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þý The Effect of Teacher s Efficacy Instructional Strategy Use and Student Engagement: Case of Woldia Collage of Teachers Education

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**THE EFFECT OF TEACHER'S EFFICACY ON
INSTRUCTIONAL STRATEGY USE AND STUDENT
ENGAGEMENT: CASE OF WOLDIA COLLAGE OF
TEACHERS EDUCATION**

BY

EDGET SEYOUM ZEWUDU

June,
2019

**THE EFFECT OF TEACHER'S EFFICACY ON
INSTRUCTIONAL STRATEGY USE AND STUDENT
ENGAGEMENT: CASE OF WOLDIA COLLEGE OF
TEACHERS EDUCATION**

**Research thesis presented in partial fulfillment of the requirements for the
degree of Masters of Education in Educational Psychology**

By

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Bahir Dar, Ethiopia

June, 2019

DECLARATION

I, the undersigned, declare that the thesis comprises my own work. In compliance with internationally accepted practices, I have acknowledged and refereed all materials used in this work. I understand that non-adherence to the principles of academic honesty and integrity, misrepresentation/ fabrication of any idea/data/fact/source will constitute sufficient ground for disciplinary action by the University and can also evoke penal action from the sources which have not been properly cited or acknowledged.

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Abstract

Teachers' efficacy for teaching their perceptions about their own capabilities to foster students' learning and engagement has proved to be an important teacher characteristic often correlated with positive student and teacher outcomes. The central concerns of this study were to evaluate the level of teachers' efficacy and to examine the mean difference between high and low efficacious teachers' in terms of uses of instructional strategies and student engagement. Twenty teachers and two hundred students from five departments were selected using lottery method sampling techniques. Teachers' sense of efficacy scale, finding instructional strategies scale and student course engagement scale were used as data collection instrument. One sample t-test and two samples t-test were employed for data analysis. One sample t-test revealed that the sample mean was significantly different to test value. This indicated that the Woldia College of Teachers' Education teachers had low teacher's efficacy. The two samples t- test result indicated that there were statistically significant difference between teachers with high teachers' efficacy and low teachers' efficacy in their uses of instructional strategies($p=0.04$) and student engagement($p=0.03$). In conclusion, since teachers' sense of efficacy is related to students' motivation, it is important to determine how teachers uses various instructional strategies to engage students in the classroom. The present study may help involving students as a variable in the study of teachers' efficacy gave a better understanding of the direct contribution of teachers' efficacy on students' engagement. It was recommended that teachers need to develop their efficacy by focusing their internal capability and beliefs by considering the importance of their belief in their uses of instructional strategies and level of student engagement. Also, studies in relation to teachers' efficacy should use various instruments to involve students as a variable and to observe the consistency of the measurement.

Keywords: teachers' efficacy, instructional strategies, student engagement.

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CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Teachers' confidence in their ability to perform the actions that lead to student learning is one of the individual characteristics that predict teacher practice and student outcomes. The concept of teacher efficacy has been derived from two separate ways of research, Rotter's (1966) locus of control theory and Bandura's (1977) social cognitive theory. The term teacher efficacy was first employed by Rand researchers when they included two items that reflected the locus of control theory proposed by Rotter in 1966 (Armor, Conroy-Oseguera, Cox, King, McDonnell, Pascal & Zellman, 1976). For the first time Rand researchers defined the term teachers efficacy as the extent to which the teacher believed he/she had the capacity to affect student performance (Berman & McLaughlin, 1977). The theoretical framework of Locus of control of teacher efficacy is the degree to which an individual believes that the perceived causes of an intended outcome are within his or her control (Rotter, 1966). That is, the extent that a person believes that events are determined by his or her actions (Parkay, Greenwood, Olejnik, & Proller, 1988). And Rotter conceptualized teacher efficacy as teachers' beliefs in their ability to control factors in order to achieve desired outcomes. Rose & Medway (1981) and Guskey (1981) extent the definition of Rotter's and develop a measurements of teachers' efficacy.

The second strand of the research on teacher efficacy comes as a result of Bandura's (1977) social cognitive theory. His theory introduced the concept of self- efficacy as the primary motivational force behind an individual's actions. The theoretical framework for this theory is that Self-efficacy is the belief that one can successfully execute the behavior required to produce outcomes (Bandura, 1977). According to Bandura, teacher efficacy is conceptualized as teachers' beliefs in their ability to organize and execute courses of action in order to achieve desired outcomes (Tschannen-Mora., Woolfolk-Hoy, & Hoy, 1998). Based on Bandura's explanation Ashton, Buhr, & Crocker (1984), Gibson & Dembo (1984) and Tschannen-Moran, Woolfolk Hoy & Hoy (2001), defined teacher's efficacy and developed the most known measurements of teachers' efficacy.

Teacher efficacy has been built on the distinction of two dimensions, namely general teaching efficacy and personal teaching efficacy (Tschannen-Moran et al., 1998). This distinction

separates beliefs about what teachers can do in general from what individual teachers believe themselves to be capable of doing. General teaching efficacy defined on the ability of teachers to help students beyond the external factors that affect the learning process (Ghaith & Yaghi, 1997). This definition is more concern in the concept of the theory of locus of control (Tschannen-Moran et al., 1998). Personal teaching efficacy is teachers' belief about his or her ability to perform the actions needed to promote learning (Soodak & Podell, 1996). It focuses on the individuals' ability to perform actions and the power of those actions to influence student learning (Soodak & Podell, 1996). Personal teaching efficacy is more related to Bandura's theory of efficacy (Bandura, 1997).

Based on Bandura's definition of self-efficacy theory, Tschannen-Moran, Woolfolk Hoy & Hoy (2001), defined teachers' efficacy as teachers judgment of his/her capabilities to bring about desired outcome of student engagement. Teachers' self-efficacy for teaching their perceptions about their own capabilities to foster students' learning and engagement has proved to be an important teacher characteristic often correlated with positive student and teacher outcomes. Depending on these definition Tschannen-Moran, Woolfolk Hoy & Hoy (2001), developed a measurement of Teachers Sense of Efficacy Scale, which assessed critical tasks associated with teaching in the domains of student engagement, classroom management, and instructional practices. Researcher indicated that the integration of effective instructional strategies, a balance of engaging learning activities, and good classroom management increasingly improve self-efficacy (Skaalvik & Skaalvik, 2014). Teacher efficacy is important to provide support for learning and motivate all students. Skinner (2009) considered student engagement to be an outcome of a motivational process. According to Fredricks (2014), student engagement is determined by the quality of teacher-student relationships. Teachers with high sense of efficacy can easily create conducive environment to engage students in the classroom. Teacher efficacy as the belief that an individual in a classroom setting can affect instructional practices (Berman, McLaughlin, Bass-Golod, Pauly, & Zellman, 1977). Teachers' beliefs in their abilities to instruct students and influence students' performance are very strong indicators of instructional effectiveness (Al-Alwan & Mahasneh, 2014). Teachers with high sense of efficacy show high levels of planning, management, and organization, are open to new ideas and are more willing to experiment with new methods to better meet the needs of their students (Al-Alwan & Mahasneh, 2014). Studying the effect of teacher efficacy on student's engagement and instructional

strategies is important to clarify how teachers improve their students' performance and to create conducive environment for teaching learning process. So, measuring teacher characteristics at different domains help to understand the benefits that accrue from teachers with high teaching efficacy.

