success comes from healthy beliefs among the teaching staff, particularly an increased awareness of collective efficacy. Mastery experiences are related to collective efficacy. Working together in school environments as a group, they encounter successes and failures together. When teachers are progressing professionally, healthy beliefs emerge from collaboration. In contrast, individuals attempting to conquer teaching challenges alone may be resistant to collective efficacy. Therefore, organizations must learn by experience to succeed in accomplishing their objectives (Goddard et al., 2000).

Mastery experiences also contribute to an understanding of teacher self-efficacy. According to Bandura (1997), such experiences help give teachers confidence in their work. Efficacy beliefs increase when teachers view themselves progressing in teaching,

thus helping to increase their success in teaching. Efficacy beliefs are important to people and their engagement with activities because "individuals and collectives are more likely to pursue activities for which they believe they have the capability to succeed" (Goddard & Goddard, 2001, p. 809). Thus, efficacy beliefs are important in education, especially when teachers perceive them positively. On the other hand, efficacy beliefs can decrease when teachers experience setbacks in their work, further slowing progress in their future work. Therefore, working as groups can assist teachers in increasing their efficacious beliefs.

Woolfolk's interview with Shaughnessy (Shaughnessy, 2004) clarifies how collective efficacy can influence teacher self-efficacy and classroom management. Woolfolk commented on the need to re-visit Bandura's four sources of knowledge about "efficacy beliefs." Regarding mastery experience, Woolfolk also suggested the following:

- Create daily routines so that children have a sense of expectation and control over their environment.
- Ensure that learning tasks are on an appropriate level for all students.
- Provide instructional support as necessary to guarantee student success. (p. 159)

These suggestions are useful regarding student engagement and classroom management. Students are encouraged to take responsibility for their learning; thus, disruptive behavior diminishes. Teacher instruction becomes effective, and teachers come to believe that they have an impact on student learning.

Learning by observing others provides people with ideas on how to adjust their behaviors. Vicarious experience is not based on trial and error attempts, but on new behavior (Bandura, 1989). Vicarious experience is influential in creating and strengthening efficacy beliefs by means of social models (Bandura, 1995). When individuals see people similar to themselves being successful through persistence, they gain a sense of control over similar tasks (Bandura, 1986). Teachers are sometimes perceived as not depending on "direct experience" as their collective efficacy's sole foundation. They also pay attention to the feedback they get from their colleagues regarding their work achievements (Goddard & Goddard, 2000).

Bandura's views verbal persuasion and modeling as useful in advancing personal teacher efficacy and encouraging collective teacher efficacy. Accordingly, persuasion can influence staff members to exert more effort that will eventually lead to progress. Persuasion can also influence staff members to increase their "persistence, and persistence can lead to the solution of problems" (Goddard & Goddard, 2000, p. 484). Woolfolk (as cited in Shaughnessy, 2004) suggested the following in relation to verbal persuasion:

- Don't say, "You cannot do the problem—it is easy." Instead suggest, "You might be able to get this one if you take your time and line up the numbers."
- Provide attributional feedback that focuses on effort by saying, "Your hard work is paying off," or "I'm glad you did this last revision; your story uses more describing words now." (p.160)

Communicating with students using such expressions encourages them to learn and can contribute to more engagement with activities, thus improving their motivation. Teacher- efficacy researchers have reported that teachers with low teacher efficacy are often critical towards students; but through verbal persuasion, they can encourage students and become more patient with them.

Social persuasion, a source of collective efficacy, "is another means of strengthening a faculty's conviction that they have the capabilities to achieve their goals" (Goddard et al., p. 484). Tschannen-Moran and Woolfolk Hoy's findings (2007) demonstrated that verbal persuasion is important regarding the feedback and support trainee teachers receive from others, including colleagues, administrators, parents, and society. When facing challenging situations, teachers that are convinced they have abilities for and control over given tasks exhibit more effort and self-confidence, rather than concentrating on their failures (Bandura, 1995). According to Goddard et al., (2000), talks, workshops, occasions for professional development, and evaluation of accomplishments can collectively encourage teachers' receptiveness to working as a group to enhance teaching skills and, in turn, student learning.

Physiological arousal, one of the sources of collective efficacy, is important in regard to learning because it reduces stress the students may have when dealing with classroom activities. Individuals are perceived as depending partly on "affective states" when judging their abilities. They explain their anxieties as indications of fear of low performance. Bandura (1995) added that for "tasks that include potency and energy,

people judge their fatigue, aches, and pains as signs of physical debility" (p. 4). Mood can also affect individuals' evaluations of personal efficacy. According to Bandura (1995), maintaining a "positive mood encourages perceived self-efficiency; despondency decreases it," while other ways to modify efficacy beliefs are to "enhance physical status, reduce stress and negative emotional proclivities, and correct misinterpretations of bodily states" (p.5). When interviewed by Shaughnessy, Woolfolk offered the following suggestions for teachers in relation to these physiological and emotional factors:

- Make sure that all instructions are clear. Uncertainty leads to anxiety.
- Write test instructions on the board or even on the test itself instead of giving them orally.
- Check with students to make sure that they understand their assignments/instructions.
- Have students do projects, organize portfolios of their work, make oral presentations, or create a finished product. (p. 160)

These suggestions can transform the classroom into a learning environment where teachers explain instructions and students, as a result, are not anxious about being engaged in activities. The teacher and students work together; and students enjoy the freedom to learn without fear, thus feeling ownership in the learning process. Furthermore, despite stressful work situations, teachers can experience the joy that comes with success in teaching, promoting, in turn, teacher efficacy (Bandura, 1997). On the other hand, Tschannen-Moran and Woolfolk Hoy (2007) describe a "high level of stress

and anxiety associated with a fear of losing control" (p. 945), which could lead to low efficacy or hinder growth of an individual's efficacy (Chang, 2009). Some teachers exercise too much authority in the classrooms. However, if they would employ Woolfolk's suggestions and explain instructions to students, their classroom could become a "laboratory of learning," as Greenberg (2005) proposed; and their role could change from director to facilitator in the learning process.

Though the sources of collective efficacy discussed above appear to be useful in educational settings, teacher-efficacy researchers have criticized these sources. According to Klassen et al., (2011), Tschannen-Moran et al., (1998) have set the sources of teachers' self- efficacy (for example, mastery experience, verbal persuasion, vicarious experience, and physiological arousal as defined above) too high in the proposed model for how teacher efficacy operates. Furthermore, they think little information exists on how those sources function when applied to teaching. Klassen et al., reported that Tschannen-Moran et al., placed the above-mentioned sources of collective efficacy high in regard to teachers' self-efficacy beliefs, but also acknowledged that not enough research is available on their application to teaching. Henson (as cited in Klassen et al., 2011) suggested that studies investigating the sources of teacher self-efficacy was "practically nonexistent" (p. 24), and called for further research regarding "the validity and potential impact of the hypothesized teacher self-efficacy sources" (p. 24). Goddard et al., (as cited in Klassen et al., 2011) expressed a similar view of the need for additional investigations regarding the sources of collective efficacy, "questioning whether the

hypothesized sources of teachers' self- efficacy hold true at the group level" (p. 24). Studies investigating sources of students' self-efficacy have been viewed as unreliable and invalid. Klassen et al., reported that most teacher-efficacy researchers have used Bandura's social cognitive theory. Indeed, Bandura (1977, 1986, & 1997) is a major contributor to teacher self-efficacy research; and education researchers and psychologists have used his theory extensively.

Collective efficacy and mastery experiences are useful in teacher efficacy research because teachers collaborate to develop more ideas. This collaboration is relevant to cognitive development and can help teachers engage students in learning by using different teaching methods and by managing disruptive behaviors. Rotter's locus of control theory assisted researchers who were interested in investigating the teacher-efficacy construct. The following two items related to teacher efficacy guided the Rand Corporation researchers to develop their own research items: (1) "When it comes right 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." (2) "If I really try hard, I can get through to even the most difficult or unmotivated students (Cheung, 2008, p. 104). Klassen et al.,'s research covers teacher efficacy research in the last 12 years. In addition, their research on the TSES instrument's use is very important.

Collective efficacy as well its four sources can enable teachers to learn from each other and be effective. The examples of collective efficacy mentioned above can assist teachers with different methods of teaching, engaging students in learning, and managing

undesirable student behaviors. Also, beyond collective efficacy is the importance of classroom management in teacher efficacy.

Managing disruptive behaviors in the classroom is a vital but difficult task for teachers. Some students display unruly behaviors that can distract other students from learning. Thus, teachers need skills to make the classroom a place to freely learn without threats to any student. Teachers have generally viewed classroom management as difficult. Sanford and Evertson (1981) argued that classroom management is a major difficulty for "teachers and administrators in junior high schools" (p. 34). Classroom management is also a problem in other countries. For example, trainee teachers that this writer supervised at the University of Botswana from 2000 to 2007 during teaching practice appeared unable to manage students that were inattentive and playing during class. *Classroom Management and Teacher Efficacy Research*

Teaching competence, as well as generating and retaining order in the classroom, has also been viewed as important (Evertson, 1985). A conducive learning environment is not easy to establish; however, research reveals that the teacher's ability to supervise and organize instruction is vital to successful classroom management (Brophy, 1988), leading to students' engagement in the learning process. If well-managed, classrooms can become places of freedom to learn and can provide safety for students. If not distracted, students can attend to instruction and further their long-term memory for retrieving information when taking examinations, doing assignments, and studying. Such an environment can obviously reduce the number low achieving students.

Unfortunately, little research exists regarding teacher self-efficacy for classroom management. However, within the existing research, some researchers support theories implying that personal teaching efficacy has an effect on teacher behavior as well as on beliefs and outcomes (Morris-Rothschild & Brassard, 2006). Criticizing students for failing and showing impatience when confronted with challenges in problematic circumstances relate to low personal teacher efficacy (Gibson & Dembo, 1984). Ashton and Webb (1986) suggested that the beliefs of teachers with low personal teaching efficacy were linked to strict punishment procedures, such as using authority, abusing students verbally, and sending them out of class during instructional time. According to Woolfolk, Rosoff, and Hoy (1990), "It is possible that a sense of personal efficacy becomes related to beliefs about control only after some years of actual experience in classrooms" (p. 146). Guskey and Passaro (1994) reported on "instructional effectiveness," while Morris-Rothschild and Brassard (2006) noted teachers with high personal efficacy making fewer referrals to special education. Accordingly, when teachers possess a strong sense of personal teaching efficacy, they are more likely to have impressive classroom results because they establish good relationships with students and help them learn (Morris-Rothschild & Brassard, 2006). Gencer and Cakiroglu's (2007) findings revealed that teachers' differing beliefs about classroom management are critical in effective instruction.

Chen (1995) reported that teachers in Taiwan, China and the United States differ in their choices when dealing with student behaviors. Taiwanese teachers were the most

prone to use negative strategies, Chinese teachers sent notes home, and US teachers sent students to the principal's office. Additionally, they praised the students with good behaviors in private. Gencer and Cakiroglu's (2007) study of Turkish elementary school teachers revealed that in Turkish classrooms, speaking when not asked, being excessively noisy, and grumbling about friends and teachers were viewed as common problematic behaviors. Other problematic behaviors included disobeying school rules and disturbing other students. Furthermore, Gencer and Cakiroglu (2007) found that being extremely noisy, screaming at others, and speaking out of turn frequently occurred in classrooms.

Teacher-efficacy researchers have found that teachers' sense of efficacy is associated with classroom management and organization strategies. Ashton and Webb (1986) suggested that secondary school teachers with low efficacy were recognized by their scores on two items proposed by the Rand Corporation's assessment, which described classroom conditions in relation to "Punishment, coercion, and public embarrassment characterized by management strategies" (Woolfolk et al., 1990, p. 140). Teachers with higher efficacy seemed to cope well, remain friendly, and build trust with their students. As a result, undesirable behavior was uncommon and was handled in more satisfying ways (Woolfolk et al.,). These findings are based on the description of efficacy that brings together general and personal teaching efficacy as separate dimensions of the same concept. Researchers have proposed separate analyses of those dimensions. Because general and personal teaching efficacies have differing qualities "and evince differing relationships to other key attitudinal variables" (Woolfolk et al., p.140), teacher

efficacy can be related to teachers' perceptions of classroom management strategies (Cakiroglu, 2007; Woolfolk & Hoy, 1990).

The teaching methods and strategies that teachers use to engage students in learning are useful as they enable students to focus on their work. Researchers' findings regarding instruction and student engagement are discussed below.

Instructional Strategies, Student Engagement and Ideas in the Literature

When teachers take control of what is happening in the classroom, individual students as well the group pay attention and become involved in learning (see *withitness* defined later in this chapter). When students are engaged in activities that motivate them, they are less prone to display disruptive behaviors that interfere with learning. The more students are engaged in their work, the fewer the classroom disturbances. Involving students in "seat work," where they are given assignments that challenge their thinking skills is an example of a well-managed classroom environment. Therefore, generating and retaining order in the classroom are viewed as important (Evertson, 1985).

Offering a more conducive learning environment is not easy. However, research studies continue to reveal that the vital factor in successful classroom management is the teacher's ability to supervise and organize instruction (Brophy, 1988). Kounin, Gump, and Doyle investigated classroom management (as cited in Brophy, 2006); their findings are consistent with those of Tschannen-Moran and Woolfolk Hoy (2001) in terms of teachers' sense of efficacy in relationship to classroom management. The studies of Kounin, Gump and Doyle (as cited in Brophy, 2006) showed that positive classroom

management without student disturbances, such as bullying behaviors and playing with classmates as being conducive to learning.

Some researchers support theories implying that personal teaching efficacy affects teacher behavior as well beliefs and outcomes (Morris-Rothschild & Brassard, 2006). Criticizing students for failing and showing impatience when confronted with challenges in problematic circumstances relate to low personal teacher efficacy (Gibson & Dembo, 1984). Ashton and Webb (1986) had the same findings, suggesting that these teachers' beliefs were linked to strict punishment procedures, such as using authority, abusing students verbally, and sending students out of class. Woolfolk Hoy, Rosoff, and Hoy (1990) added, "A sense of personal efficacy becomes related to beliefs about control only after some years of actual experience in classrooms" (p.146).

Gencer and Cakiroglu (2007) found that teachers' beliefs regarding classroom management differ and are critical in effective instruction. For example, Chen (1995) reported that teachers in various countries differ in their choices when dealing with student behaviors. Guskey and Passaro (1994) reported on "instructional effectiveness," while Morris-Rothschild and Brassard (2006) noted that teachers with high personal efficacy refer fewer students to special education. Several researchers (Cheung, 2008; Rich, Lev, & Fisher, 1996) reported that being able to help in forming constructive "interpersonal relationships" with students was common among teachers with high personal teaching efficacy. Thus, when teachers possess a strong sense of personal

teaching efficacy, they are more likely to have positive classroom results (Morris-Rothschild & Brassard, 2006).

Gencer and Cakiroglu (2007) revealed that in Turkish classrooms, speaking when not asked, being excessively noisy, and grumbling about friends and teachers were common problematic behaviors. Other problematic behaviors included ridiculing friends, disobeying school rules, and disturbing other students. Furthermore, Gencer and Cakiroglu's (2007) work with Turkish elementary school teachers found that being extremely noisy, screaming at others, and speaking out of turn frequently occurred in the classrooms.

Researchers have found that teachers' sense of efficacy is associated with classroom management and organization strategies. Ashton and Webb (1986) suggested that secondary school teachers with low efficacy were recognized by scores on two of the Rand Corporation's assessment items, which described classroom conditions in relation to "Punishment, coercion, and public embarrassment characterized by management strategies"(Woolfolk et al., 1990, p. 140). Teachers with higher efficacy seemed to cope well, remain friendly, and build trust with their students. As a result, undesirable behavior was not common and was handled in more satisfying ways (Woolfolk et al.,).

These findings are based on the concept that general and personal teaching efficacies are separate dimensions of the same concept and, therefore, should be analyzed separately. Because general and personal teaching efficacies have differing qualities "and

evince differing relationships to other key attitudinal variables" (Woolfolk et al., 1990, p.140), teacher efficacy can be related to teachers' perceptions of classroom management strategies (Cakiroglu, 2007; Woolfolk & Hoy, 1990).

Various investigations, including those of Kounin and Gump, have shed light on classroom management and student engagement.

Ecological Research on Classroom Management and Student Engagement

Early ecological research focusing on classroom management clarified how teachers manage classroom behaviors and how environmental factors influence learning. Kounin and Gump (as cited in Brophy, 2006) focused on different activities, both supported (affordances) and prohibited (constraints). In these investigations, classrooms were viewed as ecologies that can be investigated in terms of innovations created to fulfill a specific goal (Brophy, 2006). This concept led Kounin and Gump to concentrate on different aspects of classroom environments ("e.g., whole class, small group, individual) and the activities that took place in them (e.g., more teacher-student discourse occurred in lesson settings than in seatwork settings") (p.759). In later ecological research on classrooms, the focus changed from different tasks to the teachers' responsibilities in forming and using activities (Brophy). Studying 26 kindergarten classrooms, Kounin and Gump concentrated on "desist incidents in which teachers directed interventions at students who were misbehaving" (p. 759). They observed students, took "running notes, and explained desist incidents. They elaborated them into "specimen records" as well formatting and coding desists "(about how the students were misbehaving or what they

should be doing instead), firmness (and 'I mean it' and 'right now' quality, and roughness (expression of anger or exasperation)" (p. 759).

Later researching elementary classrooms, Kounin made three important changes that "produced original and enduringly influential findings" (as cited in Brophy, 2006, p.759). He improved data collection by changing sample records formed from observations to include comments about classroom proceedings and by recording videos. Second, Kounin changed previous researchers' limited concentration on "desist incidences" to include a variety of teachers' actions. Third, Kounin ranked teachers' "effectiveness" of being classroom supervisors, stressing teachers' progress in making students to be engaged in lessons as well as tasks. According to Kounin, "these ratings were much more valid and reliable than attempts to rate overall teaching effectiveness" (p. 759). His analysis of video tapes revealed that measurement of teachers" reactions to classroom disturbances were not "reliably" related to disturbing manners ("i.e. desists") or to the general efficiency of teachers as classroom supervisors. Rather, the "secret" behind success in management was keeping students from being "disruptive in the first place, by maintaining the momentum of learning activities and nipping potential problems in the bud before they could escalate" (Brophy, 2006, p. 760). Variables identified by analyzing the video tapes included the following:

- *Withitness*. By "remaining with it," teachers stayed on top of what was happening in the classroom most of the time; they continued to examine the classroom environment while engaged with individual students or small groups.

