Research Paper

Effect of Teaching Method and Teachers' Self Efficacy and Students' Learning Outcome in the Accra Metropolis of Ghana

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ABSTRACT: *The study aimed at evaluating the effects of student-centered teaching methods on teachers' self-efficacy in ten selected Senior High School in the Accra Metropolis of Ghana. To accomplish the main objective, the study specifically sought; identify the teacher's favorite student-centered teaching technique at Accra Senior High School; eachers' perceptions of the considerable advantages of using student-centered teaching approaches; the relationship between teacher demographics and self-efficacy and the impact of student-centered teaching on teacher self-efficacy. The study adopted the quantitative research approach for the study. A total of 200 teachers were purposively chosen for the study. The study found that that teacher preferred to use student-centered teaching methods such as Role-playing, brainstorming and discussion, demonstrations, and simulations, activity-based teaching, co-operative and collaborative learning, debates, field trips and projects in teaching students. The study found that the use of student-centered teaching method helps students to have a higher and longer retention level, helps students to have in-depth understanding of subject matter, helps students to acquire inventive problem-solving skills, helps students to acquire increased opportunities to demonstrate mastery of subject matter, helps to involve students to use their higher imaginative skills to solve problem and also, enables students become further self-determining and independent self-leaners in their learning. The study found no significant difference between teachers' gender and their self-efficacy. However, there exist a significant difference between teachers' working experience and their self-efficacy belief in the use of student-centered teaching methods in teaching students in the Accra metropolis of Ghana. The study found significant effect of teachers' student-centered teaching method on teacher' efficacy in students' engagement, classroom management and instructional strategies.*
[Key Words]: Student Centered Teaching Method; Self-Efficacy; Students' Engagement; Classroom Management; Instructional Strategies

I.　INTRODUCTION

The key to Africa's economic progress is educating enough people with the skills and knowledge required to construct and run a modern country. Education contributes to economic prosperity. Education is the key to progress in all areas of life. This is evident when comparing the educational levels of developed and less developed communities throughout the nation and the globe. A successful teaching is the result of a good teaching process. A successful student-centered teaching technique affects instructors' self-efficacy. The section of the study will focus on the background of the study, statement of the problem, research objectives, research questions, significance of the study, limitation of the study, delimitation of the study and structure of the research.

The late 18th century witnessed a shift in educational techniques from conventional teacher-centered to contemporary student-centered approaches, allowing students to actively participate in the classroom teaching and learning process (Muwonge, Ssenyonga, Kibedi & Schiefele, 2020). For this reason, many studies during this time period identified the necessity to explore how student-centered teaching affects students' higher-order thinking skills (Collins et al., 2003; Zimmerman et al., 2001). Researchers (Todaro, 1992; Shah & Rehat, 2014;

Khan, Muhammad & Ahmed, 2012) argue that education should be used to assist students gain information, skills, and attitudes that will help them be useful in the classroom and in society.

According to Vin-Mbah (2012), teaching is an all-purpose job that fosters personal and economic progress. The act of teaching is also an effort to assist someone acquire or alter a skill or attitude. In other words, the teacher's job is to generate or influence desired behavioral changes in his students/pupils. Effective instructors tailor their pupils' education. They recognize that children grow at varying speeds and that each classroom will have a mix of talents and aptitudes. They cater to the requirements of their pupils rather than teaching to the middle, allowing some kids be bored while others struggle or fail. Effective instructors also recognize that kids learn best when their culture, background, and ability are appreciated. Educators and researchers say that teaching approaches based on student preferences and needs may help kids improve their attitudes, test scores, and higher order abilities (Piercy, Brandon-Jones, Brandon-Jones, & Campbell, 2012).

This is only achievable if pupils are taught well. Students may comprehend problems based on their own practical experiences and intuition if effective instructional technique is used. According to research, only student-centered teaching methods allow students to actively participate in their own learning and comprehension (Singh, 2011). Teacher-centred teaching, according to Armstrong (2011), suppresses student accountability while focusing on the teacher as the center of learning. The traditional teaching method led to role learning, so teachers must abandon these old practices and use teaching methods that make students the center of learning by educating them on how to acquire knowledge, make it meaningful in their lives, and apply it to practical problems (Gelisli, 2009; Senol, Bal, & Yldrm, 2007; Gelisli, 2009).

Student self-efficiency, self-reliant, inwardly and externally driven, and capable of solving challenges without support from others are mandated by the contemporary job market and global friendliness of the globe (self-dependent). Similarly, Solaiman (2016) found that notable theorists like Jean Piaget, John Dewey, and Lev Vygotsky show how students should be the core of classroom teaching and learning. Student-centered teaching strategies produce a realistic learning environment that replicates real-world situations including noise, pressure, and stress (Aldrich, 2006; Beaubien & Baker, 2004; Herrington & Oliver, 2000). Students who can identify challenges in this practical learning environment and actively seek information might become more efficient in their profession or educational endeavors (Crossley-Frolick, 2010; Obendorf & Randerson, 2013). Pupils-centered teaching focuses on building self-efficacious students who are self-motivated and can adjust to difficulties as they arise (Cassidy & Eachus, 2002; Schunk & DiBenedetto, 2016; Tang, Addison, LaSure-Bryant, & Norman, 2004). Some studies (Cassidy, 2015; Duchatelet et al., 2020) argue that students' self-efficacy adds considerably to their cognitive, emotional, and psychomotor domains of learning as they learn to overcome problems in acquiring new information.

Engaging students via student-centered methods improves academic achievement, motivation, and even instructor self-efficacy (Bakker, Denessen, Dennissen, & Oolbekkink-Marchand, 2013; Epstein, 2001l; Epstein, 2018; Hattie, 2009). Encouraging pupils to apply their learning in a real natural world rather than the abstract teaching environment established by instructors has not taken root in Ghana (Granger, Bevis, Saka, Southerland, Sampson, Tate, 2012). Every school's main goal is to prepare students to contribute to their country in many fields of study under the guidance of instructors. To achieve this goal, instructors must successfully incorporate current teaching approaches such as student-centered teaching into their daily lesson plans for pupils. Efficacy beliefs about what they learn in class, how they should learn it, and when to apply it to real-world practical issues are developed via self-efficacy and motivation, according to research (Bandura, 1977; Fackler & Malmberg, 2016; Ma & Marion, 2019). On the other hand, teacher self-efficacy seems to be acknowledged as a factor influencing the influence of instructional approaches on teaching and learning (Cheung, 2008; OECD, 2014). Based on the above considerations, the present study has three research aims. This study sought to bridge a methodological and research vacuum by studying instructors' perceptions of the effectiveness of student-centered teaching methods on student learning.

Motivation of the Study

One of the main issues Ghana teaching and learning face today is outdated educational attitudes and practices based on rote learning. Rather than the conventional teacher-centered educational methods and strategies, such engaging teaching methods should be favored. These strategies should be used to teach students how to learn (ùenol, Bal & Yldrm, 2007). A wise person used to know everything or store information provided by others in his head. Historically, training was seen as a means of passing on information, cultural values, and critical skills to future generations. Today, a knowledgeable person is one who is aware of knowledge, knows how to get it, understands it, and can use it to solve problems. The student-centered approach claims that children would be more creative and freer if trained according to their nature rather than what adults desire (Gür, 2006). Student focused learning organizes learning life around students' interests, knowledge, and needs. It tries to teach kids how to study and explore his learning qualities (Saban, 2004). Educators in elementary, secondary,

and higher education have traditionally favored student-centered learning. Student-centered research, policy, and practice have grown in number (Lea, Stephenson, and Troy, 2003).

The outcomes of educational research need changes in educational institutions and learning - teaching processes. Since 2003, educational curricula in Turkey have been changing to reflect new intelligence. Course books have changed along with the programs. Instead of procedures placing teachers at the center, a student centered educational understanding has been stressed.

Unlike conventional teacher-centered learning approaches where students are passive listeners, this paradigm proposes that students should be active learners. (Nakibolu, 2001).

Student centered learning is a strategy that takes into account students' interests, talents, and needs, allowing them to study at their own speed (Sparrow and Sparrow, Swan, 2000). When students' lives are arranged, their learning rate and learning styles are considered. In student-centered learning environments, the student's experience, content, and knowledge are important. Examples of student-centered learning activities include exploring, seeking, and problem-solving (Ubukçu, 2007). Teachers provide a structured learning environment where students are supported and guided to develop self-evaluation and learning independence (Klenowski, 1995). Active student engagement in the learning process results in more lasting and sensible learning.

So we established student-centered learning (SCL) to help students take ownership of their own learning (Scott, Buchanan and Haigh, 1997). This training may help them think more creatively and enhance their thinking abilities. According to active learning theories, all students inherently have self-esteem, a sense of energy, self-organization, social awareness, and self-awareness (Korkmaz, 20007). In actuality, student-centered learning does not negate the role of teachers. Instead, in student-centered learning, both students and instructors are active participants (Ercan, 2004). Based upon this backdrop the study aimed effect of student-centered learning on students 'self-efficacy.

The primary objective of this research was to assess the impact of student-centered learning on teachers' self-efficacy and student learning outcomes in Accra, Ghana. The study's objective was to:
1. Identify the teacher's favorite student-centered teaching technique at Accra Senior High School.
2. Examine teachers' perceptions of the considerable advantages of using student-centered teaching approaches at Accra Senior High School.
3. Determine the relationship between teacher demographics and self-efficacy.
4. Determine the impact of student-centered teaching on teacher self-efficacy in Accra Senior High School.

Based on the research objectives that govern the study, two esearch questions and two research hypotheses were formulated to be tested in order to investigate the issues under study.

Research Questions
1. RQ1: What is the preferred student-centered teaching method adopted by senior high school teachers in the Accra Metropolis?
2. RQ2: Does the use method in teaching senior high school provides benefits to students and teachers senior high school students in the Accra Metropolis.

Research Hypothesis
1. H1 : There is a significant difference between Teachers demography's and self-efficacy
2. H2 : There is a significant positive effect of Student centered teaching on senior high school teachers' self-efficacy in the Accra Metropolis.

Based upon the research Questions and hypothesis, conceptual model was designed to guide the study. This was illustrated in Figure 1.
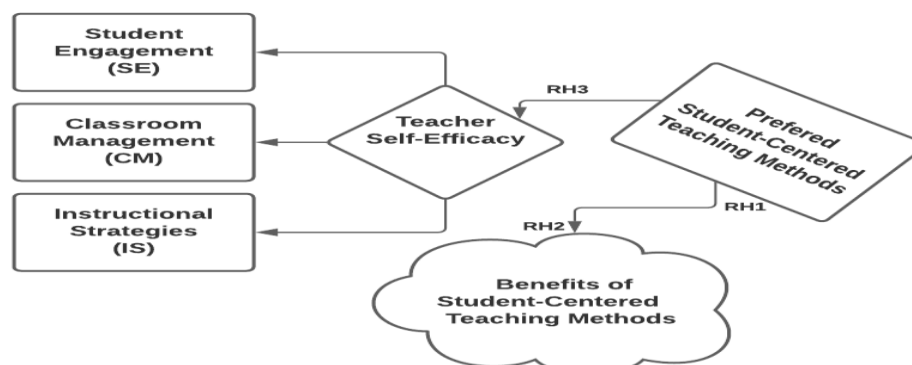

Figure 1 Conceptual Model for the study
Source: Researchers' Own Construct

II. REVIEW OF RELATED LITERATURE

Theoretical Review
Constructivism Theory

This research is based on constructivism. Constructivism is a modern learning philosophy that encourages students to actively develop their own knowledge. Bunner (1961) and Piaget (1980) propose that pupils make their own world maps. Constructionists describe learning as an active process in which pupils actively develop their own understanding of the circumstances. Constructivism claims students are active creators of knowledge, not passive consumers. This idea states that pupils actively generate meaning from their interactions with the world. They construct their own networks of relationships and thought patterns based on their own experiences and what others teach them (Stanley, 2008). They make sense of their world via reading, watching TV, listening to or overhearing older pupils, parents, and instructors. The experts believe that fostering these attributes in pupils will make studying more interesting and successful.

Using a range of learning activities engages students in the teaching-learning process (Brennan, 2005). An ongoing process of "adaptation" and "organization" as the learner interacts with the physical and social environment, according to Piaget (1967). He also illustrates that rich experiences and activities help learners grow cognitively and transition from one domain level to another. According to Bakare (2002), this experience would stimulate cognitive abilities such as perception, conceptualization, memory, language, reasoning, and creativity. Cognition and efficient entrance behaviors in science need skill in ordered and systematic sequencing of activities and themes within the syllabus, according to Bloom (1976). This will not only improve learning but also shorten work completion time. Gague (2001) believes that such approaches will help people understand ideas and broad principles.

Socio-Cognitive Theory

This study's theoretical framework was Bandura's Social Cognitive Theory (1986). Bandura (1986, 1997) contends that reciprocal determinism occurs when behavior, cognition, and other human variables interact with the environment. SCT is a psychologically advanced theory that describes how people within social systems execute many human processes including information and knowledge acquisition. In particular, numerous aspects in learning processes are examined (Jenkins, Hall & Raeside, 2018). Bandura's SCT expands on behaviourism's emphasis on behavioural, contextual, and individual (cognitive) components in the learning process (Harinie, Sudiro, Rahayu & Fatchan, 2017). Bandura's theory of learning emphasizes constant reciprocal interaction between these three elements, according to Hjelle and Ziegler (1992). Individual cognitive activity may alter the environment, and the environment can change mental processes (Harinie, et al., 2017).