Theoretical framework

The present study focused on Bandura's theory of self-efficacy. Based on Bandura's theory Tschannen-Moran, Woolfolk Hoy defined teachers' efficacy as teachers' judgment of his/her capabilities to bring about desired outcome of student engagement. Depending on these definition Tschannen-Moran, Woolfolk Hoy & Hoy (2001), developed a measurement of Teachers Sense of Efficacy Scale, which assessed critical tasks associated with teaching in the domains of student engagement, classroom management, and instructional practices. This study was used to measure the level of teachers' efficacy based on the two dimensions namely, instructional strategies and student engagement. The study uses the scale of instructional strategies and student engagement questionnaire to assess the level of Woldia College of Teachers' Education teachers. To examine the contribution of teachers' efficacy to teachers' use of instructional strategies, the study uses find instructional strategies scale. Find instructional strategies scale had used to evaluate teachers uses of instructional strategies in more specific way. Measuring the level of teachers' efficacy by using of teachers sense of efficacy scale were commonly used. On this study to examine the direct impact of teachers' efficacy in student engagement the study uses student course engagement scale to measures students' engagement in the classroom.

1.2 Statement of the problem

Teachers' efficacy has a direct impact on students' academic achievement and motivation for learning. Other than students' beliefs about their own competency teachers' activity in the classroom determine the goal of students' academic success. Teachers with high teaching efficacy likely use a learner-centered and constructivist approach in their teaching, to engage and motivate students (Temiz & Topcu, 2013). These help students to learn more with various instructional materials that help students actively involve and cognitively inspire in classroom (Hamre & Pianta, 2010). Also researchers predicted that teachers with a greater sense of efficacy generate novel ideas and new instructional methods that bring changes in student's achievement (Martin, Sass, & Schmitt, 2012). High efficacious teachers tend to utilize a variety of instructional strategies drawn from their repertoire that are autonomy supportive and positive for student engagement and achievement. Highly efficacious teachers are more likely to implement new teaching approaches and strategies, accommodating also for individual students to understand the subject.

Researchers who examined the consequences of teachers' efficacy in students' outcome used variety of instruments for increasing academic outcome. Researchers measure the effect of teachers' efficacy on students' outcome in relation to teachers' gender, educational background, teaching experience and school status. Shaukat & Iqbal (2012); Franklin, (2018), studied the impact of student engagement, instructional strategies and classroom management on self-efficacy. They founded that there was no statistically significant difference between teachers' gender, age, ethnicity and educational level with classroom management, instructional strategies and student engagement. In contrast to this finding in Kenya, Kwaku Sarfo, Francis Amankwah, Francis Kwame Sam & Daniel Konin(2015), investigated the relationship between gender and self-efficacy beliefs in instructional strategies, classroom management and student engagement among senior high school teachers. Results indicated that female teachers on average have better instructional strategies efficacy than male teachers. On contrary, both male and female teachers did not differ in terms of classroom management and student engagement efficacies. Also in Ethiopia Amare (2013), examine the relationships among teachers sense of efficacy, self-perceptions of the teaching roles and selected background characteristics. The result showed that both male and female teachers have similar sense of efficacy and teaching roles. The result

indicated that there was no significant mean score difference between teachers having high teaching experience and teachers with low teaching experience on their sense of efficacy. There was no significant difference between teachers who attended and teachers' did not attend professional development trainings on the patterns of teachers' sense of efficacy and self-perception of the teacher role dimensions.

The result from those studies focused on teachers' efficacy in relation to different characteristics. The studies do not give a detailed overview of the strong relations between teacher's efficacy with instructional uses and student engagement by participating students as a variable. Measuring teacher's instructional strategies by using of various instrument is important to know how far efficacious teacher use different methods in the classroom. The central purpose of this study is to examine the effect of teachers' efficacy on uses of instructional strategies and student engagement.

1.3 Research questions

The following questions guided the study

1. What is the level of teachers' efficacy of Woldia teachers' education college teachers?
2. Is there statistically significant difference in instructional strategies between teachers with high efficacy beliefs and those with low efficacy beliefs?
3. Is there statistically significant difference in students' engagement for teachers with high efficacy beliefs and those with low efficacy beliefs?

1.4 Objective

General objective

To examine the differences in student engagement and instructional strategies for teachers with high and low level of teaching efficacy among science teachers at Hawassa College of Teacher Education.

Specific objective

The specific objectives of this study are:

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1. To evaluate the level of teachers' efficacy
 2. To compare whether significant difference between high efficacious teachers and low efficacious teachers in student engagement.
 3. To compare whether significant difference between high efficacious teacher and low efficacious teachers in instructional strategies.

1.5 Significance of the study

Providing quality education is the major issue in education. To bring quality education teachers have a big role. To enhance the goal teachers should have quality behaviors that increase the quality of teaching learning process. Among different measure of teacher's quality, teacher's efficacy is one of them. Most teachers are focusing on their subject knowledge and the way of assessment, they don't have awareness how their belief determine their student academic outcome, instructional strategies and the level of student engagement.

By conducting this research the result will give an insight to administrators for the implementation of intervention actions for better improvement of teacher efficacy.

1.6 Delimitation of the study

The study delimited to the definition and measurement of teachers' efficacy on Tschannen-Moran, Woolfolk Hoy & Hoy (2001). The control variable of the study was limited to teachers' efficacy and dependent variables were limited to instructional strategies and student engagement. The instrument used to measure teachers' efficacy was limited to instructional strategies (8 questions) and student engagement (8 questions). The instrument used to measure student course engagement questions contained behavioral (9 questions) and cognitive (9 questions) dimensions of engagement. To measure uses of instructional strategies the study limited on Finding instructional uses questionnaire with a total of 25 questions The geographical location of the study has been delimited to Woldia College of Teachers' Education, which is located in the northern Ethiopia. The study conducted in 2019 second semester. The participants delimited on Natural science, Social science, Aesthetics, Mathematics and English department teachers.

1.7 Limitation

The study has been specific to Woldia Collage of Teachers' Education teachers and students. It should be noted that the results refer to the selected college. Thus, the result cannot be generalized to others collage. If there were other collages included in the study the result might be more general and large sample with more diversity would have benefited the study result.

1.8 Operational definition of terms

Throughout this paper, key terms provide a common understanding and clarity for communication.

Finding Instructional Strategies Scale: measurement used to assess teacher's instructional strategies commonly used in classroom (Ibrahim Hbaci, 2008).

Instructional strategies (IS): Educator's techniques that support independent thinking, creativity in teaching, and strategic methods for assessment (Tschannen-Moran & Woolfolk Hoy, 2001).

Student engagement (SE): The ability of an educator to encourage a student to value learning and motivate an atmosphere of learning (Tschannen-Moran & Woolfolk Hoy, 2001).

Student course engagement questionnaire (SCEQ): to measures student's behavioral, cognitive and affective aspects of engagement and assesses each dimension of engagement in relation to students' course involvement(Handelsman, Briggs,2005).

Teacher efficacy: The extent to which the teacher believes he or she has the capacity to affect student performance (Bandura, 1986).

Teachers' Sense of Efficacy Scale (TSES): The scale to measure teachers' sense of self-efficacy that assessed critical tasks associated with teaching in the domains of engagement, classroom management, and instructional practices (Tschannen-Moran, & Woolfolk Hoy, 2001).

CHAPTER TWO: LITRETURE REVIEW

2.1. Theoretical Background and definition of teacher's efficacy

The concept of teacher efficacy has been derived from two separate lines of research, Rotter's (1966) locus of control theory and Bandura's (1977) social cognitive theory. For the first time the term teacher efficacy was first employed by RAND researchers when they included two items in a massive survey that reflected the constructs of Rotter's theory (Armor et al., 1976). The theoretical framework of locus of control refers to the degree to which an individual believes that the perceived causes of an intended outcome are within his or her control (Rotter, 1966). Depending on this framework Rotter defined the term teacher efficacy as the extent to which teachers' believed that factors, which they could control, had a larger impact on teaching outcomes than beliefs that the environment held greater power (Tschannen-Moran et al., 1998). This definition conceptualizes teacher beliefs based their ability to control factors in order to achieve desired outcomes.