- *Overlapping*. Teachers performed more than one task at a time. For example, they remained close to students or looked at them to capture students' attention and to conduct the lesson without interjecting.
- *Signal continuity and momentum during the lesson.* The teacher is expected to teach well-planned, efficient classes centered on capturing students' attention. The teacher should also present content continually ("the "signal") that is more compelling than the noise of competing distractions, and by sustaining the momentum of the signal throughout the lesson.
- *Group alertness and accountability during lessons.* Teachers were expected to use question strategies that maintain the groups' attention and sense of responsibility. Such strategies include pausing before asking an individual to respond to a question, refraining from guessing in selecting participants, and "interspersing choral responses with individual responses" (Brophy, 2006, p. 760).
- *Challenge and variety in assignments.* Students can be encouraged by and engaged in "seatwork" by being offered different assignments to challenge their cognitive abilities (Brophy, 2006). Evertson, Emmer and their team (1980) wrote detailed notes about regulations presented to teachers at the beginning of the year, along with the teachers' methodologies and follow-up procedures for abiding by the regulations.
- *Conveying purposefulness.* Teachers who were efficient classroom managers took advantage of the time allotted for teaching and evaluated whether the students

were participating and learning. They encouraged students to be responsible for finishing their work on time. Daily revision of work was arranged, and students were given effective evaluations (Brophy, 2006).

- *Teaching appropriate conduct.* Effective classroom managers were viewed as having an understanding about their expectations of students as well as what they cannot accept. Teachers concentrated on students' work, which was important, and also on teaching them how to do their work effectively (Brophy, 2006).
- *Maintaining attention.* Effective classroom managers pinpointed students who were confused or not paying attention in class. They also organized seating arrangements so that students faced the direction in which they could best concentrate. In addition, effective managers changed the tone of their voices when they spoke with students, they moved around the class, or "pace[d] to sustain attention" (Brophy, 2006).
- Furthermore, effective managers followed up on demanding tasks in the first weeks of class, encouraging and supporting students. According to Emmer, Evertson, and Anderson (as cited in Brophy, 2006), effective managers "continued to give reminders and occasional remedial instruction, and they remained consistent in enforcing their rules" (p. 760). In addition, effective managers instructed their students to abide by rules and procedures; talked about their expectations regarding students' accountability, engagement, and quality of work; and posted tasks and due dates. These findings are related to student

engagement, which can enhance student learning. Daugherty (2005) found that efficacy for student engagement "was a significant predictor to three of the five (engaging the struggling learner, motivating students, instruction and assessment)" (p. 59).

The apprenticeship model is discussed because exposing trainee teachers to models related to student engagement, instruction, and classroom management is useful. The knowledge and skills gained during training can be used later in the classroom.

Apprenticeship Model, Student Engagement and Instruction

Collins, Brown, and Newman (1987) suggested the apprenticeship model, whereby trainee teachers learn classroom-management skills by observing practicing teachers. Trainee teachers spend more time asking experienced teachers questions; and from the observations, they can acquire knowledge about and develop more skills in classroom management. Teachers need classroom-management skills that can enhance students' learning. According to Brophy (1988), classroom-management strategies involve patterns of "complex learning" abilities. Brophy observed teacher trainees when they were engaged in activities. The trainees asked questions and were guided by mentors in lessons. As a result, the trainees increased personal responsibility and developed knowledge and skills. Brophy found that skilled teachers used three major instructional strategies: *modeling*, *coaching*, and *fading*. He explained these strategies: "The expert initially models the task for the novice and then provides coaching (cues, instructions, feedback) as the novice attempts the task, reducing (fading) the amount of

coaching and turning over more and more responsibility for independent task completion to the novice as his/her skills develop" (p.14). This writer thinks these instructional strategies add to teacher efficacy beliefs as well as increasing student engagement and management skills.

Teachers modeled tasks for trainees and coached them regarding those tasks. Eventually, the time dedicated to coaching was reduced and used instead to show beginners how to be responsible regarding activities as his/her skills increased (Brophy, 1988). The skilled teacher used "complex skills" for scaffolding and organized tasks for trainees. The trainees were also expected to master other aspects of the activity prior to involvement. While continuing to learn through the apprenticeship, they had the opportunity to observe the activity being performed and to hear explanations of the procedure used. With this practice, trainees' classroom management abilities can emerge.

Teacher educators should use available time and materials to provide instruction on classroom management. Brophy (1988) advocated an integrated approach to teacher training for three reasons. First, students who obtain a continuous, incorporated instruction in one approach can excel and apply the method when teaching. Trainees with insufficient experience using different methods perceive the lessons as insufficient or not creative. Secondly, different approaches taught in survey classrooms are not fully researched and focus too much on punishment or remedial views of "student socialization" and focus on classroom management or on "developing prosaically

attitudes and behavior in the students" (p. 15). Thirdly, further research in classroom management approaches is needed.

Teachers are viewed as being responsible for developing and using activities that engage students in learning. Doyle's classroom-management research (as cited in Brophy, 2006) advocated that teachers should explain activities to students as well as focus on misbehaving students. Organized instruction leads to students' engagement in the learning process. If well-managed by teachers, classrooms can become places where students can freely and safely learn.

Instructional Strategies

If students can attend to the teacher's instruction without being disturbed, they can save information in their long-term memory, and retrieve it for future use, particularly when taking examinations, doing assignments, and studying. An engaged classroom environment also reduces the number of low achievers. Daughtery used Tschannen-Moran and Woolfolk Hoy's (2001) TSES instrument with its three subscales: efficacy in instructional strategies, student engagement and classroom management. In addition, using a self-report instrument measuring teacher behaviors, Daugherty (as cited in Bryant &Yan, 2010) reported that instructional strategies predicted teacher behaviors in five areas: "(a) the learning environment, (b) motivating students, (c) using curriculum, (d) giving instruction or assessing and (e) engaging the struggling learner" (p.4). These research findings show instruction's importance for teachers and students. Teachers can

teach their subject matter, assess students' learning, and motivate and engage even low performing students.

Rimm-Kaufman and Sawyer (as cited in Bryant & Yan, 2010) investigated elementary teachers' self-efficacy beliefs in regard to using the Responsive Classroom Approach, an instructional strategy involving classroom methods aimed at actively engaging students in learning. These methods incorporated "caring into the daily routine as well as providing a proactive approach to discipline that helps children acquire self-control and take responsibility for their actions" (p. 4). Through this approach, students also acquire self-assessment skills that influence how they evaluate and modify their thoughts, particularly if they are displaying undesirable behaviors. Bandura (1997) asserted that "The self-directed learning is supplemented with instructional social influences that can affect children's beliefs of their cognitive efficacy" (p. 215). Rimm-Kaufmann and Sawyer (as cited in Bryant & Yan) also reported that teachers using the Responsive Classroom Approach had high self-efficacy beliefs regarding instructional self-efficacy, enabling them to help students learn. Schuck (2012) asserted the same view (see Chapter 1).

Culture can affect teachers 'efficacious beliefs, and some teachers can use their cultural beliefs effectively in learning settings; however, negative cultural beliefs negatively affect students' learning. For example, in Botswana's Setswana culture, where students are expected to respect their elders and not answer back but only listen to adults, some teachers are authoritative in the classroom.

Culture's Impact on Teacher Efficacy

According to Nieto (2000), culture includes "the values, traditions, social, and political relationships, and world view created, shared and transformed by a group of people bound together by a common history, geographic location, language, social class and/or religion" (p.383). Most teacher self-efficacy studies have been conducted in the United States and a few in Europe. Therefore, teacher self-efficacy research is needed in other cultures. Furthermore, instruments relevant to those cultures' efficacious beliefs need to be designed. Cheung (2008) compared primary school teachers in Hong Kong and in Shanghai; Shanghai teachers were more efficacious than Hong Kong teachers. Cheung's qualitative study reported that Shanghai in-service teachers had high general teacher efficacy for three factors: "respect or confidence placed by students/parents, the training they have received from the universities and [what] they gained from daily teaching experience" (p.115).

These studies' results support the influence of social cognitive theory, upon which teacher self-efficacy is based. *Personal teacher efficacy* refers to a teacher's accountability for students' knowledge and conduct. *Professional teaching efficacy* is the beliefs of teachers, in general, and their belief that they have control over external factors (Bandura, 1977).

For example, the Chinese teachers' responses reveal interdependent views in which individuals may identify themselves more with a group than with an individual. China is a collectivist culture that extends its perception of efficacy to its institutional

training and experience. The above-mentioned differences are a challenge to teacher-efficacy researchers, who must design teacher-efficacy measures suiting other cultures. TSES instrument was useful for investigating teacher efficacy beliefs in another culture, Botswana. The following research supports TSES's effectiveness for use in other countries.

Research on Teacher Efficacy in Other Countries

Klassen et al., (2009) researched five countries (Canada, Cyprus, Korea, Singapore and the United States) using the Teachers' Sense of Efficacy Scale (TSES) to examine the instrument's validity and reported the scale's reliability and validity in those countries. Their research provided strong proof that teachers' self-efficacy is a relevant concept among different cultures. Furthermore, their study revealed a connection between teachers' self-efficacy and a sense of job fulfillment. What is both thrilling about the findings of Klassen et al., and relevant to education "is that TSES showed itself to be a valid tool to measure the self-efficacy beliefs of teachers in a range of settings" (p.74). Research now can further investigate a broader diversity of educational issues in different environments "than was previously possible" (p.74)

Other researchers from different countries have also used TSES. For example, Poulou (2007) investigated the following in Greece: "(a) student teachers' perceptions of the sources of personal teaching efficacy, (b) student teachers' efficacy beliefs for instructional strategies, classroom management, and student engagement; and (c) the relationship between the sources of personal teaching efficacy and efficacy beliefs for

instructional strategies, classroom management, and student engagement" (p.195). The TSES instrument's long form translated into Greek was used. Data was analyzed using the Pearson and T tests. Also used was a chi-square test, and "the results showed that the 3-factor solution was a significantly better fit than the single factor model (difference in χ^2 (1) =181.59, p< 0.001)" (p.207).

Liaw (2009) researched teacher efficacy of pre-service teachers in Taiwan and "the influence classroom teaching and group discussions" have on their training (p.176). Using some items in the Teacher Efficacy Scales developed by Gibson and Dembo (1984) and Hoy and Woolfolk (1993), Liaw wanted to develop items that suited non-Western cultures, but that would not negatively affect teachers' General Teaching Efficacy (GTE).

Ho and Hau (2004) investigated teacher efficacy from a cross-cultural perspective as they attempted to design a teacher efficacy instrument for two cultures: Australia and China. This study used six items measuring personal instruction efficacy, eleven items measuring personal discipline (classroom management efficacy), and twelve measuring beliefs about external influences. Twenty-nine items had a high factor loading as reported by the findings of Emmer and Hickman, 1991; Gibson and Dembo, 1984; and Woolfolk et al., (1990). Ten other items were added to measure personal guidance efficacy, which up until then had not been investigated in Western research of teacher efficacy but was reported as relevant for Chinese culture. This addition showed how culture influences teacher efficacy and highlighted the need to construct culturally relevant instruments.

Australian and Chinese teachers had the same results regarding instruction efficacy and discipline/classroom management related to personal teaching efficacy. On the other hand, Chinese teachers displayed more parental accountability than Australian teachers in directing their students' behaviors (Ho & Hau, 2004). Guidance efficacy was perceived as a teacher-efficacy component more rooted in Chinese culture than in Western culture. This divergence is an example of cultural differences among these teachers; therefore, teacher efficacy must be researched to address such differences further.

The amount of experience a teacher has in his/her profession does not imply that he/she is more effective in teaching. Teaching experience and best practices are discussed below.

Teaching Experience and Best Practices

Researchers have reported different findings regarding teaching experience. For example, in comparative studies with in-service teachers, Ghaith, Shaaban; and Guskey (as cited in Fives & Buehl, 2010) found no relationship between teacher efficacy beliefs and the amount of teaching experience. Campbell (as cited in Fives & Buehl, 2010) researched teacher efficacy and teaching experience among pre-service and in-service teachers in Scotland and the U.S., and they found that in-service teachers had more efficacious beliefs than pre-service teachers. Hoy and Woolfolk; Taylor; and Tashakkori (as cited in Buehl, 2010) reported "a negative relation between years of experience and general teaching experience" (p. 121). Other researchers who used Teacher Sense of

Efficacy Scale found that newly employed teachers used instructional and management knowledge and skills that assisted them in being effective teachers (Wolters & Daugherty, 2007). Melnick and Mesiter (2008) found that teachers with more years of teaching experience did not feel confident regarding time management and did not feel that their teacher-preparation programs had made any difference in preparing them as teachers. Thus, more years of teaching do not necessarily imply that teachers will excel. On the one hand, Brandon, Moorad, Bogopa, and Dambe's (1998) study revealed that the trainee teachers' education program in Botswana was only average, implying that the program was insufficient in assisting trainees to meet learners' needs.

Researchers of teacher efficacy have not agreed on construct measurements; thus, confusion remains regarding teacher efficacy instruments. Recent research has been inconsistent with other instruments measuring teacher efficacy.

Problems with Measurements of Teacher Efficacy

Researchers intending to further investigate these constructs must develop their approaches with more recent studies in mind. For example, Klassen et al. (2011) were surprised to find that a third of teachers' self-efficacy researchers are still using Gibson and Dembo's (1984) Teacher Efficacy Scale (TES) without considering Henson's (2001) and Tschannen-Moran et al.'s (1998) findings regarding the General Teaching Efficacy (GTE) factor's unreliability. Also, Woolfolk Hoy, Davis, and Pape (2006) urged researchers to collaboratively study teachers' sense of efficacy. They also advocated for additional work on the concept since previous research concentrated on two

characteristics divided between the "general" and the "personal" (Gibson & Dembo). Liaw (2009) noted the importance of "cultural-related factors that affect the GTE of pre-service teachers in non-Western contexts" (p. 179).

One concern with the GTE subscale is that it focuses on environmental restrictions affecting students rather than on teachers' abilities. For example, according to the GTE, "the amount a student can learn is primarily related to family background" (Klassen et al., 2011 p. 22). Therefore, Tschannen-Moran and their colleagues criticized the GTE subscale and raised questions regarding its validity. A major problem with the Teacher Efficacy Scale and its alternatives is whether they concentrate too much on "the teachers' beliefs about their control of student outcomes (originating in locus of control theories) rather than a focus on the teachers' capabilities to effectively teach students" (p. 36).

Previous teacher-efficacy researchers took a somewhat misleading direction in attempting to measure the construct. For example, Klassen et al., (2011) searched articles from 1998-2009 with a comparison search of articles published from 1986-1997. They limited their search by concentrating on articles written only in English, narrowing their search to the terms *teacher* and *efficacy*, and by not including dissertations and unpublished work. Nevertheless, they highlighted useful information as discussed below.

Betoret (2006) investigated teachers' efficacy, instructional process and classroom management. The seven measurement items were not related to self-efficacy's descriptions but instead showed views of capabilities centered on previous

accomplishments (rather than the ability to engage in current activities). Tournaki and Podel's (2005) research focused on teachers' previous performance and experiences instead of concentrating on their future abilities. Other studies claiming to measure teacher efficacy unfortunately drifted away from the teacher efficacy's theoretical orientation with the following quotes from Klassen et al.,

- When a student does better than usual, many times it is because I exerted a little extra effort.
- I suffer from self-doubts.
- I have sometimes had the feeling of not being cut out for this profession.
- I believe I enjoy a good rapport with the administration at my school.
- Few teachers in my school can do better a better job than I.
- I feel good about myself. (p.36)

Some statements combine self- and collective-efficacy beliefs, particularly those that include group descriptions. Summarizing the problems with measuring teacher efficacy, Klassen et al., (2011) reported that among the 218 studies they reviewed, 50% were inconsistent with Bandura's ideas about self- and collective-efficacy concepts. Furthermore, these instruments do not measure teachers' convictions or abilities "to carry out [a] course of action" (Klassen et al., p.36). Therefore, the above-mentioned instruments raise questions; and the findings and assumptions of studies based on these instruments may misinform readers regarding how teacher self- and collective-efficacy

influence behavior. Klassen et al., summarized this point, arguing, "Use of conceptually troubled measures plague teacher efficacy research" (p.36).

Some researchers have designed measures close to the construct of self-efficacy related to Bandura's theory. For example, "I can get even the most resistant and difficult students to attend class work" (p. 36). Bandura (2006) highlighted that items measuring efficacy should conform precisely to the theory of self-efficacy, which focuses on one's "perceived" capabilities. He maintained that efficacy items should be modified "in terms of can do, rather than will do. Can is a judgment of capability; will is a statement of intention" (p. 308).

Tschannen-Moran and Woolfolk's Scale (TSES)

Tschannen-Moran et al.,'s (2001) Long and Short forms, previously named Ohio State Teacher Efficacy Scale (OSTES) and presently known as Teacher Self Efficacy Scale (TSES), involve three subscales: efficacy for instructional strategies, efficacy for classroom management, and efficacy for student engagement. Their items included such questions as "To what extent can you…?" and "How much can you do to…? (see appendix Short Form subscale). These instruments measure teachers' abilities to perform certain tasks (Klaseen et al., 2011). The present study used the Short-form subscale, which is valid and reliable (see Chapter 3).

Additionally, Paneque and Barbetta conducted extensive research on self-efficacy instruments, using Bandura1993's manual, *Guide for Constructing Self-Efficacy* (see Klassen, et al., 2011. Their scale included such questions as "How much can you control

disruptive behavior in the classroom? “These instruments were consistent with self-efficacy models and focused on (a) context specify (judgments related to specific outcomes) and (b) a focus on capabilities to carry out a particular course of action” (p. 37). Finding researchers who have addressed measurement problems in teacher efficacy research is encouraging because they have set scholastic standards for other researchers wishing to replicate such studies.