Bandura, among other scholars, illustrated how human activity might change the environment and generate desired consequences if individuals believed in their powers (Stajkovic & Luthans, 2013). Confidence, or more accurately self-efficacy, is crucial in SCT. Bandura (1991) gives a conceptual and empirical examination of how self-efficacy interacts with SCT to determine human motivation, adaptability, and change. According to social cognition theory, self-efficacy is one of the most essential elements influencing an individual's behavior. "Personal efficacy beliefs are essential to human agency. People won't try to make things happen if they think they can't (Bandura, 1997, p. 3). Perceived self-efficacy is described as confidence in one's ability to plan and execute actions necessary to create in a particular situation (Bandura 1997, p. 3). Social cognition theory emphasizes the connection between individual skill and the environment when building efficacy beliefs. SCT defines "social" situations as ones in which people evaluate their own talents to others' in a particular context. Unlike other cognitive theories of work motivation that focus on process-oriented analysis of factors influencing the relationship between human action and environment, SCT focuses on factors influencing the relationship between human action and environment (Stajkovic & Luthans, 2013). Individuals (unique human traits like ability) and the environment (contributions of the organizational environment like performance pay) are said to be causally linked in the SCT (previously successful or unsuccessful performance).

The social cognitive theory posits a second form of expectation, that of outcomes, different from efficacy expectations. In other words, the expectation of efficacy is the conviction that one can organize the required behaviors to execute a task, whereas the expectation of consequences is the belief that one can do that work well (Bandura, 1986). According to Fives and Buehl (2009), the world and surroundings influence one's views. The study included 102 practicing teachers and 270 aspiring teachers. The full form TSES questionnaire was completed by respondents. Also, Fives and Buehl (2009) found that experienced instructors reported higher effectiveness views than pre-service teachers.

In contrast to self-concept, self-worth, and self-esteem, self-efficacy is task-specific. "Self-esteem is commonly thought of as a distinctive emotive judgment of oneself (e.g., feelings of self-worth or self-liking). However, self-efficacy is a non-evaluative task capacity evaluation (Gist & Mitchell, 1992, p. 185 as cited in Tschnnen-Moran, Hoy & Hoy, 1998).

No other kind of thinking influences behavior more than people's beliefs about their power to control events in their life. Self-efficacy is a critical component of human agency (Bandura, 1982; 1986). Self-assessments of operational capacities are one set of proximal determinants of how individuals behave, think, and respond under stressful circumstances (Bandura, 1986). Bandura said that how people see their own effectiveness impacts how much effort they put into things and how long they can tolerate obstacles and failure. Also, how individuals perceive their talents affects how much stress and despair they experience throughout anticipated and real interactions with the environment (Bandura, 1986).

The last contribution of social cognition theory to teacher efficacy was to clarify the causes of teacher efficacy beliefs. Bandura (1977, 1986) identified four sources of self-efficacy. Affective and physiological states are the four origins of mastery experience. Mastery is the apparent consequence of prior successes. After the work is finished, the participants interpret and evaluate the findings. Those interpretations shape the evaluation of competence (Pajares & Usher, 2008). Teachers gain effectiveness by researching others who have had comparable experiences (Bandura, 1995; 1997; Pajares & Usher, 2008). Bandura (1994; 1997) and Pajares and Usher (2008) define verbal and social persuasion as an atmosphere in which people may be verbally convinced that they have the abilities necessary to accomplish a task. Anxiety, tension, weariness, and mood are commonly discussed in relation to physiological and affective states (Bandura, 1995; Pajares & Usher, 2008). Self-efficacy judgments are based on four basic kinds of data. Physiological conditions from which humans partly estimate their ability, strength, and weakness (Bandura, 1986).

According to Stajkovic and Luthans (2002), those with high self-efficacy for a task would do better than people with low self-efficacy. They also said that self-efficacy tends to boost performance more than other similar incentive approaches like goal planning. They found that self-efficacy adds to job motivation. SCT recognizes that workers are motivated by intrinsic and extrinsic factors. SCT also proposes that workers' self-efficacy beliefs in their ability to do the behaviors required to succeed. There have been several attempts to measure effectiveness, including Bandura (1997) and Rose & Medway (1981), Ashton et al. (1982), Gibson & Dembo (1984), Riggs & Enochs (1990), Tschannen-Moran & Hoy (2001). He said that a teacher's perception of effectiveness varies depending on their duties in school. That is, instructor effectiveness varies. Bandura's efficacy scale influenced subsequent efficacy scales. However, the produced instruments had several flaws.

Tschannen-Moran and Hoy (2001) structured the Teacher Efficacy Scale (TES) into three components: instructional tactics, classroom management, and student involvement. Teacher self-efficacy refers to the instructor's conviction in their abilities to employ innovative approaches to help pupils learn. It relates to the teacher's confidence in their abilities to motivate kids to learn (Moalosi & Forcheh, 2012). Teachers' self-efficacy in classroom management refers to their belief in their abilities to create an atmosphere that fosters academic and social-emotional development (Oliver, Wehby & Reschly, 2011). Despite its age, the TES is still the most widely used instrument in teacher efficacy research, including cross-validation utilizing instructor samples from varied situations (Klassen et al., 2011; OECD, 2014; Scherer et al., 2016).

Teachers' Self-Efficacy

Bandura (1997) and Woolfolk Hoy and Burke Spero (2005) define self-efficacy as one's belief in one's own ability to do well. Teacher self-efficacy is described as a teacher's confidence in their ability to teach a certain topic to pupils in a manner that maximizes student learning and engagement (Tschannen-Moran & Woolfolk Hoy, 2001). Teachers' self-efficacy has been identified as a critical factor influencing their classroom pedagogy and direction (Caprara, Barbaranelli, Steca, & Malone, 2006). Some social cognitive theorists argue that a teacher's self-efficacy is founded on their own perceptions and experiences. Bandura identified four fundamental pillars of teacher self-efficacy. This includes mastery, vicarious, verbal, and physiological states. Mastery experience is described as the teacher's success in completing a task in and out of the classroom. Verbal persuasion relates to how other people view and evaluate a teacher's efficacy. Teacher's physiological condition is the mental makeup and how emotions impact their capacity to teach successfully in the classroom (Choi, Lee & Kim, 2019; Evers, Brouwers, & Tomic, 2002; Nie et al., 2013). There has been more focus on how teacher self-efficacy influences constructivist classroom methods.

The study shows that teacher self-efficacy is connected to student academic progress, classroom engagement and learning, accomplishment, retention, and work satisfaction (Ashton & Webb, 1986; Caprara et al., 2006; Skaalvik & Skaalvik, 2007). Other research saw teacher self-efficacy as a determinant of predicted teacher conduct and practices (Suprayogi, Valcke, and Godwin, 2017; Zee & Koomen, 2016). The link between self-efficacy and instructional outcomes, especially student learning, has been debated (Bümen, 2009; Holzberger et al., 2013). Some research shows that teacher self-efficacy increases instructional practices, particularly student-centered teaching. Researchers wanted to know whether changes in instructors' teaching techniques affected self-efficacy in the classroom. For example, Holzberger et al. (2013) found that instructional quality predicts teacher self-efficacy and that effective student-centered teaching methods boost teacher self-efficacy. teacher self-efficacy, but found no evidence that the latter affects the former.

Classroom Management

Classroom management is the ability to maintain order, engage students in learning, and encourage student engagement in all classroom activities (Wong & Wong, 2005 as cited in Dustova & Cotton, 2015). It is also important to control the broad environmental and pedagogical factors that permit clear set-up, structure, expectations and feedback processes throughout the classroom. The capacity of instructors to manage classrooms and pupils is critical to good educational outcomes. The ultimate aims of classroom management are to provide a safe, balanced learning environment and to prepare children for life (Wong & Wong, 2005 as cited in Dustova & Cotton, 2015).

The Tschannen-Moran and Hoy (2001) teacher self-efficacy scale is the most extensively utilized in classroom management. It emphasizes behavior control rather than organizational structures, expectations, and the influence of intellectual content on such systems. The Teacher Efficacy Scale created by Gibson and Dembo (1984) covers aspects relating to classroom management. Emmer and Hickman (1991) were among the first to distinguish classroom management and teaching effectiveness from the "power to influence learning outcomes or accomplishments" (p. 757). They understand that classroom management is about achieving order, cooperation, and outcomes that aren't directly tied to student learning. Based on Doyle's (2013) explanation of the learning environment's management.

Classroom management is successful when it incorporates eight (8) factors that include behavior control, structure and procedures, and expectations. The TSEBs (Tschannen-Moran & Hoy, 2001) classroom management scale emphasizes behavior training somewhat more than systems and norms. Unlike previous effectiveness scales that just evaluate what teachers should do to execute basic management duties, this scale measures what teachers should do to execute basic management tasks, regardless of classroom management skills evaluations and teacher awareness impressions.

Classroom management has grown in importance over the years. Successful classroom management is required for effective teaching and learning in our institutions (Marzano, Marzano & Pickerings, 2003). If one cannot manage a classroom, one cannot ensure that kids are absorbing material. Poor classroom management may lead to increased school violence, bullying, teacher conflict, burnout, and turnover (Allen, 2010). (Jepson & Forrest 2006).

A badly organized classroom might cause a teacher to lose crucial instructional time (Nicks, 2012). Unable to cover the content required by pupils to meet the school's declared instructional goals or objectives. Thus, instructors must establish and maintain an efficient and effective classroom management strategy that fosters a safe learning environment for all children.

Student Engagement

Efficacy of student engagement mirrors instructors' expectations (Blazevski, 2006). Teachers' self-belief that they can inspire their pupils might motivate them to influence their academic and cognitive advancement (Bandura, 1997). Encouraging individual pupils to like learning or think they can perform well in a certain class is how teacher self-efficacy for student engagement is commonly conceptualised and (Tschannen-Moran & Hoy, 2001).

Many academics are investigating whether individual psychological variables that encourage engagement may be fostered (Caraway et al., 2003). The Teacher Self-Efficacy Scale was the researchers' initial effort to quantify student motivation. Researcher and teacher conversations on key teaching duties led to items for this sub-construct. Bandura's unpublished teacher effectiveness measure also helped establish these points. No clear theoretical framework was provided to motivate or commit students. This sub-construction has eight (8) components (long form). Encourage pupils to achieve well, encourage creativity, and help them think critically. Students who are more confident in their abilities to self-regulate their learning are more likely to establish realistic objectives, appreciate the learning process, and own their academic accomplishments (Bandura, 1993; Linnenbrink, 2005; Pajares & Graham, 1999; Pintrich & De Groot, 1990; Pajares & Usher, 2008). These are crucial features of student engagement. Moreover, students with higher self-efficacy for self-regulated learning beliefs are less likely to have negative school expectations, set success (rather than mastery) goals, procrastinate, or get nervous in threatening academic situations (Cleary & Zimmerman, 2012; Joo, Bong, & Choi, 2000; Pajares, & Valiante, 2006; Pajares & Usher, 2008).

Instructional Strategy

Instructional techniques are approaches used by instructors to assist students learn or comprehend course material. They help instructors make learning more entertaining and practical while also encouraging students to participate in their education. The goal of applying instructional tactics beyond topic knowledge is to develop autonomous strategic learners. With experience, students should be able to identify appropriate methods and apply them successfully to assignments. TSE's instructional self-efficacy is poorly understood.

Except for the TSES subscale of the instructional approach, several TSE domain scales were constructed (Tschannen-Moran & Hoy, 2001). Efficacy of instructional techniques relates to instructors' expectations that they should adapt content to students' needs, interview students, and evaluate student achievement (Tschannen- Moran & Hoy, 2001).

This scale assesses teachers' self-efficacy in preparing for teaching and communicating with students in and out of the classroom. In addition to pre-active and interactive teaching components (Jackson, 1990). Components of class (interactive) or class (proactive) planning. Students' grasp of concepts is assessed using a variety of evaluation techniques. Preparing questions or changing lessons may be done before the session or as needed since teacher training programs tend to emphasize proactive teaching components (Grossman, Hammerness & McDonald, 2009). Preparing instructions requires less time and cognitive effort than presenting classes within a time period. This is because teachers may focus on the proactive aspect of activities that usually include instructional preparation. Never teach without regard for the content of what is being taught (Cohen, 2010). Although the content dictates much of what instructors do with instruction, it is critical that teachers evaluate their usefulness for the content (e.g., skills and practices) when considering their teaching abilities.

In summary, the third TSE domain (classroom management, student participation, and instructional method) is the least understood. The efficiency of classroom management has been extensively studied in educational psychology, although self-efficacy of teachers has been less studied. In recent years, three key teaching areas (Kuusinen, 2016) have been identified as core TSE domains.

Mastery experience

Mastery experience, also known as enactive experience, is the most essential source of efficacy knowledge. The notion that a performance was effective leads to expectations of competent performance. Successfully completing one's own duties provides mastery experience. Teachers who excelled in their classrooms looked to have high teacher efficacy rates (Hoy & Woolfolk, 1993; Williams, 2009). But not all favorable contacts inspire efficacy, such as progress on difficult activities with little help or early learning success with few failures. Previous accomplishments boost confidence in doing comparable tasks, but failures lower confidence, especially if they occur early in the learning process. It is doubtful that failure would affect a strong feeling of efficacy based on earlier experience and achievement. Thus, the impact of failure on self-efficacy is dependent on the kind and overall sequence of encounters. This assault on effectiveness is likely when failure happens early in the learning process and cannot be attributed to lack of effort or external factors (Bandura, 1986, 1997). The mastery experiences and the physiological exhilaration connected with them are the most significantly influencing variables on self-perception of teaching skill. Only in a real-life teaching environment can one assess his or her talents and their impact. In real classroom circumstances, instructors learn how their skills and shortcomings affect student management, instruction, and assessment. For example, while dealing with a group of hyperactive youngsters, enthusiasm may help, but not enough to compensate for lack of coordination or preparedness.