Other researchers have followed Rotter's interpretation of the term teacher efficacy in their research. For example, Rose and Medway (1981) defined that the extent to which a teacher believes that he or she can control student outcomes. And also Guskey (1981), defined teacher's belief that he or she can influence how well students learn, even those who are difficult or unmotivated.

The second strand of the research on teacher efficacy comes as a result of Bandura's (1977) social cognitive theory and his construct of self-efficacy, as initially described in his 1977 article, "Self-efficacy: Toward a unifying theory of behavioral change". His theory introduced the concept of self- efficacy as the primary motivational force behind an individual's actions. Self-efficacy is the conviction that one can successfully execute the behavior required to produce outcomes (Bandura, 1977).The theoretical framework for this theory is that Self-efficacy is the belief that one can successfully execute the behavior required to produce outcomes (Bandura, 1977). According to Bandura teacher efficacy conceptualized as teachers' beliefs in their ability to organize and execute courses of action in order to achieve desired outcomes (Tschannen-Moran, M., Woolfolk-Hoy, A., & Hoy, 1998).

These two theoretical stands used to explain the concept of teachers efficacy. Beside these stands, several researchers have defined the term teachers' efficacy from the work of both Rotter and Bandura. For example, Ashton, Buhr, and Crocker (1984) defined teachers' efficacy as a teachers' belief in his or her ability to have a positive effect on student learning. Also, Gibson and Dembo (1984), defined teachers efficacy as a belief that teachers can help even the most unmotivated students.

2.2. Dimension of teacher's efficacy

Teacher efficacy has been built on the distinction of two dimensions, namely General teaching efficacy and Personal teaching efficacy (Tschannen-Moran et al., 1998). This distinction separates beliefs about what teachers can do in general from what individual teachers believe themselves to be capable of doing. General teaching efficacy indicates the degree to which a teacher rejects or accepts the statement, "When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment." This statement indicated that environment is a more crucial determinant of student performance than teacher performance. Based on this statement general teaching efficacy defined as, the ability of teachers to help students beyond the external factors that affect the learning process (Ghaith & Yaghi, 1997). This definition is concerned in the concept of locus of control (Tschannen-Moran et al., 1998). Rich, Lev, and Fischer (1996) provide a definition that exemplifies this orientation when they describe teacher efficacy as a teacher's general feeling that the education system is capable of fostering satisfactorily student academic achievement despite negative influences external to the teacher. The second dimension is Personal teaching efficacy. The item used to measure personal teachers' efficacy was associated with the confidence of individual teachers in their own capability to overcome external barriers. The more strongly a teacher agreed with the statement, "If I really try hard, I can get through to even the most difficult or unmotivated students," the higher personal teaching efficacy would be. According to sooodak and podell (1996), personal teaching efficacy defined as teacher's belief about their ability to perform the actions needed to promote learning. And it focuses on the individual's ability to perform actions and the power of those actions to influence student learning. This dimension of teachers' efficacy is related to the theory of Bandura's self-efficacy (Bandura, 1997).

2.3. The Importance of Teachers efficacy on student outcomes

Starting from the seminal work of the Rand Corporation in the late 1970s (Armor et al., 1976), researchers give a big attention about the concept of teachers efficacy. Klassen, Tze, Betts, & Gordon (2011), reviews literature about studies related with teachers' efficacy starting from 1998 to 2009, they investigated 218 empirical articles published. This indicates that the concept of teachers' efficacy is becoming the focuses of researchers. These increases of research acknowledge that teachers' efficacy is relevant for a range of adjustment outcomes at different levels of classroom ecology. Based on the two theoretical stands and dimension, there are various definitions and measurement of teachers' efficacy. Among them most studies concluded that teachers with high sense of self-efficacy have a big influence for creating a high quality classroom environment by planning lessons that advance students' abilities, making efforts to involve them in a meaningful way, and effectively managing student misbehavior (Chacon, 2005).

Teachers' efficacies have big impact on students and teachers overall academic performance, that can be affect the quality of classroom conditions. In student side studies investigate teacher efficacy has positive relation with students' academic achievement, self-efficacy and their motivation for learning (Jeon, 2017). Academic achievement has been one of the most commonly used indicators of cognitive outcome (Archambault, Janosz, & Chouinard, 2012). One of the oldest known studies of teacher efficacy and its influence on academic achievement is Ashton and Webb (1986). They found that students' test scores in mathematics and language were significantly improved by teachers with strong efficacy beliefs, because there was dynamic student teacher interaction and encouraged them to do their homework. Also Ross, (1992), studied the relationships between student academic achievement, teacher efficacy and interactions with assigned coaches in elementary schools. The result indicated that student achievement was higher in classrooms of teachers who had more contact with their students. Teachers with high tendency of coaching have high teaching efficacy. Similarly, teachers with greater confidence in the effectiveness of their activities in the classroom increased their student's achievement. This indicated that teachers with high teaching efficacy increase student achievement than teachers with low teaching efficacy by spending more time for their student and by giving frequent coaching. In supporting these finding, Guo, McDonald Connor, Yang,

Roehrig and Morrison, (2012), examine the effects of teachers' self-efficacy, education, and experience and observed classroom practices on students' literacy outcome. The results summarized that, teacher self-efficacy predicted student literacy outcome indirectly through teachers' support for learning. Also teacher self-efficacy was positively associated with teacher support for learning and negatively associated with time in academics. In this study teacher self-efficacy was a significant and positive predictor of students' literacy outcomes. The finding of this work included that teacher self-efficacy influence teachers classroom practices. Teachers' classroom activities are the main indicator of the level of teachers' efficacy and influence students' achievement. The assumption that teachers with a higher sense of efficacy were more likely to provide a classroom environment that supported learning and to interact with students in more warm, responsive, positive ways than were teachers with a lower sense of self-efficacy. Observing teacher characteristics at different levels of teacher efficacy can help to understand the benefits that accrue from teachers with high self-efficacy. Alderman (2013) studied teachers' attitudes and teaching behaviors with students' performance. The study concluded that self-efficacious teachers tend to interact more with students. They feel a responsibility for student performance and cognitive engagement and spend more time on teaching. They also establish supportive and friendly relationships with their students, including minority students, and emphasize that students need to set up higher goals for their own academic performance. In addition to feeling more confident in their teaching, teachers with high efficacy are more likely to feel confident in working with parents, experience less stress from the task of teaching, and project positive expectations for students' successful learning. Teacher efficacy is associated with taking care of low-performing students who have poor family resources. In line with the locus of control theory, high levels of teacher efficacy indicate a positive perception of teaching effectiveness even in environments that are unsupportive of student learning. Therefore, self-efficacious teachers do not easily give up when working with low-achieving students. This persistence results in other outcomes: teachers with high efficacy are less likely to refer poor students to special education (Podell & Soodak, 1993).

Personal efficacy and general efficacy have different dimensions of teachers' efficacy, but both of them have impact on student's achievement. Allinder, (1995), found positive relation between teachers' efficacy and student achievement. He studied the relationship between personal and teaching efficacy of special need education teachers, their implementation of curriculum based

measure, and their students' gains in math achievement. The study conclude that teachers with high personal efficacy and high teaching efficacy increased student achievement by motivation and setting goals for their academic year. Teachers with a high belief of their ability to motivate and change their students can help their students to achieve their educational goal by increasing their academic achievement. Also high efficacious teacher can set goals for their student to achieve at the end of academic year. Teacher efficacy is positively associated with how much teachers support the learning process. Efficacious teacher have a belief to make a difference in students achievement. Similarly, Mohamadi & Asadzadeh, (2012), studied the mediating role of teachers' self-efficacy beliefs in the relationship between sources of efficacy information and students achievement. Teachers' self-efficacy had meditational role between sources of teachers' self-efficacy and student's achievement. The results of this study showed that the sources of efficacy information of teachers influence student's achievement. Teacher self-efficacy beliefs also mediate the effect of these sources on the student's achievement. Since teacher's strong self-efficacy beliefs and high level of student's achievement are connected to each other.