Bandura’s Scale

As a result of researchers’ uncertainty about teacher-efficacy measures, Bandura (1997) proposed the Teacher Self-Efficacy Instrument, a 30-item scale comprised of the following seven subscales: “efficacy to influence decision making, efficacy to influence school resources, instructional efficacy, disciplinary efficacy, efficacy to enlist parental involvement, efficacy to enlist community involvement, and efficacy to create a positive school climate” (Tschannen-Moran et al., 1998, p. 219). In developing seven sub-scales, Bandura intended to reveal that teachers’ sense of efficacy is not the same in all the “subject matters or different types of tasks they [teachers] are asked to perform” (Cheung, 2008, p.105).

Regarding Bandura’s views, Dellinger et al., (2008) added that self-efficacy is “situational and task specific.” Efficacy beliefs are not thought of as a “trait” of people, instead as “active and learned systems of beliefs.” Also, efficacy beliefs differ “in strength, level and generality” (p. 754). Therefore, teachers who are not active in their work may not acquire efficacious beliefs. Again, successful experience with teaching

science appears to have a positive impact on science teaching efficacy. Additionally, other researchers have debated about teacher efficacy instruments designed within the Unites States that exclude items relevant to other cultures.

Teacher Efficacy Scale of Nigerian Teachers

Faleye (2008) modified Bandura's Teacher Efficacy Scale and added items relevant for Nigerian secondary school teacher efficacy. The items included self-efficacy and outcome expectancy as proposed by Bandura (1977). The strengths of Faleye's (2008) study include the items' applicability to African culture, as well as the pilot study used to determine the instrument's reliability and validity. The following questions were asked:

- What items would be adjusted to measure TE?
- What is the internal consistency and reliability of the scale?
- What is the factorial validity of the TES? (p. 828)

The pilot program involved field assistants traveling to secondary Nigerian schools to collect data from 2071 participants. The researchers also were present to answer participants' questions.

Using Exploratory Factor Analysis (EFA) and reliability procedures to analyze the data (Faleye, 2008); this study reported that "student learning and parental involvement" were two elements that must be used in the scale. More specifically, the teachers' "efficacy to influence student learning" (p. 843) was analyzed, which also included in the self-efficacy expectations Bandura (1997) proposed. The "efficacy to

elicit parental involvement" (Faleye, p. 843) was said to come from outside the teacher's control (external).

This research was consistent with the results of Gibson and Dembo (1985) and of Hoy and Woolfolk (1993) "when they subjected TES to EFA and Confirmatory Factor Analysis (CFA)" (p. 483). Faleye (2008) suggested that "parental involvement" is outside the teacher's control and fits closely with outcome expectancy, another self-efficacy component that Bandura proposed.

Faleye's study (2008) narrowed 52 items down to 24, making the Teacher Efficacy Scale (TES) more precise and valid as well as relevant to other research findings. The limitation is its quantitative approach, which does not give the detailed insight of a qualitative study. The items on Faleye's scale were in three sections: efficacy for instructional strategies, efficacy for student engagement, and efficacy of classroom management. Each component contained eight items. Four items were chosen, including "the highest loading" to develop the Teacher Sense of Efficacy Scale (TSES, Short Form). Riggs and Enochs (1990) developed the Science Teaching Efficacy Belief Instrument (STEBI) guided by TSES.

The growth of teacher-efficacy research has brought about much debate among researchers, particularly over the Teacher Sense of Efficacy Scale's (TSES) validity and reliability. Psychometric measures were employed to compare or correlate scores of Personal Teaching Efficacy (PTE) and General Teaching Efficacy (GTE) in order to determine their "discriminant validity." Differences between PTE and GTE were

expected, as well as low "discriminant validity among PTE and GTE scores" (see Henson, 2001, p. 6). Fives and Buehl (2010) investigated the TSES's scores, particularly the Long and Short forms' factor structures. In particular, they investigated the differences between the factor structures regarding the efficacy of teachers and their experience with classes they were teaching. The research questions considered in this study included the following:

- How does the factor structure of long and short forms of TSES differ for practicing in-service and pre-service teachers?
- How comparable are the practicing and pre-service teachers' responses to the long and short forms of the TSES?
- Can previous findings in the teacher efficacy literature, with respect to differences in experience and grade level, be replicated when teacher efficacy is assessed by the TSES? (p.121)

Fives and Buehl (2010) used two forms. The long form, containing 20 items, and the short form, 12, were administered to 102 in-service and 270 pre-service teachers. The teachers were selected from the United States' mid-Atlantic region, largely composed of European Americans. The pre-service teachers were enrolled in teacher-education programs at universities in the mid-Atlantic. Identical exploratory factors were used to analyze the data for in-service and pre-service teachers. Regarding the items removed, the researchers preferred Horn's parallel analysis over Kaiser-Guttman's approach ("i.e., eigenvalue is greater than one") (p. 122). Fives and Buehl (2010) reported that pre-

service teachers lacked information about the "nature of teaching" and perceived teaching more as "a global phenomenon than a highly complex task" (p.133). This finding has implications for teacher educators, teacher-education institutions, and other stakeholders because it sheds light on how to prepare teacher trainees to have a higher teacher efficacy.

Therefore, teacher educators need to raise pre-service teachers' awareness about the teaching profession. In-service teachers were reported to have high efficacy beliefs about managing classes but scored low in activities for "student engagement," These scores suggest that such teachers need coaching programs or in-service workshops to engage students more effectively in tasks.

The limitations of Fives and Buehl's (2010) study included few representations of participants of in-service teachers and "lack of a focus group on individuals' interpretation of TSES items" (p.132).

Wolters and Daugherty's Goal Structures Research

In addition to measuring teachers' beliefs, the TSES has been used with different teachers. For example, Wolters and Daugherty (2007) investigated goal structures and teachers 'sense of efficacy and how those factors could be associated with teachers' experience and students' academic level. Teachers' sense of efficacy was found to be relevant in providing answers to "classroom goal structure." Goal structures include "prevailing instructional policies and procedures within academic settings, such as of the classroom or school," as defined by Ames, Acher; Kaplan; Maher; Midgley; Urdan;

Roeser et al.; Young and Wolters (as cited in Wolters & Daugherty, 2007 p.181). Wolters and Daughtery asked the following questions in their study:

- Are there differences in the three aspects of teachers' sense of efficacy or the two types of goal structures participants report on the basis of their years of experience as a classroom teacher?
- Are there differences in the three aspects of teachers' sense of efficacy or the two types of goal structures participants report on the basis of whether they teach in elementary, middle, or high school?
- Can the three aspects of teachers' sense of efficacy be used to predict the goal structures that teachers report? (p.184)

K-12 teachers from a Texas school participated in the study. Most were females (82%) and white (81%). Participants completed not only an online self-reported survey--including the Teacher Sense of Efficacy Scale developed by Tschannen-Moran and Woolfolk Hoy (2001) and the Patterns of Adaptive Learning Scale developed by Midgeley et al., (2000)— but also Likert-type instruments (Wolters & Daughtery, 2007).

Exploratory factor analysis was used to analyze items from the teachers' sense of efficacy scale as well as goal structure items. Consequently, the "individual factor loading" was similar to previous research's findings that confirmed aspects of self-efficacy for instruction, management, and engagement, and goal structure. The "exploratory factor analysis of the nine goal structure items indicated that a two- factor

solution was optimal and counted for 49% of the total variance" (Wolters & Daughtery, 2007 p. 185.).

One limitation of Wolters and Daugherty's (2007) study was that participants did not teach the same number of subjects. For example, the elementary teachers taught more subjects than middle and high school teachers. Therefore, drawing conclusions from such imbalances, even in terms of classroom control and efficacy, is difficult.

Tschannen-Moran and Woolfolk Hoy (2007) compared pre-service and in-service teachers' differences in "antecedents of self-efficacy beliefs." Participants were 255 teachers: "215 Caucasians, 22 African Americans, 3 Latinos/Latinas, 2 Asian Americans/Pacific Islanders and 5 who self- identified as other" (p. 949). These teachers included graduates from two Ohio universities and one Virginia University and represented two elementary schools, as well as middle and high schools. The study investigated possible factors of self-efficacy beliefs that cause differences between pre-service and in-service teachers. Other factors were added including teachers' evaluations of teaching aids and different modes of "verbal persuasion in the form of interpersonal support from administrator, colleagues, parents, and the community" (pp. 944-945). Other factors affecting self-efficacy beliefs include mastery experiences, which contributed to the teachers' happiness with previous teaching accomplishments (Tschannen-Moran & Woolfolk Hoy, 2007). This study is valuable with the addition of other factors to enhance teachers' self-efficacy. Furthermore, this study found "mastery experiences" to be a strong indicator of teachers' self-efficacy beliefs. The researchers

used a TSES instrument. Mastery experience was found to be consistent with Bandura's (1997) results, a major source of self-efficacy evaluations among pre-service and in-service teachers (Tschannen-Moran & Woolfolk-Hoy, 2007). According to Faleye, "Teacher Efficacy Scale as theorized by Bandura (1997) still suggested very strongly that Teacher Efficacy is a product of two main dimensions: self-efficacy and outcome expectation" (p. 844).

According to Tschannen-Moran et al., (1998), qualitative teacher efficacy research "overwhelmingly was neglected" (p.242). However, Klassen et al., (2011) disagreed and reported an 8.7% increase in qualitative research and a 14.7% increase in mixed-methods research regarding teacher efficacy. Other researchers have used different data-collection methods. For example, Cantrell and Callway (as cited in Klassen et al., 2011) employed qualitative methods and interviews; Onafowora (2005) used "focused group interviews"; Bruce and Ross (2007) used "observation of teacher in situ"; Cheung (2008) used open-ended inquiry; and Gabriele and Joram (2007) used "talk-aloud protocols" (p. 30).

Milner, Milner, and Woolfolk Hoy (as cited in Klassen et al., 2011) used "structured interviews, informal conversations and context observations" (p.30). Puchner and Taylor used a collective case study, researching elementary teachers with less teaching experience and confirmed "evidence for the effect of a collaborative approach to teaching, called lesson study" (Klassen et al., p. 30). Although qualitative research is characterized by low percentages in teacher efficacy construct, the number of qualitative

studies investigating teacher efficacy as suggested by Klassen et al., has increased. Just as the English proverb says, "Half a loaf is better than no bread," low qualitative approaches to teacher-efficacy measurements are better than no qualitative inquiries at all. Qualitative studies need to be conducted because they could offer in-depth information regarding teachers' sense of efficacy and mastery experience.

Summary

Teacher efficacy research has increased over the last decade (see Klassen et al., 2011); this increased investigation can be helpful in education. One of the major factors contributing to problems in education is a lack of effective teachers. Thus, teachers need to effectively plan, prepare, and instruct, as well as manage and engage students in learning. Such planning and preparation are related to Bandura's social cognitive theory, which shows how self–efficacy beliefs can shape human behavior, including developing greater responsibility in setting goals.

Collective teacher efficacy, which shows collaborative work, can affect teacher self-efficacy. When working with their colleagues, teachers share ideas and learn from each other; and, as a result, their efficacious beliefs increase, encouraging them to be effective classroom managers.

Early teacher self-efficacy research employed quantitative approaches and reported that teachers with low efficacy criticize students and do not spend enough hours working. Having a high efficacy belief is important in teaching because teachers can be more effective, stronger classroom managers and can engage students better in learning.

Furthermore, recent research has shown that teachers' cultural views are vital in the teaching profession and affect teacher efficacy. The literature indicates that teachers from various countries differ in their beliefs about classroom management. Teachers make unique choices when dealing with disruptive behavior. Action research has revealed the need for future studies on cultural identity as well as for culturally responsive strategies assessing teacher efficacy's growth.

Researchers have differed in how they define and measure teacher self-efficacy. Some have continued using unreliable and invalid measurements. While other researchers of different cultures have used Tschannen-Moran and Woolfolk Hoy's (2001) instrument, reporting results consistent with Western researchers' studies. However, the "subject matter and context specific" elements in relation to teacher efficacy, as proposed by Bandura (1997) and Tschannen-Moran et al., (1998), need to be questioned because the TSES instrument was invalid when measuring elementary science teachers' teacher efficacy in Taiwan. As a result, Riggs and Knocks (1990) designed the Science Teacher Efficacy Beliefs Instrument (STEBI). In turn, this instrument was translated into Chinese (STEBI-A-CH). Dellinger et al., (2008) presumed that their instrument, the Teacher Efficacy Belief System-Self (TEBS-Self), provided a more relevant way of measuring international participants' efficacy. However, more investigation is needed to establish which teacher efficacy instrument is suitable for other non-Western cultures. Finally, the number of years a teacher has taught seems to affect best practices. This observation implies the more experience teachers have, the better their teaching performance.

Chapter 3

Method

Chapter 3 explains the methods employed in the present study. The following sections are included in this chapter: research design, population, instrumentation, data collection and procedures for analysis.

Research Design

A quantitative survey research design was employed in this study to investigate teachers' efficacy beliefs among junior secondary school teachers in Botswana. Data came from a survey that these teachers completed. The Office of Staff Training and Development at the University of Botswana sponsored the research.

Population

Data were collected from junior secondary school teachers in Gaborone, the capital city of Botswana and surrounding areas. Gaborone has a population 186, 007 as per 2001 census (US Department of State, 2011). Villages close to the capital city have smaller populations; for example, Mochudi has a population of 36, 962. In order to assist the reader, junior secondary schools offer three years of secondary education, these years at junior secondary school level are called, Form 1, 2 and 3 respectively while senior secondary education is two years, and the two years are Forms 4 and 5. Children in Botswana spend seven years of primary education before they enter junior secondary schools, and the age of entry is six years at Standard 1, first year at primary school. It

should be noted that pre-primary education exists throughout the country, but is private owned. Some parents cannot afford to send their children to those private schools; their children start school at the age of six at public schools. The age ranges from 12-14 years by the time they complete junior secondary education, and 14-17 years for senior schools respectively (see the Report on the National Commission on Education, 1993). Surveys were distributed to 7 of the 15 junior secondary schools in this city. Surveys were also distributed in these surrounding villages: Mochudi, Bokaa, Sikwane, Gabane, Thamaga, Oodi, Tlokweng, Kumakwane, Kopong, Metsimotlhabe, Moshupa, Artesia, Ramotswa, Mogobane, Molepolole, and Lobatse. Teachers in the above-mentioned schools volunteered to complete the survey and there were no incentives given to them for participating. During data collection in the month of November teachers were busy with end of school examinations; therefore the surveys were distributed to schools where teachers were willing to participate. The sample of teachers who participated in the study were selected by the researcher and assistants, when visiting the schools, meeting with teachers in the staffrooms and explaining the purpose of the research as well as giving them letters asking them to participate in the study. Teachers' participation was voluntary. The research team selected half of the schools in each area. For example, the capital city (Gaborone) has 15 schools and only seven schools participated. In small villages with one school, the survey was distributed to all teachers, but not all teachers completed it since participation was voluntary. Data were collected mid November 2010 until the end of February 2011.

Each village has one to six schools. In those villages with five to six schools, three schools were selected by the researcher to participate in the study. Villages with one junior secondary school had 20 to 25 teachers, and the questionnaire was administered to all the teachers. Schools in bigger villages had 40 to 65 teachers. For example, Nanogang junior secondary school in the capital city had 62 teachers and 801 students; six Form 1 classes (first year at junior secondary school), six Form 2 and six Form 3 classes. These schools with the above-mentioned groups of classes -are called 18 streams schools. The number of teachers and students differed according to location of the school (or zones) in the capital city and as well as in villages and rural areas. With schools in bigger villages, 30 to 40 teachers completed the survey. Schools in small villages like Mogobane with a population of 2, 0531 as per 2003 Census had one junior secondary school with 20 teachers and less than four hundred students. The teacher and pupil ratio was 1: 42; however, Pheko (2010) reported that the teacher pupil ratio is 1: 51 in the junior secondary schools that she observed Gaborone. Altogether, 1,006 teachers were asked to participate in the present study. The age range of participants was 23-65. Out of I, 006 teachers who received the survey, only 6 did not complete it (see Chapter 4 for qualifications of participants). The high response rate (99.4%) was impressive.

Teaching experience was coded in months from 1 to 253 and above. For example, a teacher who has 1 year teaching experience, thus I year was converted to 12 months. Teachers in the present study were employed full time and there were no part-time teachers.

Instrumentation

Two instruments were used in this study. The Teachers' Sense of Efficacy Scale (TSES) Short Form, containing 12 items designed by Tschannen-Moran, et al., (2001). TSES is located in Appendix B. The Short Form instrument was administered in English to the participants to measure their beliefs about their instructional efficacy. (The authors of the TSES instrument have issued a letter, located in the Appendix C, granting permission to use the instrument). An additional 24-item questionnaire, a Checklist of Teacher Practices, investigated what teachers do in their classrooms. Some of the items related to classroom practices were taken from Little-Akin, 2007's, Classroom rules and Lewis et al. (2005)'s items for measuring classroom discipline. The researcher modified some items from the above mentioned authors to be relevant to what teachers practice in the classrooms. The supervisor guided the researcher in choosing appropriate statements. Other items related to student engagement, were taken from Woolfolk's (2010) Guidelines for keeping students engaged. Woolfolk's Guidelines for teaching effectively also guided the researcher to construct items related to instruction. The researcher generated items based on her thoughts related to teacher practices. For the 24 items, eight items were for student engagement, instructional strategies and classroom management. Four items are positive and four negative. The Checklist of Teacher Practices is located in Appendix B.

The TSES is considered to be a useful instrument for measuring teacher efficacy. Ross (as cited in Henson, 2001) called the TSES a "standard" measure for the concept of

teacher efficacy. As reported in Cheung's research findings (2008), the TSES's Long and Short forms have acceptable validity and reliability. Cheung (2008) found that the mean for efficacy of student engagement was 4.04 with a standard deviation of 0.84; the mean for efficacy of instructional strategies was 3.45 with a standard deviation of 0.91; and the mean for efficacy of classroom management was 3.54 with a standard deviation of 0.73. Fives and Buehl (2010) reported that TSES proved to be more valid than other instruments designed to measure teacher efficacy. The (TSES) short-form instrument was also reliable with Botswana participants.

Two procedures were used to determine reliability in the present study. Cronbach's alpha tested four items of each subscale of TSES. The subscale findings were as follows: student engagement .782; instructional strategies .802, and classroom management .741. Also used was the Spearman Brown Prophecy Formula, which predicts new reliability for a test that is larger; for example, the current study used four items each of the short-form scale. The Spearman Brown Prophecy, for 8 items in each subscale of TSES was used also; it showed the reliability of the present study as follows: Student Engagement, .851; Instructional Strategies, .890; and Classroom Management, .878. Klassen, et al., (2011) reported TSES reliabilities of .71-.94 for the short-form instrument in their research involving five countries.