Efficacy in Instructional Strategies

Chacon (2005) investigated self-efficacy beliefs among EFL instructors in Venezuelan schools. The research used descriptive and correlational methods, including interviews as one of the data collection methods. A poll of 100 instructors also yielded data. The Teacher Sense of Effectiveness Scale (Tschannen-Moran & Hoy, 2001) was developed to evaluate management, commitment, and instructional efficacy. It was a 9-point Likert scale. Effectiveness of instructional tactics (M=7.13) was greater than efficacy of management (M=7.00) and engagement (M=6.59).

Again, Gürbüztürk and Ad (2009) studied student teachers' conventional vs constructivist educational ideas, as well as their feeling of self-efficacy, by gender, grade, and department Their research looked at the factors' relationships. The research population included 3817 nönü University student teachers in the first semester of 2007-2008. The research sample includes 411 students selected using proportionate stratified sampling. The research found that self-efficacy in instructional tactics was ranked highest, followed by self-efficacy in classroom management and student involvement

Shaukat and Iqbal (2012) studied 108 male and 90 female instructors from four public schools in Lahore. Data were collected using the Teachers' Sense of Efficacy Beliefs measure (Tschannen-Moran & Hoy, 2001). The research found that the most effective teaching tactics were student involvement and classroom management.

Al-Alwan and Mahasneh (2014) interviewed 679 instructors and 1,820 pupils from elementary and secondary schools in Jordan. Teacher confidence in their abilities to educate students and impact student performance is a very excellent metric of teaching effectiveness. They are also more receptive to new ideas and more inclined to try new techniques to better suit their kids' needs (Al-Alwan & Mahasneh, 2014, p. 176). The survey found that when taught using a diversity of strategies and goals, pupils grasp the material. Finally, there

were no significant differences in self-efficacy in teaching tactics between male and female instructors (Al-Alwan & Mahasneh, 2014).

In their research, Epstein and Willhite (2015) looked at teacher effectiveness in an ECPDS (PDS). PDS allows mentor teachers to share their experiences with teacher candidates throughout prolonged placements of over 100 hours. Pre- and post-surveys were completed by teachers in pre-K through fourth grade. The study found high efficacy in instructional and managerial components of teaching but low confidence in helping families support their children's achievement.

Efficacy in Student Engagement

Pendergast, Garvis, and Keogh (2011) studied pre-service teachers at Griffith University. The Teacher Efficacy Scale (Tschannen-Moran & Hoy, 2001) was given to 175 teachers, including sub-scales for instructional approach, classroom management, and student engagement. This research found that pre-service teachers were highly productive in student engagement (M=7.32), classroom management (M=7.31), and instructional approach (M=7.36). Overall teacher effectiveness was 7.40 (M=7.40). Teachers in Ghana's Kumasi Metropolis were investigated for their gender and self-efficacy views in instructional tactics, classroom management, and student involvement.

A descriptive cross-sectional survey was utilized to assess teacher effectiveness and the link between gender and efficacy. The sample consisted of 259 male and 178 female instructors from both private and public high schools. The TSES was used to gather data from respondents on a 5-point Likert scale. Based on the results, instructors ranked best on student involvement (M=35.05), followed by classroom management (M=33.82), and lowest on instructional tactics (M=30.51). Sevimel and Subasi (2018) investigated variables impacting Turkish pre-service English language instructors' effectiveness views. The research employed a mixed methods approach to gather data from 113 students majoring in English Language Teaching at a Turkish public institution. The effectiveness scale subscales had similar mean scores. They felt effective in managing classrooms, teaching tactics, and student involvement. The subscales were ordered highest to lowest.

Boateng and Sekyere (2018) investigated in-service teachers' efficacy beliefs in connecting with students. 299 kindergarten instructors from both public and private institutions in Kumasi, Ghana, were selected as the sample size. The research used the OSTES student engagement subscale created by Tschannen-Moran and Hoy (2001) as a survey instrument. The research found that kindergarten teachers in Kumasi had strong efficacy beliefs in student involvement (M=4.39). Yiboe (2019) recently researched pre-service management teachers' self-efficacy in teaching their major (management) topic at the senior high school level. The TSEBs Scale was used to gather data from 230 pre-service management instructors. In student engagement, most pre-service management instructors had a strong Sense of Efficacy (M=3.37). Again, most pre-service management instructors had a strong Sense of Efficacy (M=3.55). Also, most pre-service management instructors feel effective in classroom management (M=3.57).

Efficacy in Classroom Management

Mcneely and Mertz (1990) studied 11 high school instructors from various subjects. Throughout the course, self-efficacious pre-service instructors were meticulous planners who employed a variety of activities. These instructors perceived their pupils as adversaries, focused on monitoring student behavior, and offered classes that put them in total control (Mcneely & Mertz, 1990). High self-efficacy promotes good teaching behaviors and practices, while lack of management skills might result in a dictatorship (Mcneely & Mertz, 1990).

Baker (2005) found a link between self-efficacy and instructors' desire and ability to manage difficult pupils. The research found that instructors with emotional or behavioral disabilities had poorer self-efficacy than teachers without such disabilities (Baker, 2005). In addition, the number of EBD kids in mainstream classes is growing, and self-efficacy is closely connected to classroom behavior (Guskey 1988; Milner 2002).

Sak (2015) studied 451 Turkish pre-service teachers, 231 of whom were female. Early childhood teaching is a female-dominated profession in Turkey. The Turkish-language version of the Teachers' Efficacy Scale (TTSES). The study found that Turkish instructors excelled in classroom management, student engagement, and instructional tactics.

Klassen and Chiu (2010) found that classroom management self-efficacy (M=7.56) was the highest among 1430 practising teachers, followed by instructional methods self-efficacy (M=7.55) and student engagement self-efficacy (M=6.87). It used the teacher self-efficacy measure for instructional techniques, classroom management, and student involvement. Cobbold and Boateng (2016) looked at kindergarten teachers' effectiveness in classroom management. The study included 299 instructors from public and private kindergartens in Kumasi, Ghana. A 6-point Likert scale was used to examine instructors' efficacy opinions in classroom management.

The research found strong effectiveness views (M= 4.23, SD=1.234) in classroom management methods among kindergarten instructors in the study region. This shows they can reliably plan and implement

actions to preserve classroom order. Also, kindergarten instructors felt less secure in their abilities to keep a few troublemakers from disrupting the full class. This suggests they are better at regulating group behavior than individual behavior.

No empirical research on pre-service accounting instructors' self-efficacy in teaching cost accounting has been provided. Cost accounting has a distinct theoretical foundation that sets it apart from other subjects. This supports Ross, Cousins, and Gadella's (1996) claim that instructors' self-efficacy varies by topic and student group. This implies that instructors' effectiveness levels will vary depending on the topic matter, providing a solid foundation for this investigation.

Concept of Teaching Methods

A teaching technique is a teacher's approach to facilitating student learning. These tactics are dictated by the topic matter and the student. Ood (2008). Teaching methods may be divided into teacher-centered and student-centered. Irina (2007). Teachers are the major authority figures in the teacher-centered learning approach. To be tested and assessed, students are considered as "empty vessels" that passively take in knowledge (through lectures and direct teaching). While instructors are the authoritative figure in this paradigm, both teachers and students are equally involved in the teaching and learning process. The teacher's responsibility is to advise and support student learning. Donnie (2013). The curriculum specifies the following instructional methods: discussion, question and answer, lecture, project method, brainstorming, field trip, and debate. Figure 3 depicts the major teaching approach used by instructors in key topics.
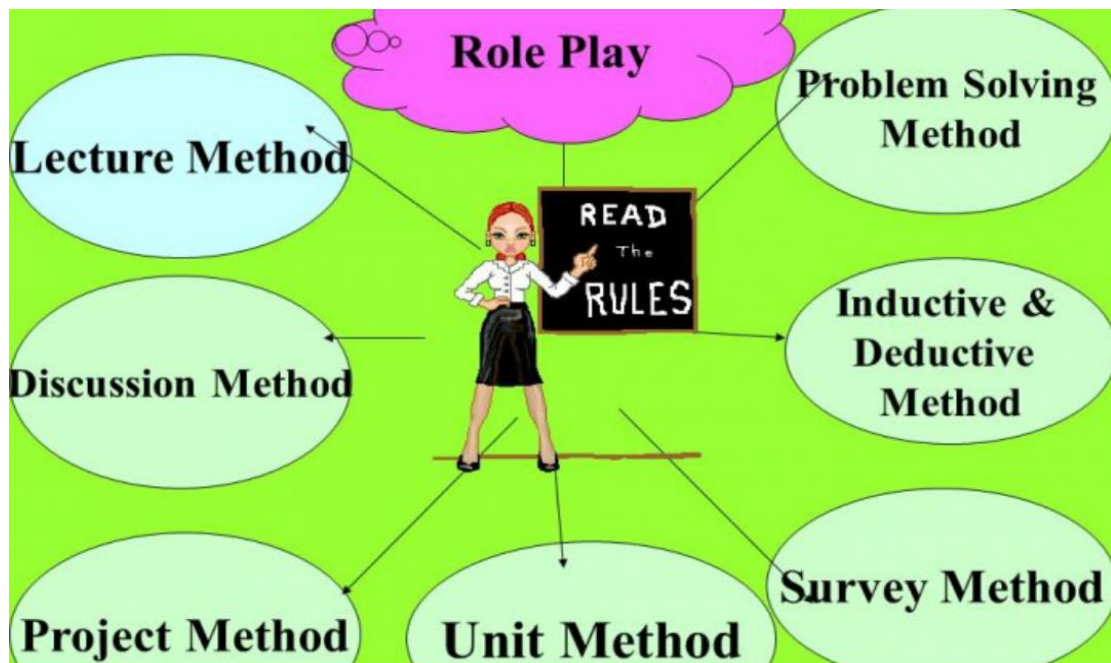

Figure 3 Teaching Methods

There are many ways to engage students in open-ended dialogue with a teacher or with peers to improve their critical thinking, problem-solving, comprehension and literary appreciation. & Gallimore (1988). The discussion method is a democratic technique of rebuilding knowledge that includes a full class in a prolonged exchange of ideas between instructor and student (Kam-Fai, 1973). According to Myers (1986), conversation is widely utilized to engage students, challenge their current thinking process, and create an environment where active reflection and exchange replace caution and apathy. This is because teachers often rely on students to contribute ideas, experiences, views, and facts. It so fosters spoken expression, critical and creative thinking, and intellectual and imaginative problem-solving. Dorleku (2013) states that the discussion technique is widely employed in teaching since it promotes student knowledge.

Fieldwork is an educational activity outside of the classroom. It is an outdoor learning experience that makes the topic less dry and theoretical. Nom (2000). According to Nacino, Oke, and Brown (1990), field excursions are locations where students go to observe what they have learned in class in action. This strategy gives first-hand learning experiences, making learning more relevant and enduring, while also boosting student-teacher relationships (Tamakloe, et al., 2005; Awuah, 2000). This fosters student creativity and critical thinking as they uncover things that would not have been possible in the typical classroom setting (Tamakloe et al.,

2005). But many instructors believe such education is pointless and wastes time (Tamakloe, et al., 2005). Adeyinka (1990) agrees that money for excursions and educational trips are seldom available. So teachers prefer to reject field trips and other expensive techniques.

Role play is a strategy that enables students to explore genuine scenarios by engaging with others in a controlled manner. It may include theatre, simulations, games, and real-life case studies, Erturk (2015). The technique helps learners grasp the complexity of professional practice and build skills to participate in multi-stakeholder negotiations in a classroom setting. Manorom and Pollock (2006) state that role play helps students to apply ideas and challenges learned in lectures and readings to real-world situations. It also aids in long term memory retention by allowing students to actively participate in sessions (Manorom & Pollock, 2006). When developed and conducted properly, role play may integrate these beneficial characteristics of learning and information absorption. McSharry and Jones (2000) illustrate many sorts of role play with intriguing examples from scientific education and ideas for all instructors. McSharry and Jones (2000) recommend starting with short role plays and working up to longer ones as both instructors and students acquire expertise and confidence. The role play exercise should also not occur just before or after a test, since this might generate tension in the students and reduce the activity's efficacy (Case & Cheek-O'Donnell, 2015). This course's activity was scheduled to avoid conflicting with an exam or other crucial event. Also, a few lecturers are integrating role play in systems analysis and design classes. Green and Blaszczynski (2012) advocate using role play to educate students and professionals soft (personal and social) skills. The systems analysis and design course itself is full of role playing.

As a lecturer, you are expected to offer knowledge and ideas in a lecture that is based on your own reading, research, and experiences. The genuine lecture involves little or no active student interaction. In reality, however, this format is seldom strictly followed. The lecturer is the key actor in the teaching and uses the chalkboard, slide projector, tasks done outside of class, and question and answer sessions. By contrast with other well accepted teaching strategies such as discussion, Ariel (1974). Despite its flaws, the lecture technique has certain benefits. Kimble and Makaechie (1960) list the following benefits of the lecture approach.

1. It is a cost-effective way to transmit vast volumes of material to large numbers of students.
2. Assign reading, small group exercises, and discussions.
3. It provides updated information from a variety of sources.
4. It summarizes or synthesizes data from several sources.

According to Bonwell and Eison (1991), activity-based learning involves learners actively participating in the learning process rather than passively receiving lectures. It is founded on the idea that learning should be more hands-on than listening to lectures. Activity-based teaching is a method of engaging pupils via activity. Unlike certain conventional teaching methods, when an instructor lectures or otherwise communicates material to pupils, who are supposed to retain it. In activity-based education, an educator acts as a facilitator, guiding and aiding pupils. The goal of activity-based teaching is to directly involve students in a lesson, making them participants in their own learning.