Teachers' efficacy is highly correlated to their level of collective efficacy, job satisfaction and working environment. These correlations directly affect students' achievement. According to Caprara, Barbaranelli, Steca and Malone (2006), teacher's job satisfaction and student's achievement have positive relation, because teachers' perception about their job determines their activity in that environment. They examined teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement in Italian junior high school teachers. The study concluded that teachers self-efficacy highly determine students' academic achievement, because if teachers have great efficacy belief, they have high job satisfaction. Their satisfaction determined by their level of efficacy. If there are satisfied they can involve more time in relation with their learning activity. So, students who have high job satisfaction, they have high academic achievement compare with teachers with low job satisfaction. Similarly the other study done by Chong, Klassen, Huan, Wong, & Kates, (2010), shows teachers' collective efficacy influenced by the level of teachers' efficacy. When teachers feel efficacious about their self and collective ability to promote learning and instruction, they are more likely to perceive high expectations, standards and press from the school leadership, and parents and students for academic success. The result investigated that in some context teacher collective efficacy influence teacher self-efficacy and academic climate. If the school environment surrounded by teachers with high

levels of self-efficacy, collective efficacy and favorable academic climate, the teaching learning will be effective and student academic achievement will improved. If the teachers have perceived efficacy they have to use different instructional strategies, their ability to manage the classroom and engage students in learning. In contrast Studies that have used the TSES (TSES; Tschannen-Moran & Hoy, 2001), a scale widely accepted to be both congruent with self-efficacy theory and psychometrically valid across cultural contexts, have found no relationship (Domsch, 2009; Donald, 2009), or a modest relationship with student achievement (Caprara et al., 2006; Ross, Hogaboam-Gray, & Hannay, 2001).

Beside the role of personal goal oriented activities and self-evaluation, teachers belief also have impact on student motivation. The existing literature suggests that students' motivation may be more consistently predicted by their teachers' self-efficacy than their academic achievement. Teacher efficacy was assessed in relation to students' motivation, including aspects such as student engagement, intrinsic and extrinsic motivation and academic expectations. Thoonen, Slegers, Peetsma, & Oort, (2011), write an article on Can teachers motivate students to learn or not. A total of 3462 students and 194 primary school teachers were participated in this research. The study examined the significance of teacher's efficacy beliefs for student motivation in the classroom. Result concluded that teacher's efficacy has an impact on both teachers teaching and student's motivation to learn. Teacher self-efficacy represents teachers' belief that they are able to perform those teaching behaviors that brings about student learning even when students are difficult or unmotivated (Klassen et al., 2011).

According to Bandura theory of self-efficacy (1997), teachers' belief in their teaching ability motivates them to actually use effective teaching practices and to exert effort in preparing their lessons. He concluded that teachers with high efficacy used instructional strategies that motivate students to learn, and spend more time on preparing their classes. Efficacious teachers apply various instruction methods, have a more open attitude toward new instructional methods, and show supportive teaching behavior (Tschannen-Moran et al., 1998). Teachers' willingness to overcome obstacles in the social environment of students, self-efficacious teachers helps them to adjust their barriers and promote academic achievement, even when students are unmotivated. According to Ross, similar findings were produced by studies using observations of teachers' practices and those relying on self-reported behavior. More recently, Schiefele & Schaffner,

(2015) provided evidence for significant relationships between teachers' sense of efficacy and their self-reported mastery-oriented and cognitively activating practices. The result concludes that there is a significant association between teacher self-efficacy and indicators of student motivation.

Teachers with high efficacy can motivate and engaged students in every level of student's grade. For example, Reyes, Brackett, Rivers, White, and Salove, (2012), examined the link between classroom emotional climate and academic achievement, including the role of student engagement in 5th and 6th grade students. The analyses shows students are more engaged in the classroom, when their teachers' self-efficacy is high. Similarly, Midgley et al. (1989), proof the association between students' motivation during the transition from upper elementary school to middle school. Students who were taught by highly efficacious teacher had high expectation and perceived high performance than students were taught in low efficacy teachers after the transition. In supporting these Jimmieson, Hannam, and Yeo's (2010), found that middle school student demonstrate high level of satisfaction and confidence and lower level of psychological distress and views future learning opportunities, when they get high efficacious teacher. In suportingg this, Robertson & Dunsmuir, (2013) studied high school students engagement in relation to teachers efficacy. the study conclude that, high school students whose teachers feel generally self-efficacious have been shown higher amounts of observed on-task behavior, increased engagement, effort and intrinsic motivation for school, more positive attitudes toward learning, and better opinions about their teacher. Other studies show that teacher's self-efficacy may not only be directly related to teacher perceptions of their students' emotional engagement, but also indirectly affects their behavioral and emotional engagement through influence (Van Uden, Ritzen, & Pieters, 2013).

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. 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). Research has clearly shown that teacher efficacy has an impact on performance, commitment, and professional retention. High self-efficacy enables teachers to be responsible in their work. 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.

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. Nicholas, and Alan (2010) proposed that teachers’ beliefs are the ideas that influence how they conceptualize teaching. 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. 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.

2.4. Measurement of Teacher’s efficacy

The combined score on general and personal efficacy became the first assessment of teacher efficacy, and supposed to identify the degree to which a teacher believed that the consequences of teaching were within the ability of the teacher, or internally controlled. Based this various measurements have been created to quantify the level of teacher’s efficacy. The two dimensions were shown to be too closely correlated with each other to constitute independent dimensions of teacher efficacy (Tschannen-Moran & Hoy, 2001). To solve the problems presented by this two-item scale measurement, many researchers attempted to develop improved tools for correctly measuring teacher efficacy.

Based on the second item, Bandura create scale to measure teacher efficacy. Bandura (1997, 2006) maintained that a teacher's sense of efficacy may vary by a teacher's activities in a school setting. It means that teacher efficacy is situation-specific. He developed a 30 item instrument using five subscales. Each subscale is measured by the degree to which a teacher feels confident in managing related activities. This division of teacher's self-efficacy scale influenced the subsequent attempts to measure teacher efficacy including the measure of teachers' sense of self-efficacy (TSES) by Tschannen-Moran and Hoy (2001).

Tschannen-Moran and Hoy (2001) attempted to compensate for the shortcomings of existing measures and created a new instrument, the Teacher Sense of Efficacy Scale (TSES). The TSES showed a high correlation with the two-item measure developed by RAND and combined the most common factors of teacher efficacy developed in previous instruments. They divided the Teacher Efficacy Scale into three components, efficacy in instructional strategies, efficacy in classroom management, and efficacy in student engagement. There were a total of 24 items for the long form and 12 items for short form were used. They examined how their instrument was correlated with general teaching efficacy and personal teaching efficacy. They confirmed that the TSES were associated more with personal teaching efficacy than with general teaching efficacy. Despite the fact that the TSES was developed about 15 years ago, it continues to be the most commonly used instrument in studies of teacher efficacy and has been examined for cross-validation using teacher samples from diverse settings (Klassen et al., 2011).