Wolters & Daugherty (2007) reported Cronbach's alpha coefficient to be above .80 with TSES long and short forms. Tschannen- Moran & Woolfolk Hoy (2001), the developers of TSES, reported similar reliabilities for both Long- and Short-form

instruments. Similar reliabilities were reported by other researchers, including Tschannen-Moran, Woolfolk Hoy (2007, SE, .88, IS, .87, and CM, .84). Fives and Buehl, (2010, .92 for SE, IS and CM respectively). Poulou, (2007, SE, .87, IS, .91 and CM, .90).

Fives and Buehl (2010) compared pre-service and in-service teachers' answers for the TSES' long and short forms. They reported that "the 3 factor structure"—efficacy for classroom management, instructional practices, and student engagement—was relevant for in-service teachers. The present study found the short form suitable for use with in-service teachers in Botswana. Items for Checklist of teacher practices used in the present study are an informal measure and no psychometric analysis was done to create a formal instrument.

Procedures for Data Collection

Data were collected from in-service teachers from junior secondary schools in Gaborone and surrounding villages. The survey was distributed on two occasions. In November 2010, the researcher and research assistants distributed paper copies of two instruments, the TSES Short Form and the Checklist of items of Teacher Practices. The schools were closed for Christmas holidays the last week of November. Data collection continued in January of 2011, when the schools re-opened, until February 2011. The copies of printed questionnaires were used because data could be collected from many participants within a short time. Nardi (2006) has suggested that a questionnaire is "…ideally suited for respondents who can read, measuring people's opinions, and when

we want to get a very a large number of respondents too difficult to observe with qualitative methods" (p. 17).

The researcher and research assistants visited schools, first to consult with the school heads and to make an introduction about the purpose of the research and how data would be collected in their schools. Also, appointments with teachers to complete the survey were requested in the above-mention visits. School heads received the Ministry of Education's approval letter and the researcher's request letter during the visit. Letters to teachers were issued in the school's staff rooms, in meetings with the researcher team on the days teachers were completing the surveys (see Appendices D, E, and F). During data-gathering the research team introduced themselves to teachers and explained to them how they should complete the surveys. The demographic data, which is on the first page of the survey, was explained first, then the Short TSES instrument and finally the Checklist items. The participants also read their letters before they complete the survey. They did not sign their names on the letters because there was no personal information needed from them and participation was voluntary. Completion of the TSES and the list of Teacher Practices typically took no more than 30 minutes.

In most cases, the researcher and assistants were present when participants completed the questionnaires and helped answer participants' questions. Participants in one or two schools asked questions about the demographic data (see Appendix B, on the last questions of the demographic data-); they asked if they could complete all questions. They were assisted that they had to complete two questions only: the district in Botswana

they come from and their place of their origin. The participants commented about item Number 7, (see Appendix B). They thought the item was restrictive because they did not use corporal punishment most of the time, and some options, like sometimes and often could have been included. The suggestions were appreciated for future research on teacher efficacy.

It should be noted that, before data collection the researcher meet with research assistants and explained the survey to them so that they could answer questions of the participants during data-gathering. It was the same information that was given to few school administration who chose to administer the survey and were advised to give the same information to the teacher they choose to help. However, in some schools the school heads volunteered to administer the questionnaires while others preferred to nominate a responsible staff member to do so. Some school heads even called the teachers they chose to meet with the research team, so that they could get the information about data collection Because of busy schedules, the school heads preferred having the questionnaires completed during staff meetings.

When the surveys were completed, the school heads communicated by mobile phones with the researcher and the research assistants. While this communication process was beyond the control of the researcher and the team, it was a form of collaboration that surfaced during data-gathering. As Nardi (2006) suggested, “Doing survey research is a skill, an art and an intellectual process involving collaboration, patience, and creativity” (p.14).

Data Analysis

The data were coded and analyzed using the Statistical Package of Social Sciences (SPSS), a computer program. Birley and Moreland (1998) defined coding as "the process of assigning a symbol as a shorthand way of summarizing a completed questionnaire response. Typically numbers and or letters are used in coding" (p. 58). Salkind (2006) added that "data are coded when they are transferred from the original collection form (such as a test booklet) into a format that leads itself into data analysis" (p. 148). Data collected from the participants was transferred from the survey forms into SPSS spread sheets. Possible mistakes in the data were checked by the researcher and assistant; it was a process of viewing every variable in the data makes sure that there was no missing information.

The gender variable was coded 1 for males and 2 for females. Using digits rather than words not only saves space and data-entry time, but also enhances accuracy of data analysis (Salkind, 2006 p.148). The 6 participants who did not complete the survey were regarded as missing data and excluded from the study. Kline (2009) suggested the "available- case method," which involves excluding incomplete data from analysis. Also encoded were demographic variables, such as age, education qualification, teaching experience, and districts. The study included 590 females and 416 males. The participants' ages ranged from 21 to 54. Education qualification (the qualifications that teachers have earned from training institutions) was coded as 7. The teaching experience

was coded as months from 1 to 253. For example 1 year teaching experience = 12 months (1x12 months of the year). (Districts were coded and divided into 8).

The following is an analysis of question 1 from the TSES short from and question 2 from the Checklist of teacher practices.

1. For community junior secondary school teachers in Botswana, what relationships, if any, exist among the three sub-scales of TSES: classroom management, instructional strategies and student engagement? Previous research in the United States showed a significant relationship among the three sub-scales. This study was conducted to determine whether this pattern of relationship also exists in Botswana.

A summary score on the three TSES subscales was computed for each teacher from Botswana. Pearson's product-moment correlation was computed (using SPSS) between each pair of subscales, yielding three correlation coefficients. Each of these *r*s was evaluated to see if it was significantly different from 0.00. In doing this, the Bonferroni adjustment procedure was used to protect against an inflated Type I error rate. Thus, the modified level of significance used in evaluating these correlations was .05/3 = .0167.

2. Is there a relationship between the use of positive and negative practices reported by teachers regarding classroom management, instructional strategies, and student engagement and their level of teacher self-efficacy?

Botswana teachers were grouped according to their responses to a set of 24 questions about their practices related to classroom management, student engagement and

instructional strategies. The statements of Teacher Practices were taken from items in research studies conducted by Lewis et al., (2005), Little et al., (2007), and Weinstein (1998). Guidelines for student engagement and effective teaching were taken from Woolfolk (2010). The teachers were put into three groups based on how frequently they said they use proper techniques for managing classrooms, engaging students, and using instructional strategies. These groups were determined by a scoring system. Teachers earned no points for responding "no" to a statement deemed to be "good practice" and earned 1 point for responding "yes". Those with total scores of 17 to 24 went into the first group; those with scores of 15 and 16 went into the second group; those with scores of 14 and below went into the third group. The three groups corresponded to those who regularly, sometimes, or infrequently use proper classroom-management methods.

A one-way variance analysis (ANOVA) was used to compare the three groups on each of the TSES subscales (efficacy in classroom management, in instructional strategies, and in student engagement). The level of significance used in making each of these three tests was adjusted via the Bonferroni procedure (.05/3 = .0167). Any ANOVA test that was significant was probed using a series of Tukey pairwise post hoc comparisons. All of these tests were conducted on SPSS.

Summary

The present study was quantitative and used survey methods to collect data from Botswana junior secondary school teachers. Data were collected from some schools in Gaborone and its surrounding areas. Teachers volunteered to participate in the study and

completed the TSES Short Form instrument comprising 12 items. A check list of 24 statements of teacher practices was used as an additional questionnaire investigating what teachers do in their classrooms. Data were computed and analyzed using SPSS. Two research questions guided the study. The Research Office in Botswana's Ministry of Education granted permission for research among junior secondary school teachers. The researcher and four research assistants gathered the data in schools.

Chapter 4

Results

The study's purpose was to examine three aspect of Botswana junior secondary school (jss) teachers' sense of efficacy: student engagement, instructional strategies and classroom management. A Checklist of Teacher Practices was also used. This chapter contains the present study's findings. The use of positive and negative teaching practices in the classroom and how they are related to the three subscales of TSES are presented. The results of the statistical analyses, reliability, and validity of the TSES instruments are included. Following are the two research questions.

Research Question 1

For junior secondary school teachers in Botswana, what relationships, if any exist among the three subscales of the TSES: Student Engagement, Instructional Strategies, and Classroom Management? Previous research in the United States showed a significant relationship among the three subscales. This study sought to determine whether this relationship also exists in Botswana.

In the data gathered from Botswana junior secondary school teachers, a significant relationship exists among the three subscales of the Teachers' Sense of Efficacy Scale. Pearson correlations among the three subscales were statistically significant (with $p = 0.017$, 2- tailed, Bonferroni-corrected): Student Engagement and Instructional Strategies, $r = .412$; Student Engagement and Classroom Management, $r =$

.589; and Instructional Strategies and Classroom Management, *r* =.589. (See the table 1 below for correlations).

Table 1

Correlations of TSES subscales in Botswana and United States of America.

	SE	IS	CM
SE	-	.41	.59
IS	.61	-	.59.
CM	.50	.46	-

Note. Correlations above the diagonal are for Botswana, and below the diagonal for US.

These correlations results are consistent with the findings of Tschannen-Moran and Woolfolk Hoy (2001): Classroom Management and Instructional Strategies, *r* = .046; Student Engagement and Instructional Strategies, *r* =0.61; Student Engagement and Classroom Management, *r* = 0.50. The sample size for Botswana is large (n = 1000) compared to the US sample (n = 410).

A correlation describes a relationship between the two variables and a positive correlation indicates a strong relationship. Thus, if one variable increases, it is the same with the other for example, in (Table 1) if Efficacy in Student Engagement increases Classroom Management increases too. This implies that when teachers use various tasks in their teaching to engage students in learning, undesirable classroom behaviors will

decrease because students will be engaged in their work and hence students' achievement is gained in the classroom setting.

Demographic characteristics and ANOVA Results

The results of the present study for Botswana junior secondary school teachers are discussed. The demographic data and subscales SE, IS and CM) were analyzed using Analysis of Variance statistical technique and are presented below.

Efficacy in Student Engagement

Student engagement and qualifications results are discussed first because they are significant results of the present study, (see Table 2). Teachers who had a degree and Post-Graduate Diploma in Education qualifications had higher mean scores in Efficacy in Student Engagement and qualifications than teachers with other qualifications. Student engagement is viewed as the teacher's ability to encourage students to learn. Thus, teachers who influence students to learn show commitment to their work. Additionally, it shows that teachers who engage students in learning are aware of their self- efficacy beliefs that influence thinking, and emotions that assist them with classroom activities.

In the educational settings, teacher self- efficacy is believed to have a strong effect on "teachers' overall effectiveness with students" Bandura (as cited in Pendergast, Garvis and Keogh, 2011 p .47) (see Chapter 2). In regard to student engagement, teacher self- efficacy is viewed as a motivation concept that impacts teachers in the classroom environment. The relationships between a teacher's self-efficacy and student achievement have been reported by the research of, Pendergast, et al., (2011). It is also perceived as a

vital “motivational construct” that influences the teacher’s success in the classroom settings (Pendergast et al.,). Therefore, teachers who are motivated and efficient with their instructional methods of teaching will be able to engage students in learning.

Table 2

Showing Student Engagement by Qualifications

					95% Confidence Interval for Mean			
	N	Mean	SD	SE	Lower Bound	Upper Bound	Low Score	High Score
Diploma	534	26.51	6.766	.293	25.93	27.08	7	112
Degree	393	26.31	4.447	.224	25.87	26.75	9	32
M.ED	16	28.19	3.885	.971	26.12	30.26	88	32
MSC	5	24.00	5.244	2.345	17.49	30.51	17	29
MA	24	26.79	3.230	.659	25.43	28.16	20	32
PGDE	30	30.27	15.56 5	2.842	24.45	36.08	18	110
PHD	4	26.25	6.652	3.326	15.67	36.83	20	32
Total	1006	26.56	6.340	.200	26.17	26.96	7	112

The Analysis of Variance statistical test was conducted (see Table above). Botswana teachers with PGDE qualifications (Table 2) differed with their colleagues with different qualifications in engaging students in learning (Efficacy in Student Engagement subscale of TSES).

TSES, Efficacy in Student Engagement and educational qualifications show significant results for postgraduate diploma in education teachers (Table 2). The means for teachers with PGDE qualification are higher than those of other teachers, followed by those teachers with Master of Education qualifications. ANOVA results show the significance level of .046 ($p < .05$) (see Appendix). The differences in Efficacy for Student Engagement by PGDE qualifications are impressive. The trainees spend four years doing an undergraduate degree to acquire Bachelor of Arts (humanities). During the fifth year, PGDE students specialize in their majors or teaching subjects and are exposed to learning for a longer period of time because they have four years of undergraduate studies and an additional year of a teacher preparation course (PGDE).

Teachers with Master of Arts, diplomas, degrees, and Ph.D. in the present study have statistically similar mean scores in regard to Efficacy in Student Engagement. Teachers with Masters of Science scored lower in Efficacy in Student Engagement. Efficacy for Student Engagement is the only subscale among TSES's three subscales in which teachers in the present study differed in engaging students in learning (Table 2).

The results are encouraging because they are significant and show teachers with PGDE qualifications doing better than their colleagues with other qualifications. Though,

more differences could be expected because these teachers are trained in different institutions in Botswana, and they should be using different effective methods of engaging students in learning. The results are consistent with those of Gibson and Dembo (1984), Tschannen- Moran and Woolfolk Hoy (2001; Wolters and Daugherty (2005).

Therefore, if PGDE teachers engage students more than their colleagues, these differences in Efficacy in Student Engagement can raise this question: Is it the programs where these teachers are trained that make them to be better prepared in engaging students in learning? Or, are education institutions in Botswana and their curriculum good enough to prepare effective teachers who may feel well-prepared to influence student learning in a positive way? Teachers in the present study had approximately the same mean scores (statistically) in Efficacies for Instructional Strategies and Classroom Management. The duration of the training program may not provide much information for us to know if it is the length of training that helps teachers acquire more skills of engaging students in learning than others.

Trainees with PGDE qualifications are in the fifth year of their studies and specialize in their teaching subjects and are exposed to learning for a longer period of time than diploma teachers. But in the present study teachers with Master's degrees did not perform better than those with PGDE, with regard to Efficacy in Student Engagement. A Master's degree at the University of Botswana requires two additional years of work. This implies that these teachers have a four-year degree and two years for Master of Education. It is six years of being exposed to University education. The degree

holders and PGDE holders also differed in the Student Engagement subscale. Teachers with degree qualifications take four years of training as teachers. Teachers with Master of Arts, and PhD holders also did well with Efficacy for Student Engagement. This writer thinks that teachers with PGDE qualifications have improved in regard to their teaching abilities and are recently effective in their work as discussed above. Dibapile's study of 2005 found that PGDE trainees chose teaching for extrinsic aspects of the job (see Chapter 1).

Teaching Experience

Teaching experience and efficacy in Student Engagement subscales are discussed below because they are closer to significance, (see Table 3). The number of years teachers spend in their work can increase their efficacious beliefs because they gain experience when teaching. However, this is not true for all because teacher efficacy research show that teachers have high and low teacher efficacy beliefs. Therefore, teaching experience may not be the best factor to influence teacher efficacy. Some researchers for example, Cheung, (2008) have reported teaching experience having an impact on the teacher efficacy and other researchers have reported contrary results (see Chapters 2 and 4).

Table 3

Student Engagement by Teaching Experience

Descriptives

TSES_SE Teaching Experience shown in months.	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Low Score	High Score
					Lower Bound	Upper Bound		
1-36	216	26.09	4.456	.303	25.49	26.69	9	32
37-72	253	27.56	10.248	.644	26.29	28.83	7	112
73-108	194	25.85	4.294	.308	25.24	26.46	12	32
109-144	163	26.60	3.851	.302	26.01	27.20	15	32
145-180	104	25.88	4.307	.422	25.05	26.72	15	32
181-216	45	26.96	3.966	.591	25.76	28.15	18	32
217-252	20	28.25	4.375	.978	26.20	30.30	18	32
253 and above	11	26.91	4.742	1.430	23.72	30.10	20	32
Total	1006	26.56	6.340	.200	26.17	26.96	7	112

Teachers with three to six years of teaching experience and those with seven and to nine show a slight difference in engaging student learning because of the number of years they have in teaching (Table 3). The means of teachers with three to six years of teaching experience and those with seven to nine are close to significance. There are other results that show trends towards significance (see Appendix for multiple comparisons). The non-significant results of Efficacy in Student Engagement and gender, Efficacy in Instructional Strategies, and Classroom Management by districts, cities and towns and they will be discussed later in Chapter 5. Teachers raised in rural villages in the Chobe District use different instructional methods in their classes than teachers raised from cities and towns. However, the limits of this study do not allow for an examination of this aspect. Perhaps a larger group of participants could yield significant results; moreover, qualitative methods might shed light on Botswana junior secondary school teachers' efficacy beliefs.

Research shows the number of years the teachers have in their profession had an impact on their abilities to engage students in learning. Klassen and Chiu (2010) have reported that teaching experience is associated with student engagement. Gorrel and Dharmadasa (as cited in Fives and Buehl (2010) have reported that teachers with more years in teaching have a higher efficacy and can effect students' learning. Teachers in the present study with the least experience did well with student engagement; this is commitment to the teaching profession as suggested by Huberman (see non- significant

results). Other researchers have found that more teaching experience is related to greater levels of teachers' sense of efficacy (Ross, Cousins, & Gadalla, 1996).

Efficacy in Instructional Strategies and gender

The demographic characteristic gender and Efficacy in Instructional Strategies are discussed. Although no significant differences were found in this study, the differences in means suggest the need for further study. Females in the present study employed instructional methods of teaching more than males. It may be due to the concept that it is generally known globally that teaching is a female job because of more females in the teaching profession than males. Daugherty (2005) used TSES (Long Form instrument) with teachers in southeast Texas public schools and reported that efficacy in instructional efficacy "was predictor of teachers behaviors namely (a) the learning environment (b) motivating students (c) using the curriculum (d) giving instruction or assessing and (e) engaging the struggling learner" (p .4). Thus, in the present study it can be assumed that female teachers may be employing some of the above teachers mentioned teacher behaviors more than the male teachers (see Table 4 below). However, this writer thinks in regard to "engaging struggling learners" that the results may not be convincing much if these teachers are using them because junior secondary school results shows students falling in large numbers than passing (see Chapter 1).