Baumgartner claims J. (2005). Brainstorming is a collaborative strategy where a group of individuals get together to brainstorm a solution. Brainstorming is a teaching method for generating new ideas and encouraging creative thinking (Cullen, 1998). It also aids in linking thoughts. In the classroom, brainstorming is often used to promote critical thinking. During lessons, the technique tends to investigate an individual's knowledge and experiences.

This study suggests that business management lecturers should focus on teaching methods that engage students, rather than those that focus on lecturing.

Teaching and Learning Resources

Learning resources are not teaching materials. Most individuals seem to confuse these words. Learning resources are those prepared and used by students to make learning simpler. Tamakloe (2005). Teaching and learning materials are objects used by teachers to make classes engaging and easy to grasp for pupils. A.S. (2002). Students get topic knowledge via teaching and learning materials. The blackboard, textbooks, flat graphics schematics, drawings, and maps are easy and affordable teaching and learning aids. Amedahe, Atta (2005).

A quick look at the business management curriculum (2010) suggests several relevant teaching and learning materials. Textbooks, visual aids, audio-visual aids, resource people, visual materials, etc. Teaching and learning materials will enable optimal student comprehension of lessons. Tamakloe et al. (2005) agree that such resources are best used in groups rather than individually.

In formal education, textbooks are utilized as a standard source of knowledge and a teaching and learning tool (Graves 2000: 175). It is one of many resources instructors may use to create successful lessons and can provide a framework for direction and orientation. The textbook also gives an inexperienced instructor confidence and assurance when customizing current textbooks, particularly for specific work-related courses.

"Research shows textbooks are commonly utilized in classrooms" (Woodward & Elliot, 1990, p.178). Availability and utilization of textbooks and other printed materials was cited in World Bank papers as a consistent indication of performance (Heyneman, et al. 1978, Heyneman and Loxley, 1983, Fuller, 1987). The most current study by Fuller and Clarke shows that textbook supply and use in elementary schools improves student success (Fuller and Clarke, 1994). Business management textbooks are the key instruments that instructors use to structure lessons and make subject information and skills accessible to students (Oakes & Saunders, 2002).

Audio items such as cassette players and radios are also excellent teaching and learning aids. The National Center for Education Statistics defines audio materials as those that can store (record) sounds and play them back mechanically, electronically, or both. A class rather than individual use of these resources is suggested by Tamakloe et al. Adabo (2009) found that most schools lack audio resources, and those that do have them seldom utilize them. Considering the benefits of audio resources, their lack of availability and improper use will negatively impact students' performance.

Audiovisual materials are also suggested business management teaching and learning aids. It may depict real-life settings, teach ideas, observe social groupings, and spark conversation. Nortcliffe & Middleton (2013) state that audio visual may help students connect to the outside world as both listeners and publishers. They may also offer specialists and perspectives to the classroom, inspiring debate and learning. Giving students access to audio and video may help them learn by offering varied teaching styles, giving the instructor a voice, reducing feelings of isolation for cloud-based students, but also connecting students situated elsewhere. It also allows students to access the content as needed.

The syllabus is another important teaching and learning resource. The aims of a syllabus are virtually as diverse as its contents, yet they may be categorized. Syllabi provide three main functions: contract, permanent record, and learning tool. These functions include a contract, a permanent record, and an aid to student learning. The syllabus specifies student and teacher duties for attendance, assignments, exams, and other activities (Matejka and Kurke 1994). Using the syllabus as a contract benefits both students and teachers. This method clarifies the regulations for pupils (Smith and Razzouk 1993, Pastorino 1999). Students may determine whether or not to take the course, prepare adequately for what they need to achieve throughout the course, and compare their performance and conduct to the stated contract. This contract viewpoint helps teachers resolve official and informal disputes. Many issues stem from imprecise expectations or expectations miscommunicated. A syllabus serves as a lasting record of what was taught in a course for two reasons: accountability and documentation. In this era of outcomes evaluation, which is typically required for program and institution accreditation, more and more proof of efficacy is desired. The syllabus may assist students assess their readiness for the course's work and, if not, what they may do to prepare (Pastorino 1999). Having a list of necessary courses or abilities might assist. The curriculum may also direct pupils to help sources. Finally, a syllabus can teach students how to think and write professionally. Clarity, organization, helpfulness and thoughtfulness are all attributes that a teacher appreciates. A lack or insufficient use of the syllabus clearly affects the teaching and learning of disciplines, including business management.

The curriculum also recommends resource individuals. Unlike professors, resource individuals are experts in specialized fields. They are often asked to teach areas in which they are experts. The utilization of resource individuals in business management classes helps make the classes more realistic and efficient. It also breaks up the monotony of pupils seeing and hearing their instructor (Crandall & Associate, 1982). The above-mentioned teaching and learning materials are the key categories suggested in the business management course. The lack of these teaching and learning materials will negatively effect students' success, as shown above.

Methods Teachers Employ in Teaching

Dorleku (2013) found that instructors employ a range of instructional approaches and tactics in Aflao. The survey found that instructors favor teaching approaches such as conversations, demonstrations, assignments, drills, and classroom visual aids. Some teaching approaches and practices have detrimental consequences on pupils. In his research, just a few professors utilized lectures while others preferred conversation, brainstorming, and role play. The survey did not specify why instructors preferred a certain strategy. Overall, he observed that most teacher-led lessons were learner-centered, with a few teacher-led. He suggested using more learner-centered strategies like role play, discussion, and brainstorming since he believes these help kids perform better. According to Ogunmade (2005), 68 percent of instructional time is spent on teacher-centered activities (explanation, demonstration, whole-class discussion, and taking notes), whereas only 32 percent is spent on student-centered activities (individual work, and small group practical work). In real classes, only 16% of class time is dedicated to small-group practical work, and this would be raised to 22% in ideal conditions. The survey also found that students spent more time working independently from the text and conducting practical and activity work in small groups than they did in formal scientific courses.

Riccio and Sakata (n.d.) did an empirical study on teaching and learning strategies in education in Brazil. The survey included 35 professors from institutions around Brazil. The survey found that 72% of lecturers either want to or are attempting to employ alternative teaching methods. But just two instructors take students to firms.

Motitswe (2012) studied inclusive classroom teaching and learning strategies in the foundation level. The research focuses on inclusive classroom teaching and learning strategies. This was a case study at Mphuphuthe Full-service School in Ledig, Bojanala Region, North West Province. Qualitative research using purposive sampling We employed a triangulation of data gathering methods: focus group interview, observation, and document analysis. They found that teaching and learning is adaptable, employing diversified approaches including multilayer instruction, songs and rhymes, and storytelling using images, puppets, and huge volumes. Dramatization was utilized when students acted out tales. Cooperative learning was utilized for problem solving and projects. Lesson preparation, activities, and assessment criteria were differentiated to suit all learners.

Resources Available for Implementing the Curriculum

Darkwa (2012) studied teaching and learning resources utilized in Sunyani Municipality SHS. The research found that instructors and students recognize the relevance of teaching and learning tools but cannot utilize them. He also discovered that teaching and learning resources help pupils learn, comprehend, or acquire information, ideas, or abilities. The research also found that using TLR did not ensure good classroom communication. The report advised that Ghana Education Service conduct teacher in-service training on how to improve teaching and learning resources.

Ogunmade (2005) studied secondary science teaching and learning in Lagos State, Nigeria. This research sought to compare an idealized view of scientific teaching and learning with real practices in junior secondary schools in Lagos State, Nigeria. The research used a descriptive survey approach with 78 random stratified respondents. Teachers and students were polled using questionnaires, focus groups, and semi-structured interviews. According to the survey respondents, their schools lack laboratory assistants (68%), and almost two-thirds (65%) of pupils lack scientific texts. The survey also revealed that schools have inadequate laboratory facilities (58%) and inadequate experimental equipment (65%). (64 percent). About two-thirds (65%) said the quality of student textbooks was excellent or adequate.

Manyala (2011) investigated the challenges of implementing secondary school chemistry in Rachuonyo area. This study's goal was to identify obstacles to implementing a secondary school chemistry program. The study used a descriptive survey. Questionnaires and interview schedules were utilized to gather data. The study was place at Rachuonyo District secondary schools. Schools were chosen at random from three categories. The schools included co-educational and all-girls institutions. The research region had 83 secondary schools at the time. The survey included 25 schools. 40 chemistry professors and 170 pupils were included in the research, totaling 210 participants. Descriptive and inferential statistics were used. Inferential statistics comprised correlation and regression analysis. The lack of text books, lab instructions, and models in most schools prevented students from learning topics using more tangible resources, causing learning difficulties.

Gathigia (2013) evaluated the integration of Creative Arts in Kenyan primary teacher training institutes. The study's goal was to assess ICA curriculum implementation in Kenyan PTTCs. There were 35 ICA professors, 7 DOCs, and 175 2nd year ICA students. Three kinds of tools were used: questionnaire, observation and interview. Other teaching and learning media employed were drawings, paintings, videos, posters, art samples, radio, charts, and newspapers.

Oludele, Abouvbo, and Abosede (2015) evaluated early childhood education curriculum implementation in Osun State. The study's goal was to assess the amount of early childhood education curriculum implementation in Osun State. The study used a survey research design. All Osun State early childhood education centers (public and private) were included. Only 5 local government areas and the Ife East Area office were chosen at random. Five schools (one from each LGA) were also chosen at random for the study. Observation, questionnaires, and checklists were employed. The findings demonstrated that many elementary schools in Nigeria lack qualified E.C.E. instructors, teaching and learning tools, and even the necessary national curriculum.

Student Centered-Teaching Method

One of the most popular teaching strategies, student-centered learning, has its theoretical roots in constructivism. According to (Dewey, 1938), students learn by assigning meaning to their own personal experiences and interactions with the subject matter. In contrast to conventional teaching methods such as lectures, this places students' interests, autonomy, and needs front and center (Thomas, 2000). Instead than imposing a uniform set of principles and standards on all students, student-centered teaching focuses on their individual interests, subject matter, learning style, and comprehension level (Lambert & McCombs, 1998;

McCombs & Whisler, 1997). It was born out of the inherent constraints connected with the conventional instructors focused learning performed in schools (Bümen 2009; Nie Tan Liau Lau & Chua 2013).

Researchers (Tsybulsky & Muchnik-Rozanov, 2019; UNESCO, 2000, 2008) claim that student-centered teaching methods are necessary for students to gain relevant skills required for early 21st century jobs. This will help pupils develop teamwork, harmony, self-confidence, communication, intercession, and collaboration skills (Bell, 2010). Many educational reformers across the globe, including Ghana, have used this model. Discussing, simulating, collaborating, going on field excursions and role-playing are some of the key student-centered teaching tactics used by instructors. According to research (Kaka, 2007), this technique incorporates active student engagement in the teaching and learning process, requiring students to become self-thinkers, collaborators, and problem-solvers.

According to Ahlfeldt, Mehta, and Sellnow (2005), learner-centered education requires solid teacher-student relationships, teamwork, and a strong desire to learn. Student-centered learning seems to change students' learning experiences by allowing them to gain new information and skills via inventive self-thinking abilities (Thomas, 2000). Students are assigned a team project or an individual assignment to solve in student-centered teaching methods such as problem-solving. It is the teacher's responsibility to convey the project overview to pupils. Students create project proposals via brainstorming, conversations, information gathering, data collection, and more (Helle, Tynjala, & Olkinuora, 2006).

Several research (Al-Balushi & Al-Aamri, 2014; Geier et al., 2008; Hernandez-Ramos & De La Paz, 2009; Karaçalli & Korur, 2014; Kokotsaki, Menzies & Wiggins, 2016) have shown that student-centered teaching strategies increase students' attitudes and desire to gain content knowledge. The studies found that students taught using traditional teacher-centered methods developed higher-order thinking skills and recall information faster than students taught using student-centered methods.

Student-centered teaching benefits

Student-centered teaching is a form of teaching that puts students' interests first (Ercan, 2004). Student-centered teaching strategies reduce teacher workload by allowing students to actively participate in the teaching and learning process. It is recommended that students use active learning methods to achieve instructional objectives and projects assigned to them (Huba & Freed, 2000; Korkmaz, 2007). Figure 4 shows this.

Figure 4 Student-Centered Teaching Method.

The advantages students gain from student-centered education make it superior to conventional teacher-centered instruction. These advantages include more chances to show mastery of subject matter, becoming knowledge learners rather than rote-memorizers, and engaging kids to utilize their higher creative talents to solve issues. Teachers can assist students develop useful skills that will help them reach their ultimate learning goals and reduce stress in the classroom. Students will be motivated to study since they will be rewarded for their efforts. This will inspire and motivate pupils to use self-regulation strategies to grasp difficulties raised in the classroom. This will help pupils determine their own strengths and weaknesses to maximize life's possibilities.

The adoption of student-centered teaching methods has been proven to be beneficial by researchers (Hamza et al., 2013; Kramer et al., 2007; Lea et al., 2003). They seem to be answerable to their own abilities to

gain new information, skills, and experiences. The pupils gained after-school skills that benefit them in their employment. Students learn more than when taught using a standard teacher-centered strategy. Learner-centered teaching benefits teachers in the short and long term. The technique encourages instructors to be creative in class to make teachings engaging and relevant to pupils. Teaching style, lesson planning, preparation, communication, administration, assessment, and material delivery all improve to match student requirements (Kilic, 2010).