2.5 Teacher's efficacy and use of Instructional strategies

Researchers suggest that the instructional behaviors, practices, and strategies teachers employ to encourage students' cognitive development determined by their self-efficacy (Tschannen-Moran & Woolfolk Hoy, 2001). If teachers apply various instructional tools that used to actively involve and inspire for learning, students improve their academic record (Hamre& Pianta, 2010). Teachers with high self-efficacy for engagement, instructional strategies, and classroom management are likely to use a learner-centered and constructivist approach in their teaching, while teachers with low efficacy prefer to use traditional learning formats (Temiz & Topcu, 2013). Also, Nie, Tan, Liao, Lau, & Chua, (2013) suggest that high teacher efficacy leads to more student-centered, constructivist approaches to instruction among pre- and in-service teachers. These types of learning formats are likely to make the most of students' interest,

engagement, and ability to learn. In supporting this, Ross' (1998) review of efficacy literature concluded that teachers with higher levels of self-efficacy are more likely to try new instructional approaches and strategies with students. Thus, efficacy in student engagement beliefs appear to drive the manner in which teachers approach instruction and, in turn, influence their level of personal accomplishment. The teacher's approach to instructional management sets the tone for the overall classroom atmosphere and ultimately student behavior stressors. Teacher efficacy for effective instruction involves the ability to plan, design, and deliver academic instruction which result in appropriate learning environment (Bradshaw and Hershfeltd, 2012). They state that teacher efficacy has been shown to be positively correlated with effective instruction, proactive and positive classroom management and student academic achievement. When efficacy for teaching is high, teachers tend to utilize a variety of instructional strategies drawn from their repertoire that are autonomy supportive and positive for student engagement.

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.). 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 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. 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. 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. Teaching is sharing knowledge and skills with students and that teacher must be knowledgeable of their materials to impart knowledge effectively to students. 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. 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. 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 self-directed learning is supplemented with instructional social influences that can affect children's beliefs of their cognitive efficacy. 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.

2.6. Teacher efficacy and Student Engagement

In the teaching learning process some students are involved, engaged, and motivated to learn and others are uninterested, disengaged, and apathetic, even when these students are learn in the same classroom (Linnenbrink & Pintrich, 2003). Pines (2002), posits that teachers are likely to consider themselves significant and their work meaningful to the extent that their students are interested in and attending to the lesson. The literature on teaching and learning suggests a significant need for teachers to craft learning situations that are active rather than passive (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006). To create participatory classroom the teacher's should use active method to help unmotivated students to be active. Student engagement involves

teaching students the importance of working together to accomplish an instructional goal (Fredricks, 2014). A content-centered approach has a common theme in a classroom environment, in comparison to student-centered instruction. Research emphasizes motivation's importance for engaging students in learning tasks. Student engagement is a different type of outcome variable due to the fact that it reflects a process instead of an outcome (Galyon et al., 2012). Teacher's ability to motivate students involves knowing what kinds of tasks support and feedback encourage students to put forth effort and strive to improve (Darling-Hammond & Baratz-Snowden, 2006). Teachers' belief and decision making with regards to instructional activities have been shown to influence student engagement.

According to Woolfolk Hoy, & Spero, (2005) teacher's efficacy defined as a judgment about their abilities to promote students' learning, shape how teachers behave in the classroom and have consistently been found to impact the learning environment. 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). Therefore, teachers with high efficacy provide support for learner and motivate all students, including difficult and struggling learners. Efficacy in student engagement is one of the strong predictor of student's academic success.

Al-Alwan and Mahasneh (2014), found a relationship between teachers' self-efficacy and student engagement, due to exerting a positive influence on students' attitudes and engagement toward classroom instructional strategies. Teachers who possess a high sense of self-efficacy and believe in their capacity to help students learn are usually more satisfied with their own work and with their students' behaviors and learning abilities (Caprara, Barbaranelli, Steca, & Malone, 2006). Teachers' beliefs play a central role in promoting student cognitive engagement and achievement in academic activities (Assor, Kaplan, & Roth, 2002). Moreover, on the basis of their beliefs, teachers build a classroom educational environment that increases or undermines students' achievement and cognitive engagement (Roeser, & Davis-Kean, 2006). Appleton et al. (2008) stated that understanding student engagement is critical to preventing school dropout and providing positive educational outcomes for all students. Willms, Friesen, and Milton (2009), examine the constructs of student engagement in order to activate motivation and enhance

student achievement. Engaged children are behaviorally involved in classroom learning activities, and they exhibit a positive emotional tone in their work (Skinner & Belmont, 1993). Behavioral characteristics include children selecting learning tasks in which effort and concentration must be initiated; and positive tones comprise enthusiasm, optimism, and interest in activities (Skinner & Belmont, 1993). Engaged children often earn higher grades and score higher on standardized tests, but student intrinsic motivation decreases over school years and into adolescence; therefore, teachers must facilitate student engagement (Skinner & Belmont, 1993).

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. 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).

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. 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). 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.

Summary

The concept of teachers' efficacy followed two theoretical stands. The present study rooted on the theoretical conceptualization of Bandura's theory of self-efficacy. Based on Bandura's theory Tschannen-Moran & Woolfolk Hoy, 2001 defined and measured teachers' efficacy in to three dimensions. The study only focused on the two dimensions, namely instructional strategies and student engagement. Literatures indicated that teachers need to effectively plan, prepare, and instruct, as well as manage and engage students in learning. 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 the effect of teachers' efficacy in

the use of instructional strategies and student engagement by using of other measurements and involving students as a variable.

Chapter Three: Methodology

3.1. Design of the study

This study examines the effect of teachers' efficacy on uses of instructional strategies and student engagement in the case of Woldia College of teacher's education teachers. Quantitative research design is employed to address the research questions. One sample t-test and two samples t-test were used to analysis the data.

3.2 Population, Sample and Sampling techniques

3.2.1. Participants

The participants of the study include teachers of Woldia teacher's education college. A total of 20 teachers and 200 students participated for this study.

3.2.2 Sample and Sampling techniques

The study used simple random sampling to select departments, teachers and students. Among eight departments the study select five departments by using of simple random sampling techniques. Based on the sampling method departments of Natural science (4 teachers), Mathematics (5 teachers), Social science (3 teachers), Aesthetics (3 teachers) and English (5 teachers) were selected. From the selected departments of a total of 35 teachers, 20 teachers were selected by using of simple random technique. Also from the selected teachers a total of 368 students, 200 students were selected by using of lottery method.

3.3 Variables in the study

The variables examined in this study are instructional strategies, student engagement and teachers' efficacy. Among these, level Teachers' efficacy is independent variable, and Instructional strategies and Student engagement are dependent variables.

3.1.1. Instruments

To collect the data, the study was used questionnaire.

Teacher's efficacy scale

To measure the level of teacher's efficacy, the study adapts Teacher's Self-efficacy Scale (TSES) developed by Tschannen-Moran and Hoy (2001). It is considered to be one of the best standardized instruments to measure teacher self-efficacy. There are 24 questions in the questionnaire which are further divided into three sub-scales: classroom management (8 questions), instructional strategies (8 questions) and student engagement (8 questions) to judge teacher self-efficacy. But this study focus on student engagement and instructional strategies, therefore only a total of 16 questions are asked. It has 9 points Likert scale labeled with the notations. The questions used for each engagement factor or subscale were streamlined to the point that they had reliabilities of 0.81 for engagement and 0.86 for instruction.

Instructional Strategies

To measure instructional strategies, the study was adopted Finding Instructional Strategies Scale (adopt from: Ibrahim Kaya, Ibrahim Habaci, Savas Küçük, Fadime Adigüzelli and Mehmet Habaci). There are a total of 33 item questionnaire. But for this study 25 item questionnaires with 5 point Likert scale were used. The other 8 questions were beyond the standard of the study scope. Each item was rated on with 5 point Likert Scale: Strongly Agree, Agree, neither agree nor disagree, Disagree and Strongly Disagree. The reliability of the measurement tools were 0.70 reliability levels into consideration, it can be concluded that the reliability level of the scale was acceptable.