Table 4

Instructional Strategies by Gender

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	55.632	1	55.632	2.733	.099
Within Groups	20437.680	1004	20.356		
Total	20493.312	1005			

ANOVA's results for Efficacy for Instructional Strategies show a trend towards significance (Table 4). Females from villages in the Chobe district used instructional strategies more than other teachers from cities, towns and villages.

The present study involved 590 females and 417 males. According to the National Development Plan (1991), "four out of five students in Teacher Training Colleges are females, and almost the same proportion applies in the primary teaching force in 1989" (p. 332). Dibapile (2005) reported more females than males among PGDE trainees at the University of Botswana. In Botswana, the teaching profession has more females than males. Cheung (2008) reported the same findings. Culture can be another factor behind the findings. In Botswana like other countries teaching has been perceived as a female profession and there more females teachers in primary and secondary schools than males. However, in the present study the number of male teachers have increased; it shows that males are now interested in choosing teaching as a career. We do not know why males have started developing interest in teaching, more than in previous years as stated by

Dibapile (2005). In Botswana teachers enjoy furnished accommodation from the government and that may be some of the reason why males have chosen teaching as a career. Some may have the desire to work with children and help them to learn. Teaching experience and classroom management subscale showed trend to significance and are discussed below.

Efficacy in Classroom Management and Teaching Experience.

Managing classrooms in education is one of important issues because students cannot learn effectively if there are distractions in the classrooms. It can also be a difficult issue to deal with because teachers interact with learners from different family backgrounds. And to have a class that offers most students freedom without disruptive behavior is not easy. The more knowledge the teachers have in the teaching field the better they are to deal with classroom issues. Table 5 below presents the results of Botswana teachers in relation to managing classrooms and teaching experience.

Table 5

Classroom Management by Teaching Experience

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	208.578	7	29.797	1.935	.061
Within Groups	15384.745	999	15.400		
Total	15593.323	1006			

Table 5 shows a trend towards significance for classroom management and teaching experience. Teachers with 12 to 21 years of teaching scored slightly higher than other teachers with classroom management. Teachers show the differences in how they manage classroom behaviors of student because of their teaching experiences. The above results also show increase in motivation and commitment of teachers in their job as described by Huberman's career cycles that from 8- 23 years of teaching experiences add to commitment and increased motivation in the area of classroom management due to experience. Klassen and Chiu (2010) have reported classroom management self- efficacy associated with teaching experience, as well as classroom self-efficacy increasing from 0-23 years of teaching experience. And teachers with 23 years of teaching experience have 76% more classroom management self- efficacy than do teachers who have less teaching experience. Day and Gu (2007) reported similar results. The other results that are not significant will be discussed later in Chapter 5 as additional results.

The second question of the present study investigated teacher practices and the findings related to question 2 as follows.

Research Question 2

Is there a relationship between the use of positive and negative practices reported by the teachers regarding classroom management, instructional strategies and student engagement and their level of teacher self-efficacy?

Botswana teachers were grouped according to their responses to a set of 24 questions about their practices related to classroom management, student engagement and

instructional strategies. The teachers were put into three groups based on how frequently they said they use proper techniques for managing classrooms, engaging students, and using instructional strategies. These groups were determined by a scoring system. Among the participants, 248 teachers scored 17 and higher out of 24 and were categorized as Group 1; 393 scored 16 and 15 were in Group 2; 360 scored 14 and below in the third Group. Teachers earned no points for responding "no" to a statement deemed to be "good practice" and earned 1 point for responding "yes."

A one-way variance analysis (ANOVA) was used to compare the three groups on each of the TSES subscales (efficacy in classroom management, in instructional strategies, and in student engagement). The level of significance used in making each of these three tests was adjusted via the Bonferroni procedure (.05/3 = .0167). Any ANOVA test that was significant was probed using a series of Tukey pairwise post hoc comparisons. All of these tests were conducted on SPSS.

Table 6 below show descriptive results of the three groups of teachers on SE, IS, and CM Means and Standard Deviation are also reported.

Table 6

Descriptive results of best practices.

						95% Confidence Interval for Mean			
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Low Score	High Score
TSES_SE	1	248	26.42	4.300	.273	25.88	26.95	9	32
	2	393	27.10	7.384	.372	26.37	27.84	7	112
	3	359	26.11	6.284	.332	25.46	26.76	11	110
	Total	1000	26.58	6.349	.201	26.18	26.97	7	112
TSES_IS	1	247	28.50	6.290	.400	27.71	29.29	17	112
	2	393	28.19	3.678	.186	27.82	28.55	12	32
	3	360	27.62	3.808	.201	27.23	28.02	14	32
	Total	1000	28.06	4.515	.143	27.78	28.34	12	112
TSES_CM	1	248	27.96	3.894	.247	27.48	28.45	10	32
	2	393	28.03	3.870	.195	27.65	28.41	7	35
	3	360	27.33	4.019	.212	26.91	27.74	16	36
	Total	1001	27.76	3.940	.125	27.52	28.00	7	36

One Way Anova shows no significant relationship among the three groups in Efficacy for Student Engagement subscale. This is an implication that even those teachers

who reported to be using the best teaching practices in the classrooms are the same as those who are average and the low performing.

Efficacy in Instructional Strategies shows that Group 1 and 3 had significant difference in the way they employ instructional methods as they teach. These are not encouraging results because teachers in Group 1 assumed that they were using best methods of various methods in the classrooms. The two pairs of groups, 1 and 2, and 1 and 3, were the same in classroom management. Groups 2 and 3 also showed significant difference in classroom management. This implies that teachers in Groups 2 and 3 differ in how they managed disruptive behaviors of students in learning. The three groups of Batswana teachers could be different in student engagement, instructional approaches and classroom management. Particularly teachers who believed that they do best practices in their classes did not differ with those who had lower scores. Research has clearly found that teachers with high efficacy have been perceived as displaying a great deal of knowledge in planning and organizing activities (Allinder, 1994). They are believed to be "more open to new ideas and are more willing to experiment with new methods to better meet the needs of their students (Berman, McLaughlin, Bass, Pauly & Zelman; Guskey; Stein & Wang, (as cited in Tschannen & Moran, 2001 p. 783).

In the present study, 951 to 987 teachers responded "Yes" to best practices (see Appendix for practices items). For item 22 ("I explain to students the class, rules, procedures and expectations.") and item 23 ("I carefully organize my lessons and bring them to clear stages."), 987 out of 1007 teachers responded positively. These teacher

practices are consistent with Woolfolk's guidelines (2010) for keeping students engaged and teaching effectively. As indicated in the Appendix B, 63% of the responses were "Yes" and 36% "No." This writer believes most teachers responded "Yes" because self-efficacy researchers suggest that self-efficacy should be designed to show " beliefs about capability and therefore should be phrased in terms of *can do* rather than *will do*" Klassen & Chiu (2010, p. 741). The word *can* has been perceived as individual's views about abilities, while the word will refers to reports about purpose (Klassen, and Chiu, 2010). The teacher- practices statements mentioned above are related to "can do" statements as teacher efficacy researchers suggested. Therefore, teachers responded to what they believed they were doing in their classrooms.

The majority of teachers in the present study believed they were engaging students in their classes. The student engagement subscale of TSES emphasizes the teachers' beliefs and capabilities to involve students to "think critically or be cognitively engaged at a deeper level" (Wolters & Daugherty, 2007, p.190). This writer does not deny the fact that these teachers' are trying their level best to engage students in learning and effectively use various instructional methods. The question is, if these teachers are genuine about their classroom practices in general, why are many of their students failing? (see Chapter1). There may be other factors influencing the low performance of students which further research of teacher efficacy can reveal.

The age of the participants in relation to the 3 subscales of TSES (Efficacy in Student Engagement, Efficacy in Instructional Strategies, and Efficacy in Classroom Management) were analyzed and Figures 1, 2 and 3 below show the results.

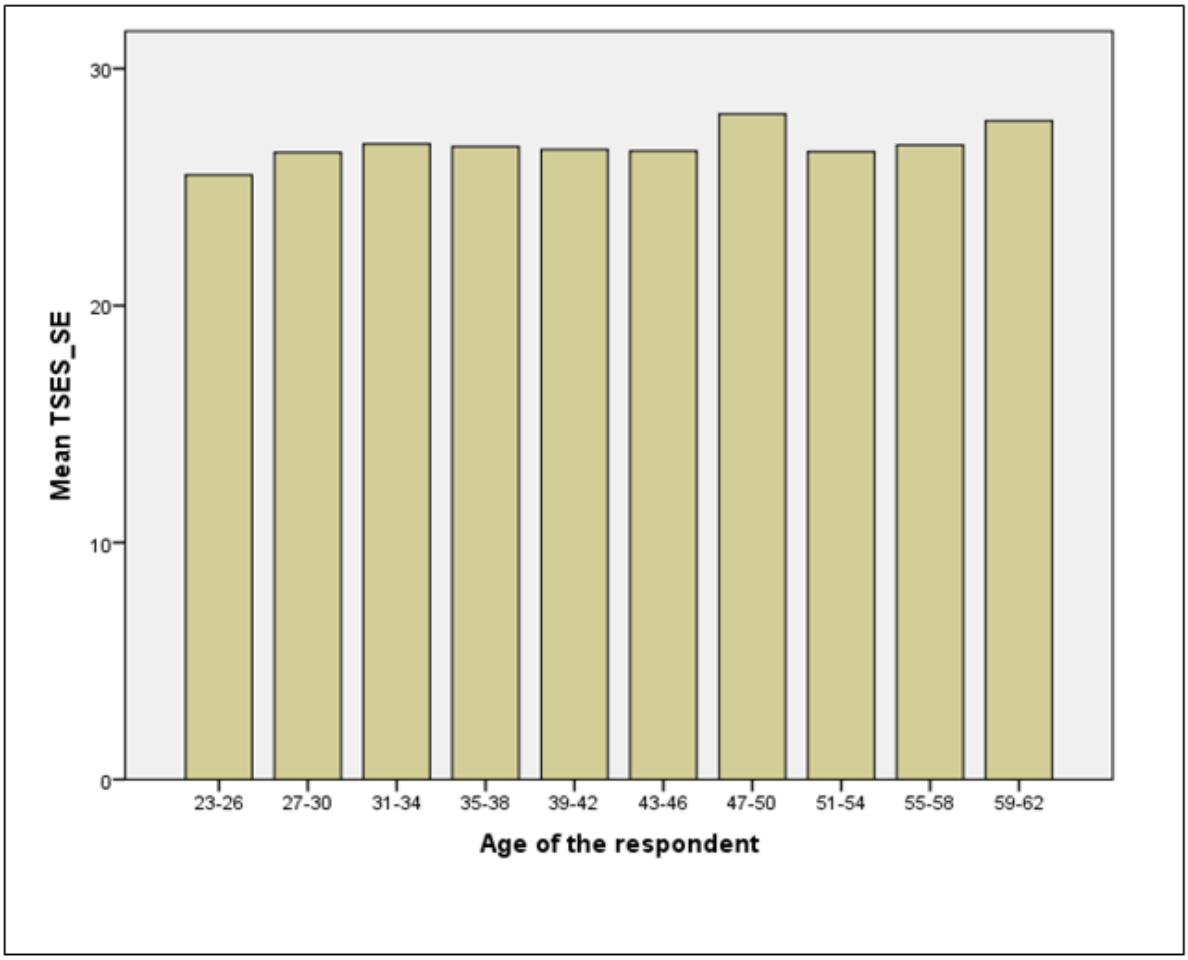


Figure 1. Efficacy in Student Engagement and age

The present study's results on the age factor among Botswana teachers are displayed in Figure 1 above. These results are related to Tschannen-Moran and Woolfolk-Hoy's (2001) items about teachers' sense of efficacy for three subscales, SE, IS

and CM (see Appendix B Short Form). Older teachers engage students in learning more than younger students because of their confidence that they are able to assist students, help them focus on the learning tasks, and motivate them in the learning settings (Wolters & Daugherty, 2007). Teachers aged 47 to 50 and 59 to 62 engaged students in learning more than other teachers. Younger teachers (see Figure 1 above) are the least effective in engaging students in learning, although the difference between older and younger teachers is only slight.

As Figure 1 shows, most teachers are similar in using a variety of activities to engage students in learning. Having just started their teaching career, young teachers are usually challenged by their vocation and their students' behavior. Using TSES, Wolters and Daughtery (2007) found that experienced teachers are "likely" to have the knowledge of their subject matter, "have different attitudes about their students, and think and behave differently in the classroom when compared to less experienced peers" (p.183).This implies that older teachers, develop thoughts about their students and differ in the classroom environment than young teachers; they are taking responsibilities of engaging students in learning. It is also their beliefs about their capabilities to encourage students and engage them effectively in their school work Wolters & Daugherty (2007). As displayed in Figure 1, the three subscales' results for younger teachers in the current study are consistent with Wolters and Daughtery's findings. Daugherty (2005) found that "efficacy in student engagement was a significant predictor for three teacher behaviors (engaging struggling learners, motivating students and giving instruction or assessing"

(p.59). Thus, older teachers (Figure1) could be helping students with learning challenges and encouraging them as they learn.

Bandura (1977) asserted that teachers who have more years of teaching experience have opportunities of experiencing useful models in their workplace. This assertion implies that experienced teachers have enhanced self-efficacy in other areas because they have observed and "learned from their colleagues the instructional and management skills needed to more confident" (p. 189). Additionally, these collective efficacy beliefs, as suggested by Bandura, have an impact on teachers' goals, efforts, and patience when challenging teaching situations arise. Botswana teachers work with others in their schools and in neighboring schools. This writer thinks that such collaboration can help older teachers feel more efficacious than younger teachers as the results from Figure 1 show.

Teachers, when they are trained are expected to use effective instructional methods that they have gained from training and impact students learning. The assumption is that they have chosen a profession they like and are well equipped for work regardless of their age. However, in the present study younger teachers seem to be scoring lower than older teachers in regard to the various instructional methods they employ in the learning environments. The results are discussed below Figure 2.

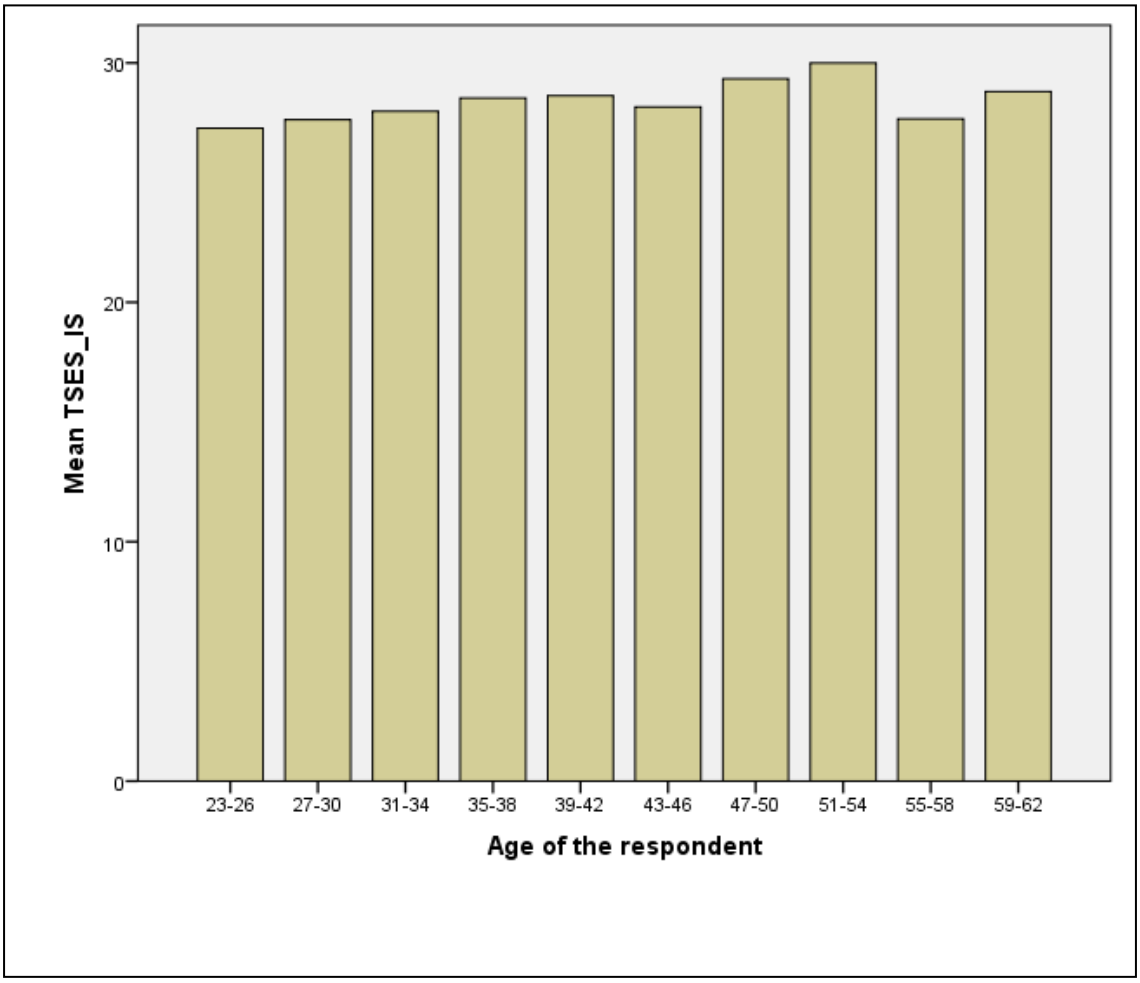


Figure 2. Efficacy in Instructional Strategies and Age

The results of Efficacy in Instructional Strategies and age shows teachers from the age of 47-54 and 59 to 62 are using instructional methods than other teachers. The results also show younger teachers and those who are 35 and 42 years older are not differing as

much in instructional strategies. Younger teachers are still new to the profession and have energy to employ what they have learned from their training.

Teachers aged 51- 54 used instructional methods more than other teachers. This is encouraging because at that age it is where some teachers get tired of using different activities to engage students in learning. The ability for older teachers to use instructional methods can be viewed as an individual's conviction that she/he can plan, put into practice activities, evaluate and have an impact on student learning Wolters and Daugherty (2007). It is also related to Bandura's perspectives of teacher efficacy, and personal teacher efficacy, an individual's accountability in regard to student learning.