The Impact of Teaching Method on Teachers' Self-efficacy

Since the 1980s, teacher self-efficacy research has grown quickly (Zee & Koomen, 2016). To maximize their efficacy in implementing student-centered teaching methods to boost students' performance in class and in the real world, instructors have been given special attention (McIlveen & Perera, 2016; McIlveen et al., 2019). Teachers' self-efficacy is critical to their students' confidence in their talents and overall self-commitment, motivation, and learning (Smith et al., 2016; Vattoy & Smith, 2019). "Self-efficacy" is defined by Bandura (1989) as "confidence in one's own capacity to achieve one's goals." This means that any student who does not trust in their own abilities to inspire others to achieve their objectives is likely to fail (Holzberger et al., 2013; Tschannen-Moran & Woolfolk Hoy, 2001). Teacher self-efficacy is seen to be a significant factor in a teacher's overall positioning to educational growth (Woolfolk & Hoy, 1990). People with strong self-efficacy regard tough jobs as challenges to be conquered rather as dangers to be avoided' (Bandura, 1993, p. 144).

According to research (Perera & John, 2020), "self-efficacy increases work satisfaction, classroom management and student support, student motivation, and academic achievement." Teacher expectations for student-centered learning have been demonstrated to improve students' academic achievement, motivation, and self-efficacy (Gamlem et al., 2019; Rubie-Davies, Hattie, & Hamilton, 2006), Using a certain instructor may not necessarily provide favorable results. Students' expectations and self-belief are interconnected in order to achieve academic achievement, and instructors' responsiveness to students' expectations and self-belief is highlighted (Gamlem et al., 2019; Smith et al., 2016).

According to (Zee & Koomen, 2016) research, teacher self-efficacy impacts student learning outcomes more. The process-oriented approach describes the relationship between teacher self-efficacy and student learning outcomes. Process-oriented teacher self-efficacy is the capacity to increase student academic accomplishment by encouraging and psyching pupils to believe they can attain high academic success (Woolfok et al., 2009). An effective teacher who uses student-centered teaching techniques makes judgments about choosing, committing efforts in pupils learning, and continuing activities that seek to assist students attain high academic achievement (Bandura, 1997). The teaching atmosphere created by teachers with strong self-efficacy promotes student understanding of any topic presented in class. Many studies (Cho & Shim, 2013; Deemer, 2004; Holzberger et al., 2013;Nie et al., 2013; Wolters & Daugherty, 2007) have shown that high self-efficacious instructors use a variety of student-centered teaching strategies to help students grasp their subject matter. Throndsen & Turmo (2013) found that instructors' self-efficacy favorably improves students' academic success in exams.

Students who are actively involved in learning ideas such as student-centered teaching methods are more likely to have high self-esteem, self-learning, and wisdom, according to Korkmaz (2007). Thus, this is a core student requirement, and educators should prioritize pupils accordingly. In student-centered learning, both the instructor and the student are involved in ensuring that pupils achieve the needed specified objectives expected of them (Ercan, 2004). Based on a thorough literature analysis, researchers were inspired to develop and test hypotheses on how student-centered teaching affects teachers' self-efficacy in supporting students.

III. RESEARCH METHODOLOGY

Research Approach

According to Hoy & Adams (2015), a good start suggests the study is half-done. So, before starting the investigation, the researcher must choose the ideal research methodology or method. The three primary scientific research methodologies are: Quantitative, qualitative, pragmatic, or combined methodologies are used. Quantitative research collects data and converts it into numbers so that statistical estimations may be performed and conclusions derived (Saunders, Lewis, & Thornhill, 2012). Quantitative research usually has one or more hypotheses (Kothari, 2013) that are accepted or rejected depending on statistical analysis. The study aims to address these concerns by predicting probable correlations between factors. Quantitative research aims to examine objective hypotheses by studying the relationships or associations between variables. The variables are then numbered so that numbered data may be evaluated statistically. This technique uses descriptive or inferential statistics to offer information on the interaction of known and unknown factors (Creswell & Creswell , 2018).

Research Design

The study will use a cross-sectional survey design. For this study, a cross-sectional design was used because it gives a clear and detailed picture of occurrences and phenomena (Fraenkel & Wallen, 1990). Again, this study approach facilitates data interpretation. According to Aborisade (1997), the descriptive cross-sectional survey design is appropriate for researching demographic traits, attitudes, emotions, beliefs, motives, behavior, and views. Salant and Dillman (2004) argued that descriptive cross-sectional surveys may be used to analyze individual perceptions on a topic. This research investigated pre-service accounting instructors' self-efficacy in teaching cost accounting. It is so suited since beliefs and views may be readily examined through surveys. The descriptive approach was selected because it produces a large number of answers from a diverse spectrum of individuals. Using data collected at a certain period, it attempts to explain people's views and behaviors (Fraenkel & Wallen, 1993). It also has the ability to provide a lot of information from the responses.

This kind of poll may provide inaccurate findings since it probes personal issues about which participants may not be totally honest. The present research seeks the respondents' self-efficacy level, which they may not be honest about. It also requires responders to write down their capacity to cope with scenarios they may face in teaching cost accounting, which is completely confidential (Seifert & Hoffnung, 1991). Again, the descriptive cross-sectional survey might provide skewed findings (Salant & Dillman, 2004). Despite these drawbacks, the design is ideal for study.

Researchers such as (Aborisade, 1997; Osuala, 2000) reaffirmed the descriptive research design's essence. Their findings demonstrated that descriptive research design enables researchers to report on topics under discussion based on the replies made by respondents without having to be actively engaged in the explanation of the phenomena or the responses offered..

Participants of the Study

The population of a study is a group or collection of persons or units from whom a researcher seeks to draw conclusions. According to Etikan et al. (2016), a population is a group of persons or units that share a set of characteristics. However, a population is a grouping of comparable elements, units, or persons (Evans & Stanovich, 2013). It is a collection of materials from which the investigation draws broad conclusions (Mugenda & Mugenda , 2003). The study's population will include all instructors in Accra's 10 senior high schools.

Table 1 Population Distribution of Respondents

Senior High Schools	Population (N)
Presbyterian Boys SHS	45
Achimota College SHS	34
St. Thomas Aquinas SHS	33
Accra Academy SHS	40
Accra Girls SHS	34
Labone SHS	38
Wesley Grammar SHS	33
Presbyterian SHS	34
Accra High	37
Accra Wesley Girls SHS	29
Total	357

A sample is a subset of a larger group of related items. It may also be defined as a subset of the population. Sample size is defined as the proportion of units or persons chosen from a larger population from which study results are drawn (Evans et al., 2013). The research included 200 instructors. To maintain homogeneity among the 10 schools, only core subject teachers will be recruited for the research. Due to the discrepancy in elective topic offered by schools, no elective instructors were picked. Kortlick's sample size suggestions were used (2002)

$$n = \frac{N}{1+(Ne^2)} \qquad (3.1)$$

Where *n* is the sample size, *N* is the population size and *e* is the margin of error.

Based on this, an error margin of .05 was given to a population size (N) of 357 teachers. Thus, the study's sample size was calculated as follows:

$$n = \frac{357}{1+(357 \, x \, 0.05^2)} \quad (3.2)$$

$$n \, of \, teachers = 188 \quad (3.3)$$

therefore, the recommended sample of teachers = 188

According to Gay (1996), a sample size of 20% or more is adequate for every research. So, researchers picked over 60% of all responses for the study. Respondents will be divided into school divisions using stratified random selection. The sample size for each stratum is calculated by dividing the total number of teachers by the population and multiplying the result by 215. According to Ogah (2013), stratified sampling ensures equitable and fair representation of each stratum in the population. The instructors in each stratum were then chosen at random.

Table 2 Sample Size Distribution of Respondents

Senior High Schools	Sample (n)
Presbyterian Boys SHS	27
Achimota College SHS	20
St. Thomas Aquinas SHS	21
Accra Academy SHS	24
Accra Girls SHS	20
Labone SHS	23
Wesley Grammar SHS	20
Presbyterian SHS	21
Accra High	22
Accra Wesley Girls SHS	17
Total	215

Data Collection Instrument

The best tool for collecting quantitative data is a questionnaire, which is completed by the informant (Frankel & Wallen, 1996). Questionnaires will be more suited for this study since they allow for a bigger sample size at a lower cost and provide better anonymity to responders. The questionnaire included four sections. The first part will ask instructors about their gender, experience, school taught, and certification. The second segment gathered data on instructors' preferred student-centered teaching methods. On a Likert scale of 1 to 5, respondents were asked to rate their choice for teaching methods. On a scale of 1 to 5, instructors and students werr to be asked to rate the advantages of student-centered teaching. The Teacher Self Efficacy Score (TSES) is used to assess high school teachers' self-efficacy (Tschannen-Moran & Woolfolk Hoy, 2001). The 24 items was divided into three categories: student engagement (SE), instructional strategies (IS), and classroom management (CM) (CM). Each dimension has eight (8) questions measuring instructor effectiveness. From 1 (Nothing) to 9 (Excellent), teachers rate their replies (Great deal). The TSES scores from the three domains of efficacy was assessed for reliability and validity using Cronbach's alpha) (Tschannen-Moran & Woolfolk Hoy, 2001). When the population is widely accessible, this device can quickly collect data from a large number of people (Amedahe & Gyimah, 2005). Again, it is suitable for surveys and allows respondents to make thoughtful responses (Kothari, 2004). Kothari reiterated that huge samples may be used to improve results. It also provides better privacy since responders and researchers do not meet in person. The instrument is less costly than other instruments, saving the researcher money (Osuala, 2001).

Teachers' Self-Efficacy Scale

The research employed the Teachers' Self-Efficacy Scale (TSES) to assess senior high school teachers in Accra. Tschannen-Moran and Woolfolk Hoy (2001) claim that the TSES is a degree measure of other measures of teacher achievement. Using this scale, teaching is predicted as a multidimensional activity, and hence teacher effectiveness. TSES More precisely, the TSES (24 test items) measures teacher effectiveness across three latent components and three zones of teaching and learning. Efficacy for Classroom Management (CM), Student Engagement (SE), and Instructional Strategies (IS). Recently, researchers in Cyprus, China, Korea, Canada, the UK, the US, and many other industrialized nations have used Confirmatory Factor Analysis (CFA) to assess teachers' self-efficacy (Heneman et al., 2006; Klassen et al., 2009; Tsigilis et al., 2010).

It has been shown by researchers (Capa Aydin & Woolfolk Hoy, 2005; Fives & Alexander, 2004; Fives & Buehl, 2010; Knoblauch, 2006) that teachers' efficacy is now based on the TSES score. Researchers must

now investigate teacher self-efficacy by examining their teaching schedules before, during, and after the teaching and learning process (Bandura, 1997). The capacity to give instructional opportunities, pragmatic teaching activities, and rapid feedback to students is the greatness of teaching and learning, particularly student-centered teaching (Gordon & Debus, 2002; Lin et al., 2002; Woolfolk Hoy & Burke Spero, 2005).

According to Tschannen-Moran and Woolfolk Hoy (2001), TSES total score should be used to evaluate teacher self-efficacy as a unidimensional latent construct. This study used exploratory to confirmatory factor analysis to assess the validity of TSES in evaluating teachers' self-efficacy. Byne (1998) agreed that using may assist uncover hidden relationships between observable and latent variables. Following EFA to find unidentified linkages, CFA is used to examine the correlations between observable and latent variables. Compared to EFA, the CFA suggests more validity (Thompson, 2004). The table outlines the SEM's latent and manifest constructs.

Table 3 Measurement of Variables

Construct	Indicator	Measurement
STUDENT ENGAGEMENT (SE)		
	SE1	How much can you do to control disruptive behavior in the classroom?
	SE2	How much can you do to get students to believe they can do well in schoolwork?
	SE3	How much can you do to help your students value learning?
	SE4	To what extent can you craft good questions for your students?
CLASSROOM MAMANAGEMENT (CM)		
	CM5	To what extent can you craft good questions for your students?
	CM6	How much can you do to get children to follow classroom rules?
	CM7	How much can you do to calm a student who is disruptive or noisy?
	CM8	How well can you establish a classroom management system with each group of students?
INSTRUCTIONAL STRATEGIES (IS)		
	IS9	How well can you establish a classroom management system with each group of students?
	IS10	How much can you use a variety of assessment strategies?
	IS11	To what extent can you provide an alternative explanation for example when students are confused?
	IS12	How much can you assist families in helping their children do well in school?
PREFERRED STUDENT-CENTERED TEACHING METHOD (TM)		
	TM13	Collaborative
	TM14	Co-operative
	TM15	Problem-Solving
	TM16	Activity -based
	TM17	Role- playing
	TM18	Brainstorming and Discussion
	TM19	Field Trips
	TM20	Projects
	TM21	Debate
	TM22	Demonstrations and simulations
PERCEIVED BENEFITS (B)		
	B23	helping students to have a higher and longer retention level
	B24	Helping students to have in-depth understanding of subject matter
	B25	Helps students to acquire inventive problem-solving skills,
	B26	Helps students to acquire increased opportunities to demonstrate mastery of subject matter,
	B27	Students becomes leaners of knowledge and not rote memorizers
	B28	
	B29	Helps to involve students to use their higher imaginative skills to solve problem
	B30	students developed after school skills that helps them perform well in their respective job

Validity and Reliability of Instrument

The tool was tested for both face and content validity to ensure it accurately evaluated the respondents' self-efficacy. The researcher used student-researchers to help fix simple inaccuracies in the questionnaire. The questionnaire's structure and content were revised, and ambiguous questions were reframed. This was done to ensure that the questionnaire questions addressed the information needed for a certain goal. The instrument's presentation, structure, and shape were investigated. My supervisor eventually authorized it. The research recruited two senior high school teachers from the Ashanti Region of Ghana for the pilot test. This group had

comparable qualities to the research participants, thus they were approved for the pilot test. The pilot test included 30 of them, or 20% of the total population. Baker (1994) suggested that 10% -20% of the sample size be considered for a pilot study. The instrument's reliability was assessed using the Cronbach alpha. Fraenkel and Wallen (2000) consider a reliability coefficient of.7 acceptable. According to Abington-Cooper (2005), such a reliability coefficient is excellent, and the device collects relevant data. Thus, the TSES's Alpha value of.878 (n = 30) was deemed credible and appropriate for obtaining research data. Table 4 shows the sub-scales of Cronbach's Alpha. The questionnaire was not changed following the pilot test. Cronbach's Alpha was recalculated after data collection to assess the instrument's dependability. The instrument's dependability coefficient was.917 (n = 30).