Student Engagement questionnaire

To measure student engagement, the study use Handelsman, Briggs, Sullivan and Towler (2005) measure of Student Course Engagement Questionnaire (SCEQ). There are a total of 23 item questionnaire measured four factors of student engagement: skills, emotional, participation/interaction, and performance. Broadly encompass in to cognitive, behavioral and affective aspects of engagement. But for these study cognitive and behavioral questions, because of it is observable. A total of 18 questions will use. Students will ask to read each item and rate to what extent that item characterized them. Each item is rated on a 5-point Likert-type scale. 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree). The reliability between the dimensions ranged from 0.76 to 0.82.

3.2. Data collection procedure

Before collecting the data, I asked permission from vice dean of the college. After getting a warm well-come, I contact department heads, to know the number of teachers and I take the list of teachers. Then, I selected departments and teachers by using of simple random method. After knowing the selected teachers, I find them and told about the aim of the research. And also I asked their voluntaries to fill the questionnaires.

In the first phase teacher's filled the questionnaire of TSES. The questionnaire distributed personally and takes 30 minutes to respond the items. After a week those teachers filled the questionnaire of Finding Instructional Strategies Scale.

In the second phase students are selected from the sampled teachers to respond the questionnaire of student course engagement scale. From each sample teachers 10 students are selected by using of lottery method. After selection, I briefly explained the purpose of the study and also informed respondents' about their participation in the study as voluntary and their responses was treated confidentially. The questionnaire administered in class brake time and it takes 20 minutes.

3.3. Data analysis

To analyses the data SPSS version 20 is used. The first objective of the study was to evaluate the level of teachers' efficacy are high or low below the test value. To answer this one sample t-test were used. The result was used to determine how the sampled teachers were efficacious or not. The second and the third objectives of the study were to compare teachers' use of instructional strategies and student engagement based on their level of efficacy. To check this two samples t-test were used. The result used to see is there difference between high and low efficacious teachers in their use of instructional strategies and students engagement.

Chapter Four: Result

In this chapter the results from SPSS analysis will be presented. As it was presented in chapter one, this research project carried out to answer three research questions namely, what is the level of teachers efficacy? Is there statistically significant difference in students' engagement between teachers with high efficacy beliefs and those with low efficacy beliefs? And, is there statistically significant difference in instructional strategies between teachers with high efficacy beliefs and those with low efficacy beliefs? To answer the first question, one sample t-test and the remaining two questions answered by using of two samples t-test. In the following sections the findings of this research work are presented in accordance with the research questions.

4.1 Level of Teachers' Efficacy

Among the selected participants how efficacious are they and their levels of Teacher Efficacy investigated as follows.

Teacher efficacy was calculated based on teacher responses to 16 questions on teacher beliefs regarding student engagement and instructional strategies efficacy. All of the questions were resented with a nine point Likert scale. To determine how teachers are efficacious or not, first the study check the normality of the data. The normality test result shows the p values .200 and .970 from Shapiro-Wilk test of normality are both greater than 0.05 which implies that it is acceptable to assume that the data distribution is normal.

After checking the normality, the study uses one sample t-test to measure the level of teachers' efficacy. The mean score for TSES questionnaire was 7.3(for both for instructional strategies and student engagement). The study uses the mean score of the instrument as the test value.

Table 4. 1: One-Sample Statistics

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
TSES_me an	20	6.6281	.77121	.17245

The table shows simple statistics for the data of TSES questionnaires and shows that the sample mean of teachers' sense of efficacy scale (TSES) is 6.62 with a SD of 0.77.

Table 4. 2: One-Sample test result for teachers' efficacy

One-Sample Test						
	Test Value = 7.3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
TSE_mean	-3.896	19	.001	-.67188	-1.0328	-.3109

The result of one sample t-test indicated that the p value is less than 0.05 which is $p < 0.001$. This shows that the level of sampled teachers mean score is statistically different from the expected value, which means that the sampled teachers have low teacher's efficacy.

4.2 Difference in teachers uses of instructional strategy according to their level of efficacy

To compare the difference between high and low efficacious teachers in their uses of instructional strategies, the study uses two samples t-test.

Table: 4.3 Group Statistics between teachers' efficacy and teachers' instructional strategies

Group Statistics					
	TSE.mean.cat	N	Mean	Std. Deviation	Std. Error Mean
TIS_MEAN	1.00	8	4.1650	.23946	.08466
	2.00	12	3.5467	.49970	.14425

The table shows that the mean score of high efficacious teachers (1) in uses of instructional strategies is $N = 8$, $M = 4.16$, $SD = 0.23$ and the mean score of low efficacious teachers (2) in uses of instructional strategies $N = 12$, $M = 3.54$, $SD = 0.49$.

Table 4.4: Independent samples t-test

		Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
TIS_MEAN	Equal variances assumed	4.363	.051	3.239	18	.004	.61
	Equal variances not assumed			3.697	16.759	.002	.61

The result of independent samples t- test using a pooled estimate of the variance was performed to test the mean difference of high and low efficacious teachers in their instructional uses. The mean teachers instructional strategies of teachers with high and low teachers' efficacy were significantly different, $t(18) = 0.61$, $p=0.04$ with 95% confidence interval.

4.2 Difference in Student's Engagement According to Teacher's level of efficacy

To compare the difference between high and low efficacious teachers in their student engagement, the study uses two samples t-test.

Table 4. 4: Group Statistics of teachers' efficacy and student engagement

Group Statistics					
	TSE.mean. cat	N	Mean	Std. Deviation	Std. Error Mean
SE_mean	1.00	8	3.0086	.51556	.18228
	2.00	12	2.5331	.38794	.11199

The table shows that the mean score of high efficacious teachers (1) in student engagement was $N= 8$, $M= 3.00$, $SD= 0.51$ and the mean score of low efficacious teachers (2) in student engagement $N=12$, $M=2.53$, $SD=0.38$.

Table 4.6: Independent samples t-test

		Independent Samples Test					
		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
SE_mean	Equal variances assumed	1.199	.288	2.357	18	.030	.47
	Equal variances not assumed			2.223	12.178	.046	.47

The result of independent samples t- test using a pooled estimate of the variance was performed to test the mean difference of high and low efficacious teachers in student engagement. The mean students engagement of teachers with high and low teachers' efficacy were significantly different, $t(18) = 0.47$, $p=0.03$ with 95% confidence interval.

Discussion

The main purpose of this study was to examine the effect of teachers' efficacy on uses of instructional strategies and student engagement. To answer the first research question one sample t-test was performed and to answer the second and third research questions two samples t- test was used.

Q1: What is the Levels of Teachers' Efficacy?

Results of one sample t-test demonstrated that the mean score of the sample was not significantly related to the expected value. This showed that the mean value of the sampled teachers had lower than the expected value ($6.62 < 7.3$). The result indicated that Woldia Collage of Teachers' Education teachers had low teaching efficacy. The present study did not classify the data of teachers' efficacy based on teachers' characteristics. Based on the finding the study tries to discuss on the factors that affect the level of teacher efficacy. There are different factors that contributed to teachers have high or low teachers' efficacy. America and Scotland (Campbell 1996), reported that teachers gain high efficacy when they matured in their years of professional experience. Highly experienced teachers who had more than fifteen years' teaching experience

had a stronger sense of efficacy in providing instructional strategies and engaging students compared to novice teachers who had less than five years' teaching experience. Also Wilson and Tan (2004), found that teachers with five or more years' professional experience reported stronger efficacy judgments relating to classroom management and discipline compared to beginning teachers. The teacher's belief and effort are apparently directed to creating and maintaining an orderly and conducive environment to facilitate delivery of content, and to devise and adjust strategies to engage students in learning. It is a challenge for the teacher simply to enlist the cooperation of less than optimally motivated students to attend the lesson. The teachers with years of experience may have perceived themselves as being able to engage the students by using of various instructional strategies. Another factor that influences the level of teachers' efficacy was the strength between teacher student relationships inversely predicts teachers' efficacy in the use of instructional strategies and student engagement. Having a relationship with students that is low on conflict is expected to enhance a teacher's efficacy in teaching low achieving students and engaging students. In a narrow but very specific way, this underlines the importance of the teacher's relationship with students, which is the keystone of teaching (Collier 2005).