The results from Figure 2 are informative in relation to teacher efficacy construct and factors that can influence it. Wolters and Daugherty (2007) suggested that the convictions of teachers with more years of teaching are influenced by "additional and more specific training needed to be effective in the areas of their professional responsibilities" (p. 189). And various research in support of teacher preparation is related to increase in teachers' sense of efficacy (Fritz, Miller-Heyl, Kreutzer, & MacPhee (2001. In Botswana teachers are exposed to additional and relevant training on their subjects of specialty. There are Education Centers throughout the country, where teachers are invited to come for workshops or innovations to develop themselves more in their vocation. Education, Senior, and Principal educators oversee this training, and other teachers are trained to facilitate workshops. Thus, every teacher; young or old is exposed to this information and can take advantage of it to increase their efficacious beliefs.

Classroom management can be a challenging factor for some teachers because they interact with students who display different behaviours. Some students are abused from home and need the attention of the teacher and some display such -behaviors in the class that disrupt other students from learning so that the teachers can attend to them. Teachers - need- to be trained effectively to deal with such behaviors. Research clearly states that teachers who observe students as they teach know if students are paying attention or are confused in learning (Brophy, 2006). However, some teachers are unable to manage student behaviors in learning, and teacher-efficacy research shows that teachers with low teacher efficacy refer disruptive students to Speacil education (see Chapter 2). The results for Efficacy in Classroom management are discussed below.

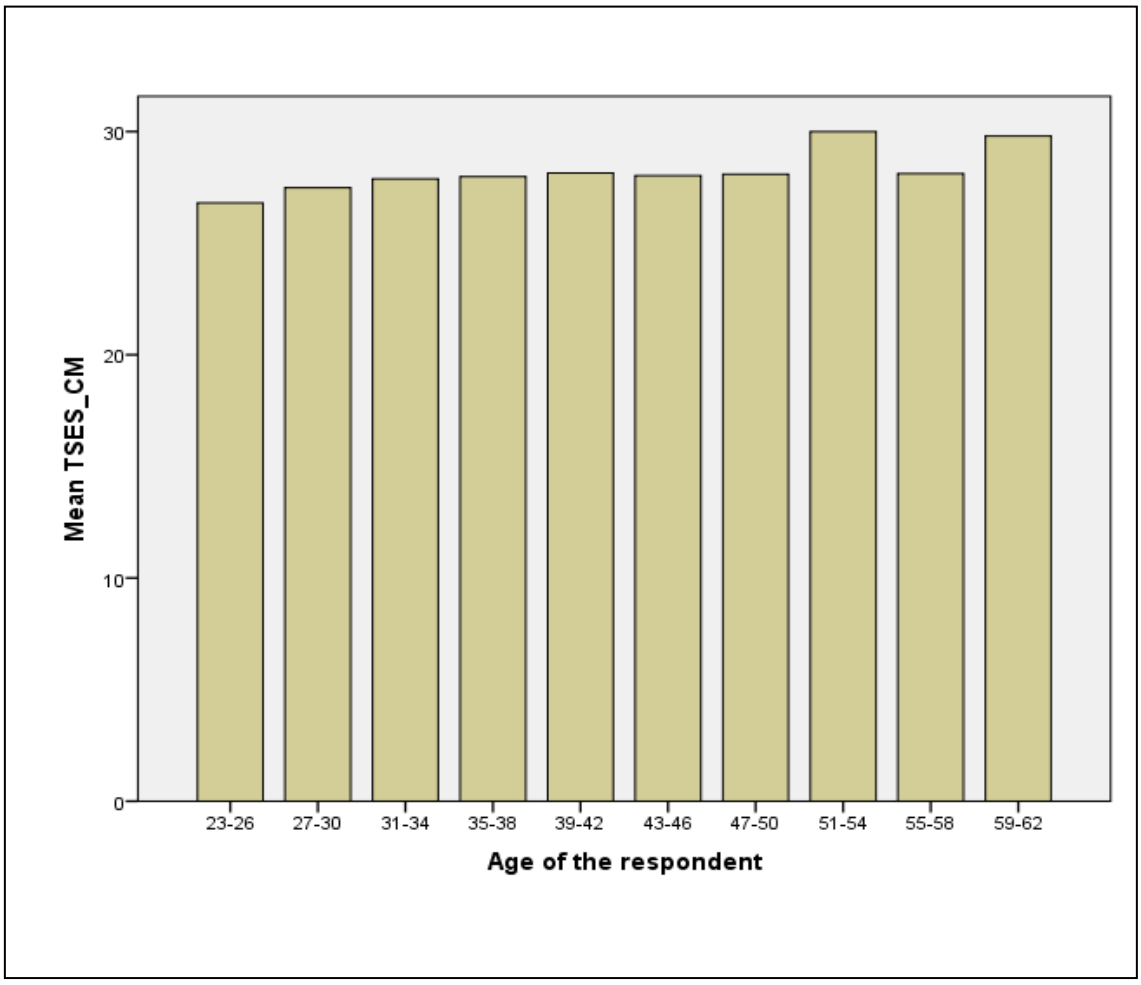


Figure 3. Efficacy in Classroom Management and Age

Figure 3 shows the results of Efficacy in Classroom Management and participants' age. Older teachers (50 and above) outperformed their colleagues in classroom management. This writer thinks that one implication of this finding is that these teachers may have been unconcerned about leaving their profession for greener pastures, but were working towards retirement and may not have desires of looking for other jobs. Furthermore, these teachers may have developed beliefs to keep order in

disruptive classrooms. Another implication is that older teachers have more years of teaching experience and, as a result, have acquired more knowledge and skills. Fives and Buehl (2010) compared pre-service and in-service teachers and found that in-service teachers had higher beliefs in Efficacy for Classroom Management activities but had the least beliefs in their Efficacy for Student Engagement. Also, teachers with 10 or more years of teaching experience reported higher efficacy beliefs. Unlike these research studies, the present study focused only on in-service teachers.

This writer thinks that more investigations are needed to know what makes older teachers score higher in beliefs in their Efficacy for Classroom Management. Before starting her doctoral studies at the University of Tennessee, I observed Postgraduate Diploma in Education (PGDE) trainees teaching in junior and senior schools in Botswana. When I asked trainees why they were unable to manage students' behavior, they responded that they found students already out of hand and that the classroom teachers were unable to calm them when they became noisy.

Figure 1 show teachers aged 23 to 50 using similar classroom-management skills. Qualitative studies and observational studies are needed to determine what teachers are doing to manage their students' behavior. As shown in Figures 1, 2 and 3, the results for the three subscales (Efficacy in Student Engagement, Instructional Strategies and Classroom Management) show older teachers (age 40 and above) have higher mean scores than younger teachers. The results are consistent with those of Cheung (2008) who reported that more years of teaching could result in higher teacher efficacy. In the present

study, young teachers in their earliest years of teaching may be adjusting to the profession's challenges and experiencing problems in teaching therefore, becoming more effective may not be easy. Corcoran, Veenman, Weinstein (as cited in Woolfolk-Hoy, & Burke Spero, 2005) reported that the first year of teaching "can be a time of reality shock as the novice teacher is faced with all the role demands and expectations encountered by experienced teachers" (p.346). The same can be true for the youngest teachers in the present study because they are in the beginning stage of their work. Friedman's studies (as cited in Woolfolk Hoy & Burke Spero, 2005) of beginning teachers in the U.S. reported "shattered dreams of impeccable professional performance" (p. 346). Also, using the results of qualitative studies involving novice Israeli teachers, Friedman associated work-related stress with teaching and called that "professional efficacy discrepancy" or the distance between expected (if unrealistic) and actual levels of performance (p. 346).

Summary

The responses of Botswana Junior Secondary school teachers on the two subscales of TSES, (Short Form) similar in how they use different methods of instructions, and manage student behaviors classroom settings. Efficacy in Student Engagement and qualifications showed significant results. The results are impressive because they are significant. The teacher practices results are not significant; teachers who believed that they use best practices in the classrooms did not differ statistically with those with lower scores in teacher practices. Younger teachers, as the above Figures

show, seem to be scoring lower than older teachers; the former group may be learning and familiarizing themselves with their profession and encountering work related challenges of adjusting in the profession.

Chapter 5

Summary and Discussion

Chapter 5 confirms the purpose of the study as well as the methods used. Results, discussions, conclusion, and recommendations for future research are also provided.

Statement of Purpose

The purpose of this study was to conduct quantitative research among junior-secondary school teachers in Botswana. Student engagement, instructional strategies, and classroom management —were explored using TSES, an instrument designed to measure teachers' self-efficacy beliefs. To determine whether teachers have high or low efficacy beliefs, their types of classroom practices were also investigated. Demographic data included the following variables: gender, educational qualification, teaching experience, nationality district, city, town and village.

The researcher and four research assistants conducted the survey in Gaborone and surrounding areas. During the first meetings, the research team visited schools to introduce themselves to school heads and to brief them about data collection. The team also distributed research-permission letters from the Ministry of Education, the researcher's letter, and letters to school heads. Appointments with teachers were requested. The teachers completed the questionnaire on the scheduled dates agreed upon in communications with researchers facilitated by school administration. The first part of the research was conducted for three weeks, towards the end of 2010 and continuing

through the first two months of 2011. Teachers responded to the three subscales of TSES, and the results are discussed below.

Results

The TSES subscale Efficacy in Student Engagement and qualifications showed significant results for teachers with a Post-Graduate Diploma in Education (PDGE). Other results are closer to significance (see Chapter 4). The PDGE teachers had higher mean scores than other teachers; these. results are encouraging because they not only show that these teachers have a higher teacher efficacy in student engagement but also imply that they are using different activities to help students learn. As discussed in Chapter 4, junior secondary school teachers as well as primary teachers face challenges of class-size overload in Botswana. This overload interferes with their instructional goals. and the attention they want to offer students. The National Commission Committee (1993) cited primary school teachers' complaints about overloaded classes, which relate to the secondary level because class overload is still a problem. In discussing overloads, teachers described the "impossible tasks with a class of 45" and "strongly suggested a reduction in the class size ranging from 25 to 35" (p. 121). What is striking is that the Commission had evidence, especially from teachers and community members, about class size hindering effective teaching. Pheko (2010) expressed the same concern about class size (see Chapter 4). However, the efficacy beliefs of PGDE-qualified teachers enable them to persevere when situations do not go as expected; and they are determined to offer effective instruction for engage students in learning despite the challenges in the

classroom. Gibson and Dembo (1984) reported the same results with teachers who had higher teacher efficacy.

These results for Efficacy in Student Engagement are also important to teacher education because they show the teacher's impact on student achievement; when students are engaged in their learning, they are likely to perform well. Research shows that teachers' sense of efficacy has an effect on students' achievement. Ross (as cited in Woolfolk-Hoy & Spero, 2005) reported that highly efficacious teachers are more likely to (1) learn and use new approaches and strategies for teaching, (2) use management techniques that enhance student autonomy and diminish student control, (3) provide special assistance to low achieving students, (4) build students' self-perceptions of their academic skills, (5) set attainable goals, and (6) persist in the face of student failure. (p.345)

This writer thinks teachers in the present study who scored higher in Efficacy for Student Engagement possess the above qualities. As mentioned later in this chapter, these teachers had serious conflicts with the government, but they still enhanced students' learning in a positive way. They are the intentional teachers that have a sense of purpose in their profession. According to Bandura (as cited in Slavin, 2006), "an intentional teacher, one who has a strong belief in his or her efficacy, is more likely to put forth consistent effort, to persist in the face of obstacles, and keep trying relentlessly until every student succeeds" (p.7).

The significant and closer-to-significant results can benefit education, particularly if teacher educators in Botswana can employ some of Bandura's theoretical views of self-efficacy beliefs. Because teacher efficacy has an impact on behavior because of cognitive abilities (particularly "goal setting), motivational processes (especially attributions for success and failure), affective processes (especially control of negative feelings), and selection processes" Bandura (as cited in Ross & Bruce, 2007, p.2). This insight is relevant to education because if teachers develop more cognitive abilities, they can think more about their instruction. They can also become more motivated in their work; therefore, they can manage negative feelings towards work. In turn, student learning can improve. For example, in Botswana some teachers are known to verbally abuse students and utter such comments as "I don't care if you fail; at the end of the month I get my salary." Parents have expressed their concerns about such statements. These negative comments might cease if teachers become aware of their efficacious beliefs. The writer is not implying that teacher educators in Botswana are ignorant of the theory discussed above; some may be, but others are not. For example, during data gathering in one secondary school, when the writer was explaining the survey to teachers, an argument arose about the term teacher efficacy. When one teacher thought the writer meant to write "teacher effectiveness," others disagreed. Fortunately, in that situation, the writer was able to give a detailed explanation. Therefore, some teachers may come from training unaware of self-efficacy theories, which are vital to teacher efficacy.

Teachers who have high efficacy also use different classroom strategies. Managing students' learning is not easy; furthermore, if many students are involved, disruptive behaviors are distracting. However, research has shown that when teachers use effective classroom- management strategies, students become engaged in activities and their achievement increases Woolfolk, Rosoff and Hoy (as cited in Ross & Bruce, 2007). It is not known what contributed to Botswana teachers differing in one of the three TSES subscales. Some research evidence in other countries, including the United States, shows that teacher institutions do not prepare teachers to be effective. On the one hand, it is not known whether trainees take advantage of the curriculum while training as teachers and/or effectively use the knowledge and skills they acquire during training .Thus, generalizing the present study's findings may not be appropriate.

Education institutions in other countries, for example the United States, have been criticized regarding teacher preparation. According to Darling-Hammond (2000), a survey of teachers on Professional Knowledge and Skills revealed that education institutions do not prepare teachers to be effective in their work. Brandon et al., (1998) reported that education programs in Botswana were viewed as being average regarding "teaching students to become teachers" (p.50). Therefore, the teacher-education programs may not be challenging trainees' learning abilities enough to enhance their teaching effectiveness. This writer shares Darling- Hammond's views. Effective teachers are also viewed as developing student learning through interactive instruction (Tournaki et al., 2010). Darling-Hammond adds, "Research suggests that the extent and quality of teacher

education matter for teachers' effectiveness, perhaps now even more than before" (p.166). Because teachers in Botswana differed in one aspect of TSES, Efficacy in Student Engagement and qualifications, they do not employ similar teaching strategies; therefore, education institutions need to help them learn more. For example, teachers' knowledge of the subjects they teach has been perceived as contributing to teacher effectiveness; the connection of that knowledge "to teaching performance is curvilinear; that is, it exerts a positive effect up to a threshold level and then tappers off in influence" (p. 167). Teachers in Botswana junior secondary schools teach their major subjects, enabling them to excel in their majors and, thus, enhancing effectiveness and contributing to students' learning. Likewise, Bryne (as cited in Darling-Hammond), (2000) commented, "insofar as a teacher's knowledge provides the basis for his or her effectiveness, the most relevant knowledge will be that which concerns the particular topic being taught and the relevant pedagogical strategies for teaching it to the particular types of pupils to whom it will be taught" (p. 167).

Teachers were asked to indicate the place in Botswana from which they originated The results for teachers from various districts, cities, towns and villages are discussed below in an effort to determine if place of origin influenced teaching efficacy. Teachers from the Chobe district had the highest means in student engagement, followed by teachers from cities. These results are encouraging because teachers in the Chobe district, which is north of Botswana and considered rural, was expected to have low teacher efficacy when teaching students in the city, villages and towns close to Gaborone.

Therefore, growing up in rural areas has seemingly not affected them. Bandura's (1989) concept of reciprocal determinism can help in understanding that the commitment of teachers from the Chobe district is controlled by their cognitive abilities, environment, and "external systems." Also, the implication is that teachers use what they have learned while they were training. Therefore, according to Bandura (1989), they are "products and producers of their own environment" (p.3).

The four sources of efficacy beliefs are useful because they enable teachers to use a variety of activities to engage students in learning (See Chapter 2 for an interview with Woolfolk about the sources of efficacy beliefs.) The following researchers found similar results regarding Efficacy for Student Engagement: Gibson and Dembo; Ross, Cousins and Gadalla (as cited in Knoblauch Woolfolk Hoy, 2008); Klassen and Chiu (2010); and Fives and Buehl (2010).

Teaching experience and Efficacy in Student Engagement are discussed in Table 2, suggesting only a small difference in efficacy between experienced teachers and those with the least teaching experience.

Kyriacou and Coulthard (2000) reported 54% females and 46% males in their study of undergraduate teacher trainees. Johnston et al. (2000) and Thorn and Reid (2001) found that male trainees in their studies believed teaching is a female job. Teacher-efficacy researchers have disagreed about the impact of gender on teacher efficacy, some have reported that females are more efficacious than males (Evans& Tribble; Cantrell, Young & Moore; Mulholland, Dorman, Odgers, & Riggs as cited in

Gencer & Cakiroglu, 2007). Kalaian and Freedman (as cited in Gencer & Cakiroglu, 2007) reported that females have a higher sense of efficacy than males because the teaching profession consists largely of females.

Another factor that can make experienced teachers self- confident in their work is "attrition." According to Bandura (as cited in Wolters & Daughtery, 2007), "attrition" can add to a greater self-efficacy among experienced teachers and make them remain longer in their profession, whereas those who look for other jobs and who leave teaching are viewed as not confident and as having the least skills to remain in the teaching profession. In terms of this study, Botswana teachers are not leaving the teaching profession in larger numbers for greener pastures, unlike in other professions, for example nursing. An incentive, along with other fringe benefits, could be that the government offers Botswana teachers accommodations with low rent compared to other government officials. Also, in Botswana, both parents and students respect teachers.

Teacher Practices

The second question of the study asked teachers about their classroom practices. Then teachers were grouped according to their beliefs about best practices. The expectation was that teachers who rated themselves high as best practitioners in the classroom would perform better than those who scored themselves lower. However, this was not the case in the present study.