Table 4 Reliability Coefficients for these Subscales on the Questionnaire

Sub-Scale	No. of Items	Reliability Coefficient (α)	
Perceived Teacher's Self -Efficacy		Pilot Tests	Actual Study
Student Engagement	4	0.853	0.945
Classroom Management	4	0.897	0.897
Instructional Strategies	4	0.866	0.931
Preferred Student-centered teaching methods	10	0.896	0.896
Perceived Benefits of the use of teaching methods	8	0.877	0.912
Reliability Coefficient	30	0.878	0.917

The students were asked to complete their questionnaires and return them after 15mins. Upon receipt, each completed questionnaire was quickly reviewed for completeness. When missing data were found, some of the students were contacted and asked to complete them. Providing the questionnaires directly to the students, collecting them directly, and quickly following up on missing responses help to ensure a high response rate. The study achieved a questionnaire response rate of 93.0 % from 200 participants.

Data Processing and Analysis

The cross-sectional survey data will be reviewed for inaccuracies. The data will then be coded and put into SPSS version 25 and subsequently into AMOS version 20. The first part asked about respondents' demographics will be examined using frequencies and percentages. Describing the original research idea (Bar graph, Mean and Standard deviation). The second study hypothesis will be analyzed using means and SD. The third research hypothesis will be measured using the SEM, especially Explanatory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). On the other hand, Variance Inflator Factors such (VIF), NFI, and GFI will be used to assess the models' fitness (Thompson, 2004).

Study Hypothesis One used descriptive statistics (means and standard deviation). A mean score of 0.5 to 5.0 shows a low preference for student-centered teaching, 2.50 to 3.4 suggests a moderate desire, and 3.50 to 5.00 indicates a high choice. The standard deviations offered further information on the field response dispersion. It indicated the respondents' replies' homogeneity or heterogeneity. A standard deviation of less than 1.00 indicates homogeneity whereas a standard deviation of greater than 1.00 indicates heterogeneity (Tsiang, 1972). A standard deviation close to 0.00 indicates a high degree of homogeneity in the replies.

The second research hypothesis focused on the advantages of student-centered teaching in impacting student learning outcomes. This was also evaluated using means and SD. Means ranging from 0.5 to 5.0 indicating agreement or disagreement with the advantages.

Structural Equation Modelling was used to investigate the impact of student-centered practices on teachers' self-efficacy in Accra.

Table 5 Summary of Data Analysis

Research Questions/Hypotheses	Analytical Tools
RQ1: What is the preferred student-centered teaching method adopted by senior high school teachers in the Accra Metropolis?	Means and Standard deviation
RQ2: Does the use method in teaching senior high school provides benefits to students and teachers senior high school students in the Accra Metropolis?	Means and Standard deviation
RH1 : There is a significant difference between Teachers demography's and self-efficacy	Independent t-test and ANOVA
RH2 : There is a significant positive effect of Student-centered teaching on senior high school teachers' self-efficacy in the Accra Metropolis.	Structural Equation Modelling (SEM)

IV. Results and Discussion

Biographic Information of Respondents

The demographic features of the teacher-respondents discussed in this section include the gender, level of qualification and teaching experience. Figures 5 to 7 summarizes the demographic information of teachers within selected senior high schools within the Accra Metropolis involved in the study.

According to the data in Figure 5, male instructors included (138) 69 percent of the total number of teacher respondents, while female teachers comprised (62) 31% of respondents. This reveals that the research included more male instructors than female colleagues. This illustrates the gender imbalance in the Ghanaian educational system.
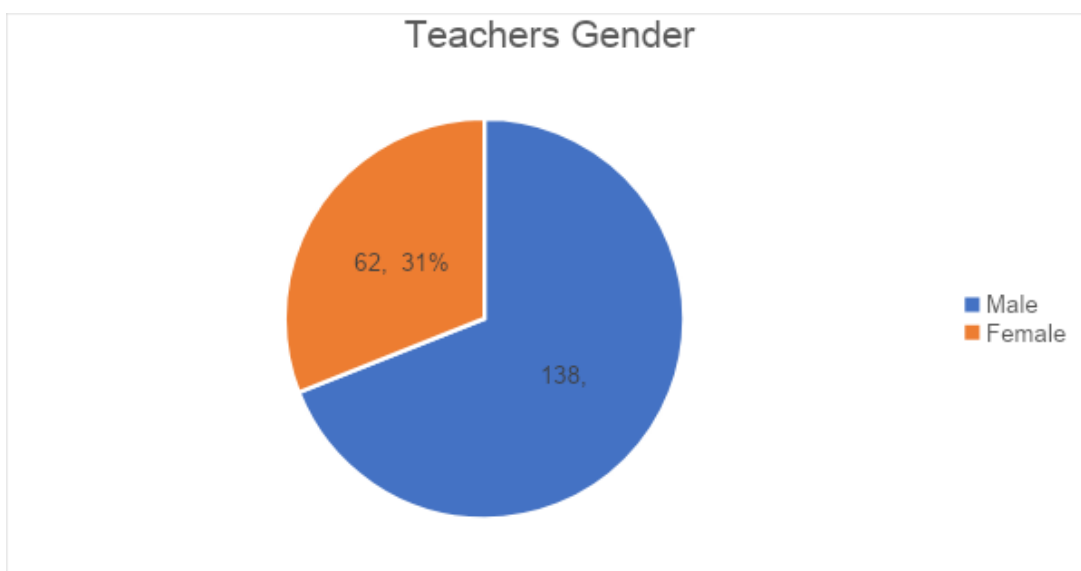

Figure 5 Gender of teachers in Accra Metropolis

The educational credentials attained by instructors at selected senior high schools are shown in Figure 6. The majority of instructors (155) 77.5 percent had a bachelor's degree in their area of specialty, indicating that they possessed all of the essential knowledge to be successful teachers with appropriate understanding of student-centered teaching approaches. Only (45) 22.5 percent of instructors pursued a master's degree. This is seen rather well in Figure 5, which is included below.
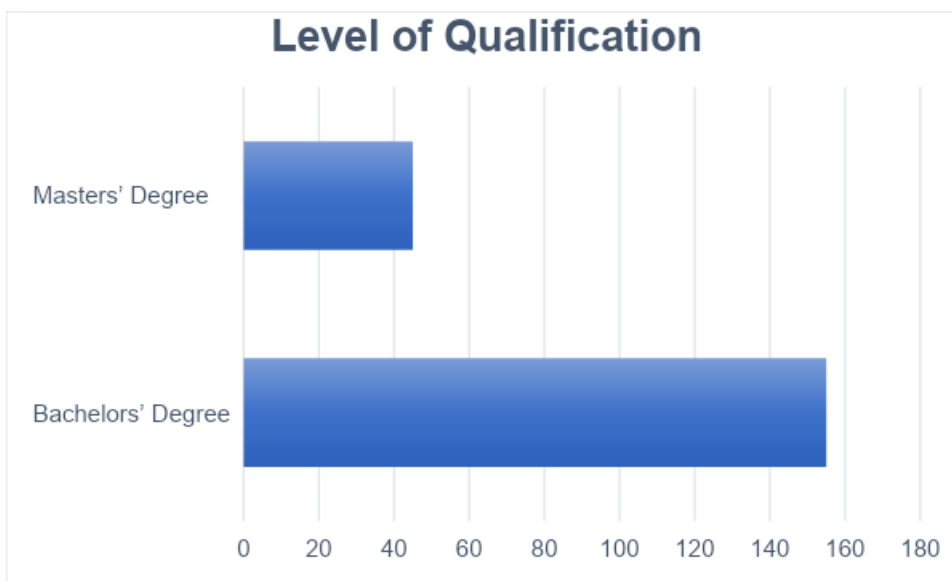

Figure 6 Educational Qualifications of Teachers in Accra Metropolis

Additionally, Figure 7 demonstrates that a significant proportion (105) 52.5 percent of instructors had taught for between one and five years. This was followed by a teaching experience of (55) 27.5 percent of instructors. Of the 200 instructors, (40) represented 20% of those with more than 11 years of teaching experience.
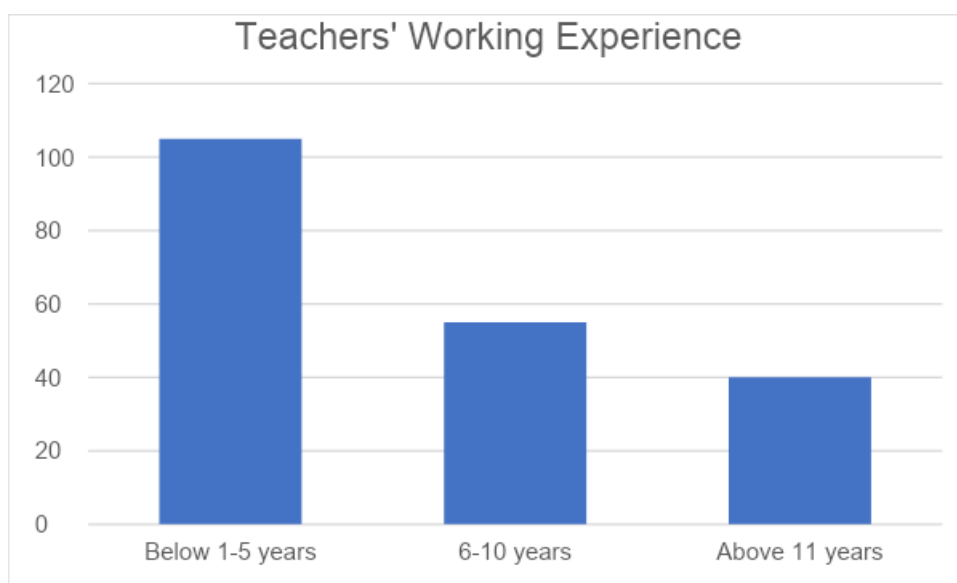

Figure 7 Teaching experience of Teachers in Accra Metropolis

V. Main Results and Discussions

Research Hypothesis One:
Senior High school teachers in the Accra Metropolis have preferred student-centered teaching they adopt in teaching students.

Students actively participate in the learning process rather than passively hearing lectures when student-centered teaching approaches are used. It is predicated on the premise that learning should be more experiential than passively listening to lectures. Student-centered teaching is a means of involving students more in classroom learning sessions via activities. In contrast to some traditional teaching approaches, when an instructor lectures or otherwise delivers information to students, the content is meant to be retained. In a student-centered educational setting, the educator serves as a facilitator, leading and assisting students. The purpose of is to engage students directly in a lesson, so including them in their own learning. Numerous scholars have advocated for the adoption of student-centered teaching methods due to their importance in prioritizing students' interests in order for learners to give meaning to what they learn in class. Hypotheses for research One was developed to discover if instructors do actually prefer to utilize a student-centered teaching technique while instructing senior high school pupils in the Accra Metropolis.

Figure 8 shows teacher respondents' preferences for using student-centered teaching strategies. Using a scale of five where (Least Preferred)= 1, , Not Preferred= 2, , Moderately Preferred = 3, More Preferred = 4 and Most Preferred 5, the study analyzed the preferred student-centered teaching methods adopted by teachers in the ten selected schools.

Figure 8 outlines the student-centered teaching approaches that instructors in Accra's metropolitan area favor while instructing students in a variety of fields of study. According to Figure 8, a sizable number of instructors largely agreed that they preferred to educate senior high school students via collaborative, cooperative, problem-solving, activity-based, role-playing, brainstorming, field trips, projects, discussion, demonstrations, and simulations. This was sufficiently represented in the aggregate (Mean of means = 3.40, Standard Deviation =.65). The subsequent paragraphs detail the instructors' degree of preference. The majority of instructors (Mean = 4.53, St. Dev. =.67) chose to employ role-playing as a student-centered instructional strategy while teaching high school pupils. This was followed by brainstorming and debate, as well as demonstrations and simulations using the appropriate methods for (4.51) and (4.52). (4.22). This demonstrates that instructors in the Accra Metropolis more than likely chose to adopt the aforementioned ways while instructing pupils. Figure 8 also demonstrated that instructors favor discussion, field excursions, problem-solving, and activity-based teaching methods when instructing high school pupils. Their relative mean scores of 2.25, 2.42, 2.62, 2.88, and 3.25 mirrored this.
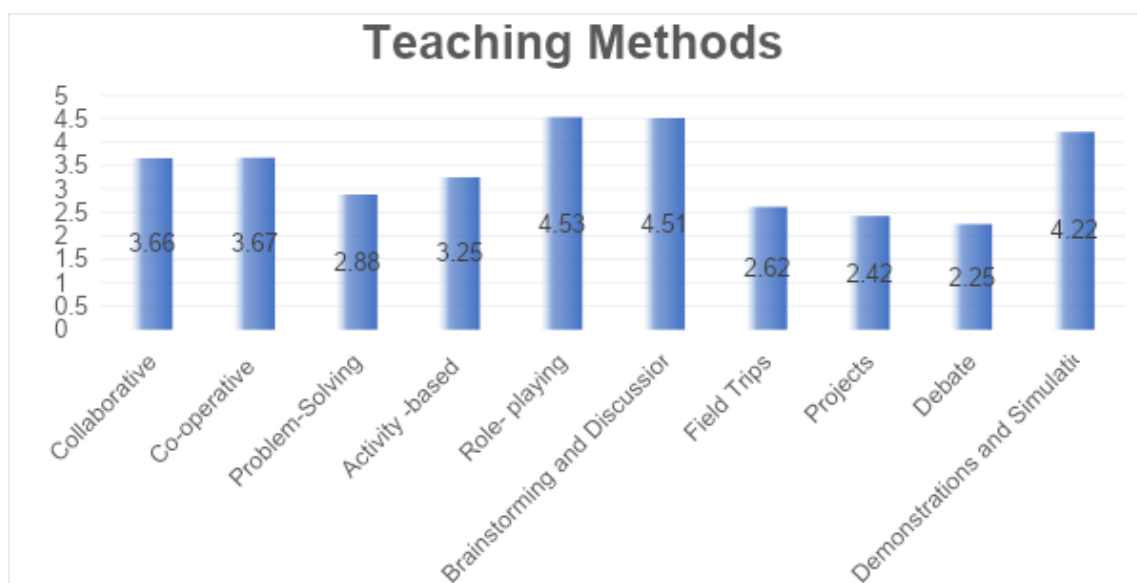
Figure 8 Preferred Teaching Methods adopted by Teachers in Accra Metropolis

This study confirms the findings of (Tsybulsky & Muchnik-Rozanov, 2019; UNESCO, 2000, 2008; Thomas, 2000; Bell, 2010; Geier et al., 2008; Hernandez-Ramos & De La Paz, 2009; Karaçalli & Korur, 2014) that the majority of teachers prefer to teach senior high school students through collaborative, cooperative, problem-solving, activity-based, role-playing, brainstorming, field trips, projects

Research Question Two: What are the benefits of student-centered teaching method in teaching

Many educational stakeholders have campaigned for instructors to embrace teaching approaches that place students at the center of teaching and learning, therefore focusing learning on students' interests. Additionally, a second research hypothesis was developed to ascertain the advantages to both instructors and students associated with teachers' employment of student-centered teaching strategies in the classroom. The following table outlines the advantages of the aforementioned student-centered teaching strategies.