Also sex has one factor on the level of teachers' efficacy. Studies indicated that male and female differed in terms of student engagement and instructional strategies they employ; male teachers were better at student engagement, while female teachers were better at instructional strategies. Andersen (2011) found that female teachers have higher self-efficacy than male teachers. he concluded that women are usually more attentive than men. They pay attention to details more than men do, and women are more careful in doing their job. Women are usually more organized than men, and try to do their job as carefully as they can. These are true in the case of teaching as well: Because female teachers are more attentive, accurate and organized than men, they usually attempt to have the best instruction. They are usually sensitive to teach as effectively as they can and not to skip anything because they pay attention to details.

Q 2: Is there statistically significant difference in instructional strategies between teachers with high efficacy beliefs and those with low efficacy beliefs?

The result for this research question indicated that teachers who have high teaching efficacy also they uses various instructional strategies. The two samples t-test reviled that there is statistically

difference between teachers who have high efficacy and low level of efficacy. Teacher efficacy in the classroom was interesting and important to the understanding of classroom practices. One classroom practice that is frequently discussed in educational literature is differentiating instruction (Brimijoin, 2005; Tomlinson, Tomlinson & McTighe, 2006). In classrooms, it is important that teachers understand how to differentiate instruction to ensure increase the learning experiences for all students. Teachers with high level of teaching efficacy consider the level of students understanding in the course. To address each student educational need efficacious teacher uses various instructional strategies. The finding of the present study support the work of Caprara, Barbaranelli, Steca, & Malone (2006), they found that teachers' sense of efficacy having positive influence on teachers' instructional practices in the classroom. The classroom activity was based on how teachers involve students in the course. Instructional strategies was one of the basic indicators of teachers' ability to engaging students, as a result of this students motivation was also increased. Also Holzberger, Philipp, and Kunter (2013) investigated the role of teachers' efficacy beliefs on their instructional quality. The study founded a significant relation between teachers' efficacy beliefs and their instructional quality. That is, the more efficacious the teachers are, the higher the students' perception of the quality of instruction. Thus, high scores for self-efficacy could also be seen as an indicator of teachers' well-being. Shulman (1987) indicated that the key to understanding the knowledge base of teaching is the intersection of content and pedagogy, especially in the capacity of the teacher to transform content knowledge into forms that are pedagogically powerful and yet adaptive to the variations in ability and background presented by the students. If teachers are comfortable in modifying instruction for their students because they know how to make modifications, then students should learn more effectively.

Teachers who had more beliefs about themselves to change students felt more efficacious in differentiating instruction in their classes. Teachers' college students came from different background and difficulties. To overcome those difficulties teachers' should use various instructional strategies to make the subject content clear and easy acceptable. The level of teachers' efficacy in instructional strategies indicated that teachers who had spent more time in course activity felt more efficacious in differentiating instruction in their classrooms. The teacher must work to facilitate maximum understanding for the students. Teachers who have a one-size-fits-all attitude, or who cannot see the big picture of why this is needed, often do not think they

can accomplish this process. Also, using various instructions helps to address students with special need. Weshah (2012), conclude that efficacious teachers frequently engage in professional learning activities, such as keeping up to date with the profession, trying out new approaches to improve their practices, and changing their practice to promote process-oriented student learning. These professionals develop help to identify special students and used to develop appropriate method for teaching.

The present study believed that teachers should satisfy the students' academic need by producing relevant explanations or examples when their students seemed to be confused. While summing the study, the study stated that the impending contribution of teachers efficacy in students' achievement and performance will highly be dependent teachers confident in choosing their instructional methodology and style can be more aware of their expenditure of energy and resources, can regulate their behavior and negative learning enviroment, direct their own motivation, and, through cognitive processes, exercise decision-making and consciously resist against emotionally and mentally straining classroom situations.

Q3: Is there statistically significant difference in students' engagement for teachers with high efficacy beliefs and those with low efficacy beliefs?

The result indicated that there is statistically significant difference between high teachers' efficacy teachers and low efficacy teachers in their level of student engagement. The two sample t test result indicated that there is statistically significance difference between teachers who have high level teachers' efficacy and low teachers' efficacy in the level of student engagement. It means that when teachers have high level of teachers' efficacy, they engage students highly. This result was consistent with the studies which examined the relationship between teachers' behavior and student behavior the studies of Skinner & Belmont, 2003). They concluded that teachers' behavior in the classroom predicts students' engagement. Also Uden, Ritzen, and Pieters (2013) examined teachers' efficacy and perceived student engagement. They found that teachers with high levels of efficacy scored themselves as higher on influencing students Martin, Sass, and Schmitt (2012) confirm this by stressing that teachers with low levels of self-efficacy in student engagement tend to use more controlling instruction strategies. The first research question of this study centered on discovering the relationship between teacher self-efficacy and student engagement as measured by the TSES. Teachers' strong belief in their instructional

strategies can influence the expectations teachers have of their students regarding behavior and learning outcomes and the motivation they provide for students to be more actively and willingly engaged in performing learning tasks. Teacher efficacy is important not only because it may influence the goals set for the learning context, but also because it can channel the effort and persistence invested in tasks (Fives and Looney 2009). Given that Bandura's theory regards contextualized personal competencies, high teacher efficacy beliefs mean better use of judgment, channeling of motivation and self-regulation to achieve the set learning goals. Moreover, we could link high teacher efficacy beliefs to a raised awareness concerning stress and a higher commitment to challenges present in the classroom. Although, motivation and engagement are heavily influenced by student perceptions as to the teacher's involvement and the degree to which autonomy and competence as needs are met at school, concrete teaching behavior could be a significant influence (Stroet et al., 2013). Teachers with high self-efficacy believed that they were capable of answering even the most difficult questions by the students in the classrooms. Moreover, teacher behavior, such as immediacy and clarity, can heighten student cognitive and behavioral interest with course content and its future relevance, channel their selective attention, help them built internal connections among content and reflect, consequently enhancing emotional and cognitive engagement (Mazer 2013). Having these qualities, and regardless of the level of formal education, a teacher with high teacher efficacy beliefs can strengthen her personal efficacy beliefs by means of encouraging results through planned and strategic instruction.

Teachers who had knowledge of special education issues had higher teacher efficacy beliefs, which, they can assume, rendered them more comfortable with a variety of instructional strategies and more capable of choosing the most suitable one to engage students. Teachers with high teacher efficacy can better respond to students with special education needs (Haverback and Parault 2011). Teachers with strong teacher efficacy beliefs may be more confident in offering more mastery experiences for maintaining effort and persisting against failed attempts at learning something. High teaching efficacy beliefs can lead a teacher to feel more competent in motivating their students and to recognize that, in accordance with Bandura's theory on self-efficacy, students need to be active agents in the learning process. High teacher efficacy teachers seem to place more emphasis on the student engagement. The manner teachers teach a subject can ignite or smother the interest of the students, and influence cognitive skill development. Teacher belief in their teaching practice teachers confident in their teaching practices also be

confident in their level of engagement. In an environment fostering connective instruction characterized by a sense of support and warmth, where the teacher encourages student autonomy and is perceived as caring, accepting and involved, affective, cognitive and behavioral engagement occur; students are more persistent and effortful, happier and more enthusiastic about learning (Martin and Dowson 2009). Rather than relying on external factors for student engagement, teachers should develop their resilience in the face of hurdles and against overwhelming emotions that may obstruct classroom management and disengage students, while persisting in their goals and adjusting their expectations to classroom reality. That way, teachers may enhance the behavioral involvement of students with school, teachers and peers, as well as their willingness to comply with class rules, teacher's class-related requests and learning goals.