Teachers who thought they employed best practices in the classrooms did not differ from those who rated lower in classroom practices. This finding raises questions

because those teachers with high efficacy are expected to perform better than their colleagues. Freire (as cited in Tabulwa, 1997) discussed the concept of "banking education," defined as the teacher being a "depositor and students depositories who must bank the deposited knowledge" (p.187). Teachers who score low in classroom practices may criticize students who fail to deliver the deposited knowledge. Such behavior is an example of low teacher efficacy, even to the extent of dominating or exercising power over students. This writer agrees with Kohl (1984) that some people teach in order "to dominate others or support work they'd rather do or simply to earn a living" (p. 7). The behavior of some teachers, which is controlling students, may happen in Botswana classrooms where teachers do not differ in teaching strategies. In general, teachers enjoy students' respect because respecting elders is highly valued in Setswana culture. Therefore, this factor may contribute to some teachers being authoritative. Their classroom management can be questionable in terms of whether they are controlling students, as well as using cultural disciplines methods, or using positive management strategies to enhance learning. Past research in Botswana has shown that cultural beliefs, including those that are negative, can affect teachers professionally. Dibapile (2005) reported that PDGE trainees' choice of a teaching career is dominated by altruistic reasons, involving a desire to serve the society which needs teachers. The trainees wanted to teach in order to assist the government in reducing the number of foreign teachers working in Botswana. Such motivation can have a negative impact, particularly when teachers do not differentiate between positive and negative outcomes of student

learning. Trainees could have chosen teaching as a career to help with the shortage of teachers in their country, but do not have a passion to impart knowledge. Therefore, this cultural factor should be investigated in terms of teacher efficacy, which according to Lin and Gorrell (as cited in Gencer and Cakiroglu, 2007) is characterized by cultural effects, such as views of teachers' responsibilities.

Comparing teachers' classroom discipline and student behavior in Australia, China and Israel, Lewis et al., (2005) found cultural factors related to the above-mentioned factors. For example, In China, teachers are highly respected Li, Xie and Wang, (as cited in Lewis et al., 2005). According to Jin and Cortazzi, "Chinese students would follow what teachers say out of respect"' (as cited in Lewis et al., p.738). Batswana students, like Chinese students, respect their teachers. Such similarities in students can make some teachers be authoritative in the classroom. Australian classes were characterized by low conversation and "recognition and punishment" (p. 738). Punishment is also evident in Botswana schools (see Chapter 2).

Ho and Hau (2004) found cultural differences between Chinese and Australian teachers. Chinese teachers were reported to have parental abilities by guiding students daily in their behaviors; hence, such guidance was related to instruction and discipline. In contrast, Australian teachers viewed their professional abilities in regard to instruction and discipline (Ho & Hau, 2004). In their studies of teacher efficacy, Tschannen-Moran and Woolfolk Hoy (2001) reported that "efficacy for instruction and for classroom management is probably the two domains for personal teaching efficacy that are valid

across different cultural contexts" (p.320). Personal teaching efficacy refers to how reliable teachers are in their work and how they recognize students learning. Therefore, finding differences in teacher efficacy is not surprising because not every teacher takes responsibility for his/her work and impact on students' learning. Research exploring cultural aspects of teacher efficacy would be useful. Teachers can be effective when they interact with learners in the learning settings. Teachers can also recognize their limitations and the cultural issues that they bring to the classroom that hinder student learning.

Regarding classroom practices, teachers who perceived themselves as employing best practices in the classrooms were statistically the same as those using less-effective practices. This finding implies that in-service or trainee teachers need to be taught more about instructional self- efficacy. Teachers' self-confidence benefits not only students' learning but also teachers' instructional effectiveness. Teaching is not an activity that has only one method to follow universally or one approach to employ; instead, it requires both the teacher's and the students' efforts. Teachers have to be committed to their vocation if they want to see good results in students' learning (see Chapter 1 planning and preparation). Accordingly, effective teaching includes the teacher's ability to plan and prepare their work and to make "dozens of decisions every hour" (Slavin, 2006, p.5). Though not easy in practice, teachers must plan, prepare and be committed to their work. As Slavin suggested, the intentional teacher does things for a "reason and purpose," a concept that makes sense particularly regarding what the teacher practices in the

classroom. If Botswana teachers in present study could have more instructional self-efficacy and be intentional teacher in their approach, the number of students failing in junior secondary school could decline. Also, regarding classroom management, being coached as well as observing models can be useful for them to manage unruly behaviors (see Chapter 2's section on classroom management).

Additional results are discussed below are interesting and helpful. Though not significant, they shed light on understanding Botswana junior secondary school teachers' responses regarding TSES's three subscales. Also, they can help teacher educators, policy makers and stake- holders improve teacher education in Botswana as well as researchers that would like to investigate the teacher-efficacy construct. For example, in his address to the nation, President Ian Khama (of the Republic of Botswana) expressed his concerns: "I must candidly report that the exams performance of pupils in our public schools continues to disappoint. … in moving forward there must be enhanced teacher motivation" (The Botswana Gazette, 2011, p.2). This speech was sensitive because the president talked about the Botswana General Certificate of Secondary Education (BGCSE) examinations' results, which have declined in five years. Junior and primary school results were included. Therefore, discussing additional results will be eye opening for everyone involved with teacher education and education in general to find different ways of improving it.

Additional Results

The TSES subscales' means are not significant by districts, cities, towns and villages. Efficacy for Instructional Strategies, Classroom Management by Experience and Qualifications, Student Engagement by Instructional Strategies, Classroom Management and Student Engagement by gender are also not significant. These findings could be expected to be different because Botswana teachers are trained in different teacher training institutions, so their teaching methods are different. For example, most teachers are diploma holders trained in one of the two colleges offering a three-year course in secondary education. The majority of degree holders are graduates of the University of Botswana. Graduates from both institutions could be effective in their work, differing in their instructional methods because they received their training from different institutions and because the curriculum they were exposed to was different. Therefore, how they engage students and manage classrooms should be different.

Teachers with a Post-Graduate Diploma in Education (PGDE) spent four years studying for a Bachelor of Arts degree and one year taking a teacher-certification course. Most students chose to train as teachers because they were offered employment after completing the program. However, employment is not currently guaranteed because the Ministry of Education has enough qualified teachers.

Regarding the current study's findings, teachers' not reporting differences in instructional strategies is not new with teachers in Botswana. Fuller and Synder (1991), who studied teacher-centered approaches in primary and junior secondary Botswana

schools, stated that surprisingly most of the time "… the vast majority of teacher questions are closed-ended, demanding simple recall" (p.292). This writer thinks that authoritative instruction does not allow students to be involved in their studies and leads to student failure. Not surprisingly, Botswana teachers trained in different institutions and with different qualifications have the same ineffective instructional strategies for engaging students as well as managing classroom behaviors. While addressing teachers in a workshop in Maun, the North West District Chief Education Officer, Mr. Maseko ("Relevant, interesting," 2010), advocated finding more "relevant interesting teaching methods." Maseko cited different teaching approaches, including Pupil Academic Empowerment Strategies (PAES), which some schools in the Central District use. The PAES approach was reported to motivate learners and diminish the teacher's role as the director of learning. Therefore, a learner-centered approach is preferable to a teacher-centered approach in Botswana.

However, reflecting on the current study's results, this writer thinks they are examples of teachers' views on career choices and related beliefs that can be understood in terms of the career stages Huberman proposed (as cited in Klassen & Chiu, 2010). .

Huberman asserted that teachers that have taught four to six years experience "stabilization," characterized by either devotion to their occupation or the decision to resign. For example, according to Huberman, teachers with three years of teaching experience have "stabilized" if they use the same instructional and disruptive behavior management methods as teachers with 21 years of teaching experience. However,

Huberman said more experienced teachers, having taught 19 to 30 years, are prone to "serenity," the "gradual loss in energy and enthusiasm [that] is compensated for by greater sense of confidence and self-acceptance" (Klassen and Chiu, 2010, p 748).

This writer agrees with Huberman that experienced teachers' ability to work and motivate is declining when their performance is the same as the least experienced. Experienced teachers should perform better than those with less experience. Other researchers—for example, Imants and DeBrabander, Lin et al., and Mertler (as cited in Cheung, 2008)—suggested teaching experience as having an impact on teacher efficacy. Their findings indicated that teaching experience is associated with teachers' "perceived efficacy" as well as "school efficacy." Perceived efficacy, as suggested by Bandura (1993), has an impact on academic growth. Therefore, the implication is that the more teachers lack perceive efficacy, the less their students grow academically. Also, more experienced teachers are viewed as having the ability to cope in various circumstances "and handle different situations and thus critically reflect on these situations, which can help them grow and handle similar situations better or in more mature ways the next time they occur" (Cheung, 2008, p.116). Wolters and Daugherty (2007) found that more experienced teachers were confident of their capabilities to "employ instructional and assessment practices that would benefit even the most difficult-to-reach students" (p.188). The present study's results, however, contrast with the studies mentioned above. In the present study, the majority of teachers have been teaching from six to twelve years, representing the middle of their career.

According to Huberman, teachers in mid- career are careers are in the stage of "experimentation and activism" and are evaluating their jobs and career decisions. The "experimentation and activism" stage is critical because it involves experimenting with the vocation and either putting forth effort or not, probably even with a "take it or leave it" attitude, which means those teachers can either continue working or quit. Therefore, if teachers believe they have made the right choices in becoming teachers, they can have a high sense of efficacy in terms of the three efficacy subscales (Student Engagement, Instructional Strategies and Classroom Management). However, if they think they made the wrong choice in becoming teachers or have chosen the teaching profession for different reasons than those mentioned above in TSES's three subscales, these teachers may not have a positive effect on student learning) (O'Mara, 1996; Dibapile, 2005). Day and Gu (as cited in Klassen & Chiu, 2010) reported that the majority of teachers in the middle of their vocation "(i.e., 8 – 23) experience increases in motivation and commitment, whereas increased proportions of teachers in the later stages of their career (24+ years of experience) report declining motivation" (p.748).

In the present study, teachers with more than 20 years' experience performed slightly higher in terms of classroom management than those with less experience. These findings are consistent with Day and GU's findings that experienced teachers were motivated and took responsibility in their career. Gorrell and Dharmadasa (as cited in Fives & Buehl, 2010) reported that teachers with more experience have a high efficacy

regarding classroom management. Tschannen-Moran and Woolfolk Hoy (2007) reported the same findings.

Factors Influencing Botswana Teachers' Responses

In the present study, factors that influenced the low teacher responses on the TSES three subscales are highlighted. Teachers' not participating in some school activities and the lack of salary increases are seen as contributing factors in this study. Since September 2010, teachers' and public officers' unions have been advising their members to reduce their workload because they are not well paid by the government. For teachers, this advice means they can finish work in the afternoon at half - past four, which is the end of the business day for government employees. Teachers in Botswana participated and trained students in extra-curricular activities, like sports and music, after working hours and were comfortable participating in those activities.

While this writer was in Botswana gathering data in November of 2010, teachers refused to invigilate the national examinations that junior secondary school students were writing the end of the year. Disputes existed between teachers and the government regarding some work- related duties. As a result, principal educators throughout the country and other professionals that the government hired were invigilated examinations for junior and senior secondary schools. Teachers complied with what union leaders advised them to do rather than adhering to their employer's requirements. For example, the Secretary General of Botswana Federation of Public Sector Unions (BOFEPUSO), to which teachers unions subscribe, wrote, "We strongly advise members only to work as

per the normal hours of work for government employees, effective September, 2010, unless advised by the union leadership" (Gazette, 2010, p.2).

The concern is how long will it take teachers to regain their efficacy and for emotionally distressed students to become engaged in learning. If teachers from last year have work-related, unresolved issues that have caused them to professionally burn out, maintaining high efficacy, engaging students, managing classes and using effective instructional strategies will not be easy.

This dissatisfaction in the workplace contributes to stress and to professional burnout, making teachers ineffective in their jobs. Evans as well as Ingersoll (as cited in Klassen and Chiu, 2010) found that "Teachers who are dissatisfied with their work display less commitment and are at greater risk for leaving the profession" (p.742). Therefore, because Botswana teachers have the same scores in the three TSES subscales, they may be experiencing unhappiness in their work and are not motivated to offer effective instruction that could enhance their high teacher efficacy.

Teacher training institutions are faced with challenges of developing new directions for preparing and retaining teachers. The Ministry of Education needs to generate funds for new programs that will produce better-equip teachers. With Botswana's economic challenges, funding new projects may take time. How long it will take teachers to become motivated to teach is unknown. When teachers are unhappy with their workloads and salaries, their effectiveness is questionable.

A change in teacher training, such as the United States has adopted, is needed in Botswana. Feistritzer, Harr, and Scullion (as cited in Nagy & Wang, 2007) reported that in the next decade, 2.2. million teachers will be needed in the United States. Therefore, since 2006, the District of Columbia and forty-eight states have designed the Alternate Route (AR) teaching certification to employ people with a college degree. Nagy and Wang (2007) reported that AR teachers are not qualified; hence, they are vulnerable to insufficient knowledge of teaching, different methods of instruction, classroom management, and general issues regarding "students 'social and academic developmental issues" (Nagy & Wang, 2007, p.99). For these teachers to excel in the classroom, they need effective guidance from principals and mentors Nkai & Turley (as cited in Nagy & Wang, 2007). Research shows that some school personnel are not fully trained to offer AR candidates effective guidance. Therefore, supervising AR candidates is insufficient Darling-Hammond; Hayes; Jacobs (as cited in Nagy & Wang, 2007).

This writer believes that any profession needs effective supervision and support for its employees or trainees; therefore, AR teachers need school administrators that are trained to mentor new teachers. Work that is not supervised effectively will have negative results despite the quality of personnel involved. Research findings about AR are positive; for example, since 2005-2006, 40% of teachers employed in New Jersey had AR qualification (Feistritzer et al., as cited in Nagy& Wang, 2007). Most of the time when teaching positions are advertised, AR teachers apply for those positions in larger numbers than "traditionally trained teachers" Feistritzeras (as cited in Nagy & Wang,

2007). These findings may encourage the Botswana Ministry of Education to improve teacher training to cope with its educational challenges. For example, the President of Botswana's expression of disappointment with low student performance echoed his suggestions that the Ministry of Education needs to redeem the situation "… currently ensuring that there is tight monitoring of teaching by regional directors, together with school heads, and as well as increased provision of in-service training" (The Botswana Gazette, 2011, p. 2). These suggestions can improve instruction and, in turn, impact student performance. However, his writer thinks instructional self-efficacy should be also encouraged to achieve more fruitful results (see Chapter 1). Instructional self-efficacy beliefs will result in a higher teacher efficacy, which is related to greater accountability. Also when regional educators and school administration work with teachers is good. Teachers can also develop personal beliefs through interacting with their supervisors. Personal beliefs can enable teachers to be motivated to assist students learn, and can be answers for effective teaching because teachers will take responsibility for their work. Culturally responsive teaching could also add to teachers' sense of efficacy beliefs because increasing cultural awareness affects teaching strategies as well as personal and general teaching efficacy (see Chapter 2) when teachers evaluate themselves and their attitudes in the classroom. Some teachers still believe in using corporal punishment to manage undesirable classroom behaviors although the Ministry of Education does not permit it or other harmful punishment. Teachers should be more aware that these cultural beliefs' influence in the classroom can hinder students' learning. Thus, being aware of

one's culture is important because such awareness also promotes awareness of teaching strengths and limitations. Regarding pre-service teachers, Imler (2009) noted, "to become culturally responsive, they must understand their cultures, values, beliefs and biases" (p.353). They must also understand how these personal factors influence their teaching and behavior" Grant & Sleeter; Lerner, Lowenthal & Egan; Phunstog and Vavrus (as cited in Imler, 2009, p. 353).

Because of the strike by teachers and some government employees in June 2011, the Ministry of Education called on University of Botswana graduates with education-related training to apply quickly for teaching positions. The graduates were recruited on temporary terms (Mmegi, 2011). It is time to take advantage of qualified unemployed teachers and design teaching-certification programs that are different from those that teacher training colleges and the University of Botswana offer. This approach will be another way of retaining qualified personnel in the teaching profession.

The teaching profession in Botswana has not suffered attrition since independence. Teachers have not left their jobs to work in other countries. The Ministry of Health did experience attrition of nurses immigrating to England for better salaries. Therefore, the Ministry of Education can take advantage of new programs and "make hay while the sun shines." Accordingly, the United States (Holmes Group, 1986) encouraged deans of education in various universities to improve their teacher training by increasing subject content and demanding course work, including teaching methods catering to students' different needs as well as methods related to clinical experiences.

Some universities have since then created a five- year model involving a year's teaching practice, when individuals concentrate on their majors in institutions of learning. The results of these innovations have been productive. Some researchers reported that "these efforts may be producing teachers who feel better prepared, who enter and stay in teaching longer, and who are rated more effective" (Andrew and Andrew; Schwab; Baker as cited in Darling-Hammond, Chung, & Frelow, 2002, p.287).

After two years of working together, the Holmes Group, a syndicate of education deans and principals' academic personnel from outstanding research universities in fifty American states, wrote a report to change teacher education. They decided to do so because they realized that schools as well as universities were not performing well in relation to teacher education (Holmes Group, 1986).

The following are the changes that Holmes Group suggested for teacher certification:

- Instructor. No professional certificate should be available to a teacher who has only an undergraduate degree. The license open to instructors should be temporary.
- Professional Teacher: This would be the first full professional certificate. It would be granted only to teachers who had completed master's degree in teaching.
- Career professional. This would be the highest licensee in teaching. It would be granted to Professional Teachers whose continued study and professional accomplishments revealed outstanding achievements as teachers, and promise as teacher educators and analysis of teaching. (pp.10-12)

The above requirements can result in institutions having qualified teachers who can bring effective instruction to the learners and who are committed to the teaching profession. This information is discussed because it can also assist teacher educators in Botswana to improve teacher certification. In Botswana, the majority of secondary school teachers have diplomas and degrees, and few have Masters and PhD degrees. Therefore, according to the Holmes Group's standards they are instructors. Teacher education in Botswana has to develop more programs to enhance effective teaching that can have an impact on students' learning.

Alternative certification programs are viewed as providing tutors with a quick route to becoming qualified while teaching. Individuals usually are degree holders in their majors (Suel & Piotrowiski, 2006). These alternative programs differ by state in the U.S. Most of the programs need individuals to be trained, to do coursework, and to take examinations leading to certification. Individuals are also mentored when teaching (U.S. Department of Education as cited in Suel & Piotrowski, 2006).