Table 6 Benefits of Student-Centered teaching Methods

Statement	Mean	SD	Rank
Helping students to have a higher and longer retention level	4.32	.63	4
Helping students to have in-depth understanding of subject matter	4.41	.84	1
Helps students to acquire inventive problem-solving skills	4.37	.78	2
Helps students to acquire increased opportunities to demonstrate mastery of subject matter,	3.98	.88	7
Students becomes learners of knowledge and not rote memorizers	4.33	.91	3
Helps to involve students to use their higher imaginative skills to solve problem	3.94	.97	8
Students developed after school skills that helps them perform well in their respective job	4.31	.78	5
Students become further self-determining and independent self-learners in their learning	4.11	.59	6
Mean of Means/Average Standard Deviation	4.22	.79	

According to Table 6, both students and instructors gain from teachers' adoption of student-centered teaching strategies while instructing high school students in the Accra Metropolis. The overall mean of the study found that the majority of teacher-respondents overwhelmingly agreed (Mean of means = 3.94, Average Standard Deviation =.97) that using a student-centered teaching technique significantly benefits students as the focus of instruction. The subsequent paragraphs include detailed descriptions of teacher-respondents' perspectives on the advantages of using student-centered teaching approaches.
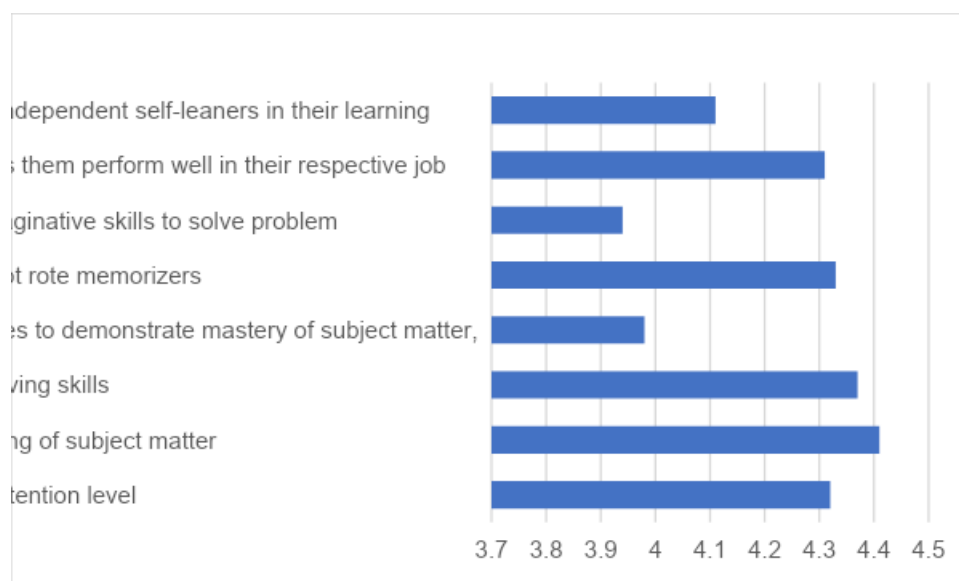
Figure 9 Benefits of the use of student-centered teaching methods

According to the data in Table 6 and Figure 9, a substantial number of respondents agreed that using a student-centered teaching method enables students to develop a thorough understanding of subject matter; enables students to develop inventive problem-solving skills; enables students to develop into knowledge learners rather than rote memorizers; and enables students to have a higher and longer retention level. This was shown by their mean scores of 4.41, 4.37, 4.33, and 4.32, respectively. This emphasizes the fact that using student-centered teaching approaches enables instructors to develop the abilities of self-directed learning and to use them in real life in order to leverage their own strengths and weaknesses in order to seize chances presented by life. The results of this study corroborate those of previous research (Ercan, 2004; Huba & Freed, 2000; Korkmaz, 2007; Hamza & Kharusi, 2013; Kramer et al., 2007; Lea et al., 2003), indicating that a student-centered teaching technique confers considerable advantages on students in the Accra Metropolis.

4.3.3 Research Question Three: Difference between Teachers' Demography's and Self Efficacy

The independent sample t-test and one-way ANOVA were used to determine if there were significant differences in teachers' self-efficacy by gender and job experience. Tables 7 and 8 summarize the results.

Table 7 Difference between Male and Female Teachers' Self-efficacy

Gender	Mean	SD	T-Value	Df	P-Value
Male	4.18	0.82	3.715	198	0.641
Female	4.16	0.79			

The independent sample t-test was used to examine the significant difference in teachers self-efficacy and gender. According to Table 7, there is no significant difference between male and female teachers' self-efficacy (4.18, SD = 0.82) for males and (4.16, SD = 0.79) for females; t (198) = 3.715, p = 0.641 (two-tailed). Therefore the study failed to reject the null hypothesis and concluded that both male and female teachers have the same level of self-efficacy belief. Despite Male teachers having a higher self-efficacy belief than female there appears to be no statistically significant difference in teacher's efficacy score in the Accra Metropolis. This implies that teachers' gender is a significant factor that could affect their efficacy towards adopting teaching methods that could enhance effective teaching and learning in the classroom. The findings of this study are in line with the findings of (Karimvand, 2011; Gowrie and Ramdass, 2014) That teachers' gender does not influence their self-efficacy belief. Table 8 further explains how teachers' working experience influences their self-efficacy beliefs in the use of student-centered teaching methods.

Table 8 Difference between Teachers' Working Experience and Efficacy

	Mean	SD	df	F	p-value
1-5 years	4.59	0.69			
6-10 years	4.67	0.56	197	5.512	.020
Above 11 years	4.78	0.74			

A one-way ANOVA was used to examine the working experience of teachers and their self-efficacy in the Accra metropolis of Ghana. Using a sig value 0.05 level, there was a significant influence of teachers' working experience on their self-efficacy [F (3, 197) = 5.512, p = 0.020]. The results mean that teachers' self-efficacy is sensitive to teachers' years of experience. For instance, teachers who had taught for more than 11 years had a high level of self-efficacy in implementing student-centered teaching methods as compared to their counterparts who had taught for 6-10 years or less than 6 years. The study revealed that the mean score for teachers with 1-5 years teaching experience (M = 4.59, SD = 0.69), between 6 and 10 years (M =4.67, SD = 0.56), and above 11 years (M = 4.78, SD = 0.74) was substantially different in terms of self-efficacy. The findings of the study are in line with findings of previous studies (Wang'eri & Otanga, 2014; Fives and Buehl, 2010; Gowrie and Ramdass, 2014).

Descriptive Statistics: Testing Multivariate Normality

A normal distribution is a two-parameter symmetric curve defined by the arithmetic mean (average) and variance (variability). The fundamental assumption of arithmetic deduction is that as the sample size grows, distributions tend to approach normality. The bulk of instructors' self-efficacy is reliant on the assumption of a "normal" data sample (Arbuckle, 2010). Parametric tests are statistical tests that are statistical in nature and are based on statistics or normalcy. After removing outliers and missing values from the data, it was evaluated if any substantial deviations from normalcy occurred. This is crucial since it is a required hypothesis for the analysis of multivariate data (Byrne, 2010). Table 9 contains the study's descriptive data.

Table 9 Descriptive Statistics

	Mean	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
Items	5.524	1.00	5.00	0.46	1.49	-1.33
SE1	4.21	1.00	5.00	0.77	1.21	-1.13
SE2	4.37	1.00	5.00	0.37	0.61	-1.27
SE3	4.41	1.00	5.00	0.68	0.27	-1.45
SE4	4.36	1.00	5.00	0.66	1.01	-1.27
CM5	4.41	1.00	5.00	0.73	1.28	-1.84
CM6	5.756	1.00	5.00	0.54	1.28	-1.23
CM7	4.71	1.00	5.00	0.81	2.36	-1.41
CM8	4.51	1.00	5.00	0.45	1.68	-1.75
IS9	4.61	1.00	5.00	0.94	1.88	-1.32
IS10	4.21	1.00	5.00	0.59	2.17	-1.11
IS11	4.66	1.00	5.00	0.78	2.19	-1.15
IS12	4.23	1.00	5.00	0.68	2.10	-1.09

Hair (2010) argues for the use of the normalcy test in combination with an examination of data values' skewness and kurtosis. Arithmetical tests for normality are performed on the outline of a distribution for each metric variable using skewness and kurtosis approaches. Experimentation enables the identification of factors in the data that vary from normality. A positive skew indicates a left-skewed distribution, whereas a negative skew indicates a right-skewed distribution. A positive kurtosis value suggests a directed distribution, while a negative kurtosis value indicates a complement distribution. Hair et al. (2010) recommended Z-Skewness and Z-Kurtosis as critical values (+/- 2.58 and +/- 1.96, respectively) to help in identifying the importance of skewness and kurtosis. On the other hand, Kline (2010) offered a more lenient measure of +/- 10 for kurtosis. After doing the data analysis stated above, it was decided that the data was appropriate for conducting the SEM test.

Research Hypothesis Four: Student centered teaching methods significantly affect senior high school teachers' self-efficacy in the Accra Metropolis.

The research used Structural Equation Modeling (SEM) to evaluate the beneficial influence of student-centered teaching approaches on teacher self-efficacy in Ghana's capital city of Accra. Structural Equation

Modeling (SEM) is a statistical technique that makes use of complicated series and statistical estimations to determine the degree of link between one or more exogenous variables and one or more endogenous variables. According to the findings of (Arbuckle & Worthke, 1999; Joreskog & Sorbom, 1999), SEM is one of the most widely used multivariate statistical tools that many researchers use to investigate phenomenon models due to its widespread application in a wide variety of fields of study and its effectiveness; thus, the researchers of this study chose SEM to investigate the positive effect of student-centered teaching on teachers' self-esteem. SEM enables researchers to quantify the constructs of variables under consideration by comparing observed (manifest) and unobserved (latent) constructs. SEM values are shown in Table 10.

Table 10 Results of Structural Equation Modeling

Constructs	Indicators	Standardized Factor loading >0.60	t- value	Average Variance Extracted (AVE) >0.5	Composite Reliability (CR) >0.8	Cronbach's Alpha Coefficient >0.7
STUDENT ENGAGEMENT (SE)	SE1	0.81	8.23			
	SE2	0.83	8.85			
	SE3	0.81	8.23	0.73	8.23	0.75
	SE4	0.81	8.42			
CLASSROOM MANAGEMENT (CM)	CM5	0.84	8.56			
	CM6	0.76	8.46			
	CM7	0.78	8.42	0.66	0.85	0.80
	CM8	0.78	8.89			
INSTRUCTIONAL STRATEGIES (IS)	IS9	0.85	7.72			
	IS10	0.81	7.93			
	IS11	0.89	7.89	0.64	0.88	0.81
	IS12	0.82	7.99			
STUDENT CENTERED TEACHING METHOD (TM)	TM13	0.85	7.92			
	TM14	0.89	7.98			
	TM15	0.87	8.61			
	TM16	0.85	7.76			
	TM17	0.84	6.98	0.58	0.91	0.79
	TM18	0.83	8.10			
	TM19	0.86	8.21			
	TM20	0.87	8.26			
	TM21	0.98	7.21			
	TM22	0.81	7.99			

***P-value < 0.001 (2-tailed)   a: Unitized parameter

The findings of the study's structural model are summarized in Table 10. All of the standardized factor loadings are statistically significant at the 95 percent confidence level, with P-values less than 0.05 (P 0.05) and T-values larger than 1.96 (t cal > t crucial). At least 0.60 factor loadings are regarded as dependable indications or good items (Field, 2009; Hair Jr. et al., 2006). The standardized factor loadings in Table 2 are all larger than the suggested minimal level, demonstrating that our items load well. The construct validity of the model was determined using the Composite Reliability (CR) index and Average Variance Extracted (Bagozzi & Yi, 1998) (AVE). Chin and Yao (2014) demonstrated that convergent validity requires a minimum AVE value of 0.50.