In addition to that, teachers with low efficacy beliefs in managing their classroom and engaging students with school activities or schoolwork believed in the students' future goals and observing student development as a means to further engage students with school. In the case of high teacher efficacy, if the students' future aspirations are relevant to the course and there is timely observation of the students' academic progress, the former may affect student cognitive engagement by urging the student to seek more profound learning opportunities and the latter can help regulate feelings of motivation. However, regarding high efficacy, it may be the case that teachers believe more that, with their classroom management and student engagement techniques, they are more capable of directing students in terms of future goals or that such goals are set by the student himself. Students who are more responsible about their learning as well as about assessing the content of a class, its presentation and integration, could see how relative a course is not only to other courses but also their career aspirations (Kiener, 2009).

CHAPTER FIVE: CONCLUSION AND RECOMMEDATION

Conclusion

This research was used to study the effect of teachers' efficacy on their use of instructional strategy and students' engagement for the corresponding course. In pursue of answering three questions. Namely, how efficacious are the teachers? Is there statistically significant difference in students' engagement for teachers with high efficacy beliefs and those with low efficacy beliefs? Is there statistically significant difference in instructional strategies between teachers with high efficacy beliefs and those with low efficacy beliefs? In the study a total of 20 teachers and 200 students were participated apart from the observation sessions. Finally, the findings of this researcher shows that the level of teachers efficacy influence significantly their use of instructional strategy and their students engagement. Therefore, for better achievement of students and education quality in broader sense teacher must have high level of efficacy. However, for more through observation of the impact of teachers' efficacy on student engagement, students should be included as a variable and other measurements should be utilized. The result concluded that rather than the subject matter knowledge teachers should focused on their belief. Students have different background and the level of understanding, to address the need of each student's teachers should use various kinds of instructional strategies. Those instructional strategies used for engaging students in the classroom. Engagement is one motive to gain academic success. Also, studying the effect of teachers' efficacy in students' engagement is very important. But to see the direct effect involving students as a variable is crucial.

Recommendation

The study recommend for further study is that, due to luck of time this study uses only questionnaires to gather data. Further teachers' efficacy researchers should include classroom observation to measure teacher's uses of instructional strategies classroom. In addition the present study limited on one collage education teachers; therefore, further researchers should compare various selected schools to get more generalized result. Also this study uses student course engagement to measure the level of student engagement in the classroom, but further studies should incorporate the measurement of teachers' sense of efficacy scale with other appropriate measurements.



Appendix D: Questionnaires

Part I: Teacher Sense of Efficacy Scale

No	Items	Response options								
		1	2	3	4	5	6	7	8	9
		None at all		Very little		Some degree		Quite a bit		A great deal
1	To what extent can you use a variety of assessment strategies	1	2	3	4	5	6	7	8	9
2	To what extent can you provide an alternative explanation/ example when students are confused?	1	2	3	4	5	6	7	8	9
3	To what extent can you craft good questions for your students?	1	2	3	4	5	6	7	8	9
4	How well can you implement alternative strategies in your classroom?	1	2	3	4	5	6	7	8	9
5	How well can you respond to difficult questions from your	1	2	3	4	5	6	7	8	9



	studies?									
6	How much can you do to adjust your lessons to the proper level for individual students?	1	2	3	4	5	6	7	8	9
7	To what extent can you gauge student comprehension of what you have taught?	1	2	3	4	5	6	7	8	9
8	How well can you provide appropriate challenges for very capable students?	1	2	3	4	5	6	7	8	9
9	How much can you do to get students to believe they can do well in schoolwork?	1	2	3	4	5	6	7	8	9
10	How much can you do to help your student's value learning?	1	2	3	4	5	6	7	8	9
11	How much can you do to motivate students who show low interest in schoolwork?	1	2	3	4	5	6	7	8	9
12	How much can you assist families in helping their children do well in school?	1	2	3	4	5	6	7	8	9
13	How much can you do to improve the understanding of a student who is failing?	1	2	3	4	5	6	7	8	9
14	How much can you do to help your students think critically?	1	2	3	4	5	6	7	8	9



15	How much can you do to foster student creativity?	1	2	3	4	5	6	7	8	9
16	How much can you do to get through to the most difficult students?	1	2	3	4	5	6	7	8	9

Part II: Teacher's instructional strategies Questionnaire

Scale: Strongly Disagree = **1**; Disagree = **2**; Neither agree nor disagree = **3**; Agree = **4**; Strongly agree = **5**

No.	Items	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
		1	2	3	4	5
1	I expect my students firstly solve the problem on their own.	1	2	3	4	5
2	While lecturing, I don't want my student to interfere.	1	2	3	4	5
3	I decide on what will be done and how it will be done.	1	2	3	4	5
4	Classes run mostly as I wish.	1	2	3	4	5
5	I give importance to details.	1	2	3	4	5
6	I ask for many examples from my students.	1	2	3	4	5
7	Assignments I gave lead students to make search.	1	2	3	4	5
8	I encourage students to solve new and general problems.	1	2	3	4	5
9	I like making students curious.	1	2	3	4	5
10	I make inductions in my lesson	1	2	3	4	5
11	I expect student to clarify the example I provided them.	1	2	3	4	5

12	I ask question on the way reaching a conclusion.	1	2	3	4	5
13	I like working with my students on projects.	1	2	3	4	5
14	I ask them to do their homework on their own.	1	2	3	4	5
15	I don't ask many questions if they aren't essential.	1	2	3	4	5
16	I tell every minute detail of the content in the class.	1	2	3	4	5
17	I motivate them to produce new projects.	1	2	3	4	5
18	While lecturing, I guide my students.	1	2	3	4	5
19	I counsel my students while they do their homework.	1	2	3	4	5
20	I consider their actual knowledge level about a topic.	1	2	3	4	5
21	I compose relax discussion atmosphere where students can state their thoughts freely.	1	2	3	4	5
22	I help my students reach me whenever they want.	1	2	3	4	5
23	Students whispering distract my attention.	1	2	3	4	5
24	I prevent actions or situation distracting the flow of lesson.	1	2	3	4	5
25	I tell students even I may have something I cannot know.	1	2	3	4	5

Part III: Student Course Engagement Questionnaire

Subject/course: _____ **Course code:** _____

Scale: Strongly Disagree = **1**; Disagree = **2**; Neither agree nor disagree = **3**; Agree = **4**; Strongly agree = **5**

No.	Items	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
		1	2	3	4	5
1	Making sure to study on a regular basis	1	2	3	4	5
2	Putting forth effort	1	2	3	4	5
3	Doing all the homework problems	1	2	3	4	5
4	Staying up on the readings	1	2	3	4	5
5	Looking over class notes between classes to make sure I understand the material	1	2	3	4	5
6	Being organized	1	2	3	4	5
7	Taking good notes in class	1	2	3	4	5
8	Listening carefully in class	1	2	3	4	5
9	Coming to class every day	1	2	3	4	5
10	Raising my hand in class	1	2	3	4	5
11	Asking questions when I don't understand the instructor	1	2	3	4	5
12	Having fun in class	1	2	3	4	5

13	Participating actively in small-group discussions	1	2	3	4	5
14	Going to the professor's office hours to review assignments or tests or to ask questions	1	2	3	4	5
15	Helping fellow students	1	2	3	4	5
16	Getting a good grade	1	2	3	4	5
17	Doing well on the tests	1	2	3	4	5
18	Being confident that I can learn and do well in the class	1	2	3	4	5

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