Florida has introduced a model of an alternative teacher-certification program because of lack of teaching personnel. These programs, according to Suel and Piotrowski (2006), "attract individuals who are committed to staying in the teaching profession" (p. 310). This writer is not encouraging Botswana to borrow and apply such models, but is highlighting what other countries do to have and retain effective teachers. The above-mentioned programs train teachers not only to be effective, but also to be involved in

research, including case studies and action research, "and the development of structured portfolios about practice" (Darling-Hammond, 2000, p. 170).

Other countries continue equipping teachers even if they have earned teaching qualifications. For example, when Singapore teachers start teaching, even if they qualified, are expected to have 100 hours of professional training each year. This additional training is useful because teachers are then better equipped in their work (Chan, Lau, Lim& Hogan, 2008). In Botswana, however, teachers do attend workshops when a need is arise.

Class Size

Overloaded classes can hinder learning by interfering with curriculum goals. The present study has shown that Botswana junior classrooms are crowded; yet according to the Botswana Education Statistics at primary and secondary schools, the teacher-student ratio should be 1:28 and 1:40, respectively (Pheko, 2010). Even if teachers have high efficacy and intend to employ various teaching methods, they may be may not be as successful in an overcrowded classroom. The classroom situation is pathetic in Botswana because the physical space for classes was designed to accommodate 35 students (see Chapter 4) but frequently class enrollment exceeds that number. Furthermore, overcrowded classrooms in Botswana are not a new problem. Reporting the benefits of a smaller class enrollment, the Report of the National Commission on Education (1993) suggested, "The teacher is able to give individual attention to the child; to give more work and mark it; to get to know the strengths and weakness of children better and

therefore devise appropriate remedial measures and more effectively monitor progress of children in class" (p.122). Despite this recommendation to reduce class size in primary and secondary schools, classes remain overcrowded. This overcrowding raises the question of how Botswana can achieve its Vision 2016 goal of being an educated and informed nation with the Commission emphasizing that "Education must focus on the development of the individual's potentialities to the fullest extent, across life-span" (p.37). This writer believes that as long as Botswana classrooms are overcrowded, providing students with a quality education will not be achieved.

The study of O'Mara (1996) with Botswana trainees reported that 87% of first-year students were 20-25 years. Teachers this young may be particularly challenged because some individuals chose teaching for job security or for extrinsic reasons (Dibapile, 2005). Thus, age can have an impact on some teachers' career, and young teachers may still be exploring the field of work and may not be motivated to handle many students in classes.

Based on the results from the three subscales of teacher efficacy (see Chapter 4, Figures 1-3), younger teachers had low mean scores when compared to older teachers. The five major attractions Lorte suggested (see Chapter 1) show that some individuals entering the teaching profession are not driven by the desire to work with young people but by material needs. Some of the teachers in the present study may illustrate that point. Therefore, enhancing trainees' efficacious beliefs is vital. Bandura's Social Cognitive Theory cannot be excluded as it is useful in education and to individuals in general.

Teaching has to start with the teacher as an individual because he/she imparts knowledge to the learner. Personal teaching efficacy, the beliefs that individuals possess, and their abilities in relation to teaching are important for both trainees and in-service teachers and should be encouraged. The feedback teachers get from their colleagues is important because it can help them improve their teaching. Verbal persuasion is useful because it involves feedback about teachers' "performance and prospects for success from important others in the teaching context, such as administrators, colleagues, parents and members of the community at large" (Tschannen-Moran & Hoy Woolfolk, 2007, p. 945).

Conclusion

Efficacy in Student Engagement and Qualifications shows significant results. Teachers with a post-graduate diploma in education rated themselves higher in engaging students in learning than their colleagues with different qualifications. Efficacy in Instructional Strategies and Efficacy in Classroom Management subscales show similar results for Botswana junior secondary school teachers on the three subscales with the implication that teachers use the same methods for instruction and for behavior management. Some results of the subscales (see Chapter 4) are closer to significance. Therefore, future teacher-efficacy researchers should include more participants than the present study did and allocate more time for research. Researchers may seek funds to do more research across the country with Junior Secondary School teachers and with teacher trainees. With limited time and funds as a doctoral candidate, this researcher was unable to continue research with more teachers across the country over a longer time period.

There is relationship of the three subscales (student engagement, instructional strategies and classroom management) of TSES (see question 1). The TSES Short form instrument is reliable to use with Botswana participants and other cultures (see Chapter 3). The results of the Checklist items of teacher practices, showed teachers using similar practices in the classrooms, and the results show no significant relationships. This writer thinks that Botswana participants can perform better on the TSES instrument, but hindrances affected them; for example, the work-related issues caused some teachers to be unmotivated to participate in the study. When the researcher had meetings with school administrators, they expressed concerns over their strained working relationship with teachers due to issues with the government. Classroom size also limits teachers in their work. The Ministry of Education should try to resolve some of these issues. Professional development is essential for teacher trainees as well as in-service teachers in terms of high teacher efficacy. Furthermore, self-efficacy is "context specific," meaning the self-perception of individuals and their abilities can change in relation to the task's state/condition (Tschannen-Moran et al., 1998). Therefore, professional development or training that assists teachers in understanding their profession can have an impact on their perceived their capability; thus, self-efficacy can be enhanced. Collective teacher efficacy is important because teachers continue to work together in groups, share ideas and learn from each other. The present study's results, as discussed earlier, also show that teachers with more years of teaching are not motivated in their work (see Huberman's career cycles). Older teachers rated higher than younger teachers in the TSES Student

Engagement, Instructional Strategies and Classroom Management subscales. Additional teacher-efficacy research investigating the sources of Botswana teachers' self-efficacy beliefs would be more informative. Finally, Tschannen-Moran (2001) asserted that "teacher efficacy is a simple idea with significant implications" (p.784). This writer believes, as other researchers have suggested, that the "significant implications" should be further investigated among other cultures.

The following recommendations for additional research are made based on this study's findings:

1. This was a quantitative study by nature and the first of its kind on the investigation of teacher efficacy among Botswana junior secondary school teachers. A qualitative study would provide more insight than quantitative. Longitudinal studies, case studies, action research and observational studies are also needed.
2. More research on teachers' sense of efficacy is still needed in primary, junior secondary, senior secondary schools, the University of Botswana, and teacher-training colleges to raise pre-service teachers' awareness about teacher efficacy. The curriculum of these institutions can add more strategies that promote the development of teacher efficacy beliefs in terms of student engagement, instructional strategies and classroom management.
3. Coaching in-service teachers regarding teacher efficacy would be useful. Teachers who have more years of teaching are the same in student engagement as those with fewer years. The experienced teachers are less motivated in their work. Coaching

teachers to enhance their teacher efficacy would be useful to instruction and self-efficacy.

4. Designing a relevant instrument to measure Botswana teachers' teacher efficacy is needed. The TSES was reliable in the present study, but some cultural differences exist between individuals entering the teaching profession in Botswana and those in the Western world. Some altruistic reasons, such as serving the community, may lead to influences on efficacy beliefs that could help teacher educators, teaching service managers and stake holders address factors that could impact the teaching profession positively or negatively.
5. The University of Botswana should continue to assist its departments with more funding for research. Building more efficacious beliefs among teachers and students is crucial and cannot be understood through quantitative research. Therefore, the present study needs to be supplemented with qualitative research.
6. The Ministry of Education in Botswana should add more teacher- certification programs. Teachers should have additional qualifications after training in order to continue teaching.
7. Culturally Responsive Teaching should be added at teacher- education institutions.

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Appendix

Appendix A

Junior Secondary School Results: Botswana

2.0: OVERALL PERFORMANCE

2009 JUNIOR SECONDARY EXAMINATION RESULTS

Candidature: 40180

Merit	44	0.1%
A	618	1.5%
B	8950	22.3%
C	20494	51.0%
D	10074	25.1%

6

Appendix B

Questionnaire to Botswana Junior Secondary School Teachers.

Title: Teacher Efficacy and Classroom practices among Community Junior Secondary School Teachers.

Rationale: The purpose of the research is to investigate teacher efficacy and classroom practices of Community Junior Secondary School Teachers in Botswana.

Important Notes:

Please read instructions carefully before completing the questionnaire.

1) The questionnaire is to be completed by in-service teachers in Community Junior Secondary Schools in Gaborone and surrounding areas.
2) Please do not write your name on the questionnaire.
3) The information that you will disclose will be treated as confidential. Your responses will not in any way affect your academic or professional career.
4) I will be grateful if you could spare twenty minutes to respond to the questionnaire.
5) Please make sure you answer every question.

Demographic Data

Please place X by each appropriate answer.
GENDER: Male_____ Female_____
AGE: _____
Education qualification: Diploma_____ Degree _____ M.ED. _____
MSC_____ MA_____ PHD_____ Other
specify_____
Teaching Experience:
Years_____
Months_____
Nationality: _____

Name the district, city/town/ village you come from
a) District_____
b) City_____
c) Town_____

d) Village_____

Teachers' Sense of Efficacy Scale[1] (short form)

	Teacher Beliefs Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.	How much can you do? Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
1.	How much can you do to control disruptive behavior in the classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2.	How much can you do to motivate students who show low interest in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3.	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)
4.	How much can you do to help your students value learning?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5.	To what extent can you craft good questions for your students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6.	How much can you do to get children to follow classroom rules?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7.	How much can you do to calm a student who is disruptive or noisy?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
8.	How well can you establish a classroom management system with each group of students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
9.	How much can you use a variety of assessment strategies?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10.	To what extent can you provide an alternative explanation or example when students are confused?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11.	How much can you assist families in helping their children do well in school?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12.	How well can you implement alternative strategies in your classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Classroom Practices Checklist

Listed below are statements related to teaching practices. Circle YES if the statement is true for you. Circle NO if the statement is not true of you.

YES / NO	1.	I engage students most of the time in activities that have connections of real life.
YES / NO	2.	I always try to remain calm, objective and consistent while presenting a lesson.
YES / NO	3.	I establish and explain rules about late/incomplete work to my students.
YES / NO	4.	My instructional strategies usually do not help low performing students to improve.
YES / NO	5.	I reward students who behave properly. (Examples: I give them sweets or prizes).
YES / NO	6.	I keep the whole class in when some students misbehave.
YES / NO	7.	I use corporal punishment to maintain order in the classroom. (Examples: I slap or hit misbehaving students.)
YES / NO	8.	In class discussions, I make sure that every student has an opportunity to respond.
YES / NO	9.	I describe what students are doing wrong and expect them to stop.
YES / NO	10.	I expect students to complete assignments without me providing them with examples.
YES / NO	11.	I give students feedback only after they complete assignments
YES / NO	12.	After students begin an assignment, I check to make sure each of them is working correctly.
YES / NO	13.	I usually know in advance where students are going to have difficulty in a lesson and plan how to help them.
YES / NO	14.	I only call on students who raise their hands.
YES / NO	15.	I get students to change the way they behave by helping them to understand how their behavior affects others.
YES / NO	16.	I tell students why I think the lesson is important for them.
YES / NO	17.	I give explanations at several b levels so that all students will understand
YES / NO	18.	I shout angrily at students who misbehave
YES / NO	19.	I go straight into what I want to teach without boring students with details about what are going to do.
YES / NO	20.	I am often surprised when students have difficulty with lessons.
YES / NO	21.	I try to embarrass students who misbehave. (Examples: I make a joke about the student, or use harsh words).
YES / NO	22.	I explain to students the class rules, procedures, and expectations.
YES / NO	23.	I carefully organize my lessons and bring them into clear steps/stages.

YES / NO 24. I engage students most of the time in tasks that focus on different skills.

Appendix C

Permission Letter fro Dr. A. Woolfolk Hoy



ANITA WOOLFOLK HOY, PH.D.

PROFESSOR
PSYCHOLOGICAL STUDIES IN EDUCATION

Dear

You have my permission to use the *Teachers' Sense of Efficacy Scale* in your research. A copy of both the long and short forms of the instrument as well as scoring instructions can be found at:

http://www.coe.ohio-state.edu/ahoy/researchinstruments.htm

Best wishes in your work,

Anita Woolfolk Hoy

Anita Woolfolk Hoy, Ph.D.
Professor

COLLEGE OF EDUCATION
29 WEST WOODRUFF AVENUE
COLUMBUS, OHIO 43210-1177

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PHONE 614-292-3774
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HOY.17@OSU.EDU

Appendix D

Permission Letter from the Ministry of Education

TELEPHONE: 3655469
TELEX: 2944 THUTO BD
FAX: 3972531/3655458



REPUBLIC OF BOTSWANA

MINISTRY OF EDUCATION
AND SKILLS
DEVELOPMENT
PRIVATE BAG 005

Reference: E/20/2 X (2)

19th October 2010

Waitshega T S Dibapile
University of Botswana
Gaborone

Dear Ms Dibapile

RE: REQUEST FOR A PERMIT TO CONDUCT A RESEARCH STUDY

We acknowledge receipt of your application to conduct a research study.

This serves to grant you permission to conduct your study at different junior Schools in and around Gaborone to address the following research objectives/questions:

To conduct a survey research among community junior secondary school Teachers in Gaborone and surrounding areas.

It is of paramount importance to seek Consent from the Teachers that you are going to interview or give a questionnaire to answer, before conducting the study. We hope and trust that you will conduct the study as stated in your Proposal and to strictly adhere to the Research Ethics.

Please note that this permit is valid for a period of one year effective from 19th October 2010 to 19th October 2011.

You are furthermore requested to submit a copy of your final report of the study to the Division of Planning, Statistics and Research, Ministry of Education, Botswana.

Thank you.

Yours faithfully

K.Mathabathi
For / Permanent Secretary

Appendix E

Letter to the School Head

UNIVERSITY OF BOTSWANA

Faculty of Education
DEPARTMENT OF EDUCATIONAL FOUNDATIONS
Corner of Notwane & Mobuto Road
Private Bag 00702
Gaborone
BOTSWANA

Telephone: [267] 3552406/7/8
Fax: [267] 3185096
Website: www.ub.bw

19/10/2010

TEACHER EFFICACY AND CLASSROOM PRACTICES OF BOTSWANA COMMUNITY JUNIOR SECONDARY SCHOOL TEACHERS

Dear School Heads

I am a teacher educator at the University of Botswana currently on study leave at the University of Tennessee, Knoxville, USA where I am pursuing a doctoral degree in Educational Psychology and Research.

I have been granted permission by the office of the Permanent Secretary of the Ministry of Education to conduct my study among Community Junior Secondary School teachers in Gaborone and surrounding areas. This study is funded by the University of Botswana.

This is to inform your office that I will, with the help of research assistants visit your school to request teachers to complete a survey. I am asking for your assistance during data collection. We will negotiate with teachers about the best time to complete the survey. The researcher's ultimate interest is learning more about how teachers respond on the three subscales of Teachers Sense of Efficacy Scale (TSES), classroom management, instructional strategies and student engagement. An additional item of classroom practices is provided to give an insight in what teachers do in the classrooms. The data will be analyzed by a computer programme (Statistical Package of Social Sciences, SPSS).

There are no risks of teachers participating in the study. No personal information from them is needed and the participation in this research is voluntary. When completed, a copy of my dissertation study will be available on line at the University of Tennessee, Knoxville, USA and its libraries. The copy will also be available at Botswana archives and records, University of Botswana.

If you have questions or would like more information about this study or survey procedure, please feel free to contact the researcher:

Smitta Waitshega Tefo Dibapile (ms)
smittawd@yahoo.com
sdibapil@utk.edu
3554174 (w) 71517561 (m)
3554171 (w)

Appendix F

Letter to Teachers

UNIVERSITY OF BOTSWANA

Faculty of Education

DEPARTMENT OF EDUCATIONAL FOUNDATIONS

Corner of Notwane & Mobuto Road
Private Bag 00702
Gaborone
BOTSWANA

Telephone: [267] 3552406/7/8
Fax: [267] 3185096
Website: www.ub.bw

19/10/2010

TEACHER EFFICACY AND CLASSROOM PRACTICES OF BOTSWANA COMMUNITY JUNIOR SECONDARY SCHOOL TEACHERS

Dear Teachers

I am a teacher educator at the University of Botswana currently on study leave at the University of Tennessee, Knoxville, USA where I am pursuing a doctoral degree in Educational Psychology and Research.

I have been granted permission by the office of the Permanent Secretary of the Ministry of Education to conduct research among Community Junior Secondary School teachers. This study is funded by the University of Botswana.

I am writing to request your participation on the study by completing a questionnaire on teachers' sense of efficacy and classroom practices. The questionnaire will be distributed by me (the researcher and research assistants). It will take about 20 minutes to complete. We will negotiate with you about the best time to complete the survey. We will also contact the School Head first about our intentions. The data will be analyzed by a computer programme (Statistical Package of Social Sciences, SPSS).

The researcher's ultimate interest is learning more about how teachers respond on the three subscales of Teachers Sense of Efficacy Scale (TSES), classroom management, instructional strategies and student engagement. An additional item of classroom practices is provided to give an insight in what teachers do in the classrooms.

There are no risks of participating in the study. No personal information is needed and your participation in this research is voluntary. Submission of a completed survey constitutes your consent to participate. When completed, a copy of my dissertation study will be available on line at the University

of Tennessee, Knoxville, USA and its libraries. The copy will also be available at Botswana archives and records, University of Botswana.

If you have questions or would like more information about this study or survey procedure, please feel free to contact the researcher:

Smitta Waitshega Tefo Dibapile (ms)

smittawd@yahoo.com

sdibapil@utk.edu

3554174 (w) 71517561 (m)

3554174 (w)

Consent

I have agreed to participate in the study about teachers sense of efficacy and classroom practices. I understand that the participation is voluntary and I can draw from the study and that I can draw from the study at any time without any negative consequences. I understand that the data will be used for educational research purposes related to this study.

Appendix G

Significant results of student engagement and qualifications

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	514.331	6	85.722	2.147	.046
Within Groups	39884.970	999	39.925		
Total	40399.300	1005			

VITA

I was born in Tonota, Botswana. I am a lecturer at Educational Foundations Department, University of Botswana. I teach courses in Educational Psychology. I hold the following qualifications: Diploma in Counseling Studies, (Keele University England). BSc Psychology (Bolton Institute, England). M Ed. Psychology of Education, (Bristol University, England). During 2008 -2012, I enrolled in a doctoral pursuing Educational Psychology and Research at the University of Tennessee. I have successfully completed my studies. The title of my dissertation is: Teacher Efficacy and Classroom Management among Botswana Junior Secondary School Teachers.