The result in Table 10 indicates that convergent validity was attained, since all AVE values above the minimal value of 0.50. While composite reliability provides a less skewed approximation of internal consistency, Cronbach's alpha is the favored measure (Devon et al., 2007). (Fornell & Lacker, 1981; Bagozzi & Yi, 1998) suggested a minimum Composite reliability value of 0.60 and a minimum Cronbach's coefficient of 0.70 for excellent or acceptable reliability.

As shown in Table 10, the estimated Cronbach's alpha and Composite reliability values are more than the minimal criterion for construct liability, indicating that our constructs are reliable. The model's fitness was evaluated and presented in Table 5. The findings of Table 4 further support the study hypothesis that a student-centered teaching technique has a beneficial influence on teacher self-efficacy. This indicates that teachers' use of student-centered teaching methods such as collaboration, role-playing, brainstorming and discussion, cooperative learning, and problem solving has a significant impact on students' engagement, classroom management, and instructional strategies.

Additionally, Table 11 summarized the structural model's discriminant validity. According to Fornell and Cha (1993), the square root of the average variance recovered for each construct should be larger than the correlation coefficient of the construct with any other construct (Henseler, Ringle & Sarstedt, 2015). The discriminant helped the researcher to ascertain the link between the study's dependent and independent variables. The research discovered that there is a link between the two constructs examined.

Table 11 Discriminant Validity Based upon Fornell-Larcker Criterion

	SE	CM	IS	TM
SE	0.711**			
CM	0.689**	0.721**		
IS	0.661**	0.715**	0.698**	
TM	0.612**	0.697**	0.671**	0.688**

The term "model fitness" refers to the degree to which the SEM corresponds to the observed data. The purpose of model fit assessment is to validate the theoretical model using the technique of parameter fitting (Benah & Li, 2020). The following fitting indices were used to assess the model's fitness in this study: The Chi-square ratio (2-ratio), the Root Mean Square Approximation Error (RMSEA), the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), the Goodness of Fit Index (GFI), the Normed Fit Index (NFI), and the Standardized Root Mean Square Residual (SRMR). According to Kline (2005), a minimum of the following indices should be supplied for model fit: model 2, RMSEA, CFI, and SRMR. The analysis of the research determined that the model for both the individual construct and the whole study was acceptable, which validates the study's conclusions as presented in Table 12.

Table 12 Fitting Indices for Individual Constructs and Overall Structural Model

Model	Variables	Fitting Parameters						
		x/df < 3	RMSEA < 0.05	CFI > 0.90	TLI > 0.90	GFI >0.85	NFI >0.85	SRMR < 0.05
	SE	2.49	0.05	0.95	0.91	0.87	0.99	0.04
Individual	CM	2.67	0.01	0.93	0.94	0.97	0.943	0.02
Fitness	IS	1.95	0.02	0.96	0.98	0.91	0.91	0.01
	TM	1.81	0.01	0.92	0.96	0.95	0.92	0.03
Overall								
Fitness		1.98	0.02	0.98	0.92	0.92	0.91	0.02

Table 13 Hypothesis Testing and Decision.

Hypothesis	Relationship	Path Coefficient	SE	t-value	p-value	Hypothesis Decision
H1	TM → SE	0.84	0.01	7.77	***	Supported
H2	TM → CM	0.71	0.03	7.81	***	Supported
H3	TM → IS	0.67	0.02	6.96	***	Supported

The study revealed a significant effect of teachers' student-centered teaching method on students' engagement efficacy among senior high schools in the Accra Metropolis (H1: $\beta = 0.84$, T= 7.77, p=0.01) as shown in Table 13. This revealed that teachers ensuring that students are disciplined in the classroom increases the stress level positively. This implies that the kind of teaching methods adopted by teachers enable them to control disruptive students behavior, get students to behave well in the classroom and help them value learning. Teachers' ability to craft questions that are challenging to make students acquire interest in learning all depends

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on the kind of teaching methods adopted by the teacher such as the use of collaborative, cooperative, problem-solving, or activity-based teaching method. The study

The study further found that student-centered teaching methods significantly and positively influences teachers' classroom management efficacy(H2: β = 0.71,T= 7,81, p=0.03). The study found that teacher's self-efficacy in getting students to follow classroom rules and regulation; establishing disruptive free classroom environments are affected by the teacher methods teachers adopt in teaching students in the Accra Metropolis of Ghana. There is a need for teachers to reconsider the kind of teaching and learning environment they create for students and hence, reduce students' workload if possible or establish good rapport with them so as to reduce their stress level.

The study results claimed that teachers' teaching methods are associated with instructional strategies adopted in teaching students.The study found that teaching method positively and significantly affects teachers' efficacy in instructional strategies (H3: β = 0.67, T= 6.96, p= 0.02). This implies that an increase in the use of student-centered teaching methods such as the use of demonstrations and simulations, debate, projects, field trips and many others would boost teacher's efficacy in instructional strategies by (0.691).

The results of this study corroborate past research indicating that instructors with a high level of self-efficacy foster a learner-centered, pleasant instructional environment conducive to students' mastery of any topic presented in class. Numerous studies (Cho & Shim, 2013; Deemer, 2004; Holzberger et al., 2013; Nie et al., 2013; Wolters & Daugherty, 2007) have demonstrated that highly self-efficacious teachers employ a variety of student-centered teaching methods in order to help students master their subject master in a classroom setting. This is congruent with the results of (Caprara et al., 2006; Throndsen & Turmo, 2013), which indicate that instructors' self-efficacy has a beneficial effect on students' academic success on tests.

VI.   Conclusion and Recommendation

This research attempted to evaluate the effects of student-centered learning on students' learning, self-efficacy; perception of teachers in Senior High School in the Accra Metropolis. To accomplish the main objective, the study specifically sought.

1. Identify the teacher's favorite student-centered teaching technique at Accra Senior High School.
2. Examine teachers' perceptions of the considerable advantages of using student-centered teaching approaches at Accra Senior High School.
3. Determine the relationship between teacher demographics and self-efficacy.
4. Determine the impact of student-centered teaching on teacher self-efficacy in Accra Senior High School.

The population of the study consists of all teachers in the ten selected senior high schools in Accra Metropolis. A total of 200 teachers were purposely chosen for the study. Only core subject teachers who teach English, Science, Mathematics and Social Studies were chosen for the study to ensure uniformity in all the ten schools selected. Elective- subject teachers were not chosen because of the disparity in elective subjects taught by schools.

The most appropriate instrument that was employed for data collection is questionnaire (quantitative data gathering) which is an informant- completed instrument (Frankel & Wallen, 1996). The use of questionnaires will be more appropriate for this research because it allows for larger sample collection of information at a minimum cost and at the provision of greater anonymity to respondents. The questionnaire was structured in four parts. The first part elicited information from teachers on their demographic variables such as gender, level of experience, school taught and level of qualification. The second collected information on the preferred student-centered teaching method by teachers. Ten items were structured based on literature for respondents to mark their level of preference of teaching method on a Likert scale (1= least preferred to 5= most preferred). The third section also collected information on the benefits teachers and students derive from student-centered teaching methods on a scale of (1= strongly disagree and 5 = strongly agree). The self-efficacy of high school teachers was measured with the Teacher Self Efficacy Score (TSES) 24-item adapted from (Tschannen-Moran & Woolfolk Hoy, 2001). The 24-item were put into three dimensions, namely; Teacher efficacy for student engagement (SE), efficacy for instructional strategies (IS) and efficacy for classroom management (CM). Each dimension has eight (8) items to measures teacher self-efficacy

VII.   Summary of Key Findings

From Research Hypothesis 1, it was found that that teacher preferred to use student-centered teaching methods such as Role-playing, brainstorming and discussion, demonstrations, and simulations. Activity-based teaching, co-operative and collaborative learning, debates , field trips and projects in teaching students in the Accra Metropolis

From Research Hypothesis 2, it can be found that both students and teachers derive a significant benefit in teachers' use of student-centered teaching methods during instructional sessions. The study found that the use of student-centered teaching method helps students to have a higher and longer retention level, helps

students to have in-depth understanding of subject matter, helps students to acquire inventive problem-solving skills, helps students to acquire increased opportunities to demonstrate mastery of subject matter, helps to involve students to use their higher imaginative skills to solve problem and also, enables students become further self-determining and independent self-leaners in their learning.

Findings from Research Hypothesis three also revealed no significant difference between teachers' gender and their self-efficacy. However, there exist a significant difference between teachers' working experience and their self-efficacy belief in the use of student-centered teaching methods in teaching students in the Accra metropolis of Ghana. The last Research Hypothesis found significant effect of teachers' student-centered teaching method on teacher' efficacy in students' engagement, classroom management and instructional strategies.

VIII. Conclusions

According to the study's findings, high school teachers in Ghana's capital city of Accra have recognized the importance of using student-centered teaching methods in teaching students to comprehend concepts in a variety of fields of study in a way that elicits self-learning and in-depth understanding of subject matter. Given that the majority of respondents moderately preferred role-playing, brainstorming and discussion, demonstrations and simulations, and a variety of other activities, it appears that teachers intend to involve students in teaching and learning in order for students to acquire and develop skills necessary for success in the practical social environment. There is still room for improvement in the use of teaching methods such as projects, debates, and field trips, which may be due to the costs associated with planning and implementing such methods. Educational stakeholders can assist teachers in this area to assist them in achieving the goal of making students the center of learning. Teachers should also attend seminars offered by school heads and Ghana Education institutes on referral trainings geared at reforming teachers and instilling in them the habit of putting pupils first. The study contains two results on the advantages of student-centered teaching approaches in educating senior high school students in Ghana's capital city of Accra. The study's results indicated that instructors who employ a student-centered approach assist pupils retain information more effectively and for longer periods of time; have a thorough comprehension of subject matter; and develop imaginative problem-solving abilities. Concerning expanded possibilities, the research discovered that using student-centered teaching approaches provides reasonable prospects for subject matter mastering, increasing students' knowledge, and avoiding rote memorization. The adoption of student-centered teaching approaches also assists students in developing their higher creative abilities for problem solving and becoming autonomous self-learners in senior high schools.

Additionally, the research discovered a beneficial association between student-centered instruction and instructors' self-efficacy. It is reasonable to conclude that instructors' instructional tactics, classroom management, and student engagement are all related to their employment of a student-centered teaching style. Thus, instructors' continued use of teaching techniques such as brainstorming, dialogues, and activity-based instruction helps teachers maintain control of students in class, instills a sense of importance in students, and assists students in general in doing well. In the long and short run, this increases instructor efficacy and efficiency in accomplishing planned student objectives. The study discovered that student-centered teaching methods positively impact students' engagement in several ways, including the extent to which teachers can control disruptive behavior in the classroom; teachers convince students that they can succeed in schoolwork; and teachers instill a sense of value in students. Again, as a consequence of instructors' employment of student-centered teaching approaches, favorable improvements in enforcing classroom rules, soothing a disruptive or rowdy student, and building a classroom management system with each group of students have been seen. Additionally, the study found that student-centered teaching methods assist teachers in establishing a classroom management system for each group of students; providing an alternative explanation for students who are confused; and assisting families in assisting their children in succeeding in school.

Teachers must use student-centered education in order to increase students' motivation, promote peer communication, reduce disruptive behavior, foster student-teacher connections, and promote discovery/active and interactive learning as well as self-directed learning. According to the findings of this research, it is obvious that instructors are eager to include student-centered education into their instructional strategies. However, various impediments were identified in the responses of the participants. To implement student-centered instruction in secondary schools in Bangladesh, the appropriate authority could take the following steps:

a. Students must be appropriately taught and informed about their roles and responsibilities in order to comprehend the notion of student-centered education.
b. Students must possess appropriate abilities in student-centered education and be able to articulate their own interests in order to participate actively in class activities.
c. Teachers should be provided with professional development opportunities that will orient them to student-centered education and increase their desire and inventiveness. They should be encouraged to use a learner-

centered approach. Teachers should be encouraged to share their experiences with one another in order to manage their time and workload more effectively. Administrations should consider reducing teachers' workloads.

d. The curriculum goals must be changed to include student-centered education.

e. Appropriate resources to facilitate student-centered education in schools should be secured by conducting a resource requirement analysis.

IX. Recommendations

The findings of this research will help the literary community, educators, and students. This has been shown rather well in the list below.

The study's results and recommendations will add to the body of knowledge in the area of student-centered teaching approaches and their effects on teacher self-efficacy. Thus, the study lays the groundwork for future research on the subject. This is because the study's results may be extrapolated to the study's population and so give sufficient information for other researchers to employ in conducting other investigations.

Additionally, the research will help both students and instructors in general since the results will advocate for the implementation of student-centered teaching methods in senior high schools in Ghana. Students will benefit in the sense that the inherent benefits of a high percentage of student-centered instruction will place the needs and interests of senior high school students at the center of teaching and learning, thereby increasing their interest in the subject matter covered by such instruction.

Additionally, teachers will increase their self-efficacy when instructing children. The study's recommendations regarding the positive effect of student-centered methods on teacher self-efficacy will have a significant effect on teachers' willingness to frequently use this method when teaching students, thereby increasing their effectiveness and efficiency as teachers in senior high schools. The learning, teaching strategy, methods, and techniques that place the student at the center of learning and teaching should be given greater attention by the head of senior high schools in the Accra Metropolis. The learning environments of different senior high schools should be reorganized around student-centered applications and student needs in order to increase instructors' self-efficacy in teaching a variety of subjects and therefore enhance students' academic achievement. Teachers should get additional in-service training in relation to student-centered apps.

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