Teacher Self-Efficacy Enhancement and School Location: 
Implication for Students’ Achievement in Economics in Senior 
Secondary School in Ibadan, Oyo State, Nigeria

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Abstract
The paper investigated the effect of teacher self-efficacy enhancement and school location on students’ achievement in Economics in Senior Secondary School in Ibadan Metropolis of Oyo State, Nigeria. Three hypotheses were tested at 0.05 level of significance. Multi-stage sampling technique was adopted in the study. Four Local Government Areas (two urban and two rural) out of the eleven Local Government Area Councils in Ibadan were randomly selected. Sixty schools (30 in urban and 30 in rural) were randomly chosen from the Local Govts selected, subsequently 60 SS Economics teachers (30 in urban and 30 in rural) whose classes were used as intact class were involved in the study. Two instruments namely: Teachers Self-Efficacy Enhancement Scale (TSES) and Economics Achievement Test (EAT) were used to generate data for the study. The Reliability coefficients of the instruments were 0.79 and 0.74 respectively. One treatment package (Teacher Self-efficacy Enhancement Package) was developed and used to enhance the self-efficacy of the teachers. Some of the findings were: teacher self-efficacy enhancement had significant main effect on students’ achievement in Economics, school location also had significant main effect on students’ achievement in Economics, while teacher self-efficacy enhancement and school location had no significant interaction effects on students’ achievement in Economics. It was recommended that teachers should be exposed to self-efficacy enhancement program to enable them imbibe the spirit of self-efficacy in carrying out their assignments. Furthermore, teachers should be made to understand and accept the fact that their students can perform excellently in their academic work regardless of their school location if they develop in themselves a high level of self-efficacy.

Keywords: Teacher, Teacher self-efficacy, Self-efficacy enhancement, School location, Academic achievement.

1. Introduction
In the knowledge industry, the teacher is the leader during teaching-learning process. Thus, his role in imparting knowledge into the learner cannot be over-emphasised. The teacher teaches in a school, gives information and instructs students on how to do something in the right and best way. Wragg (1984) cited in Smith & Laslet (undated) asserted that teacher’s behaviour have noted specific skills which are demonstrated by effective teachers. Some of these skills are belief in one’s ability to effectively impart knowledge into the students during the teaching-learning process in order to engender desirable change in learning behaviour and ability to effectively manage a class. Researchers have shown that teachers’ perceptions and beliefs do not only have considerable influence on their instructional practices and classroom behaviour but also are related to their students’ achievement and that school location could also have influence on students’ academic attainment (Hollon, Anderson & Roth, 1991; Prawat & Anderson, 1988; Adeyemi, (2013). Therefore, it is imperative to investigate the effect of teacher self-efficacy and school location on students’ academic achievement.

a. Literature Review
An individual’s belief that he/she is able to perform very well in a particular task or endeavour is known as self-efficacy. In other words, self-efficacy is an individual’s belief in his/her ability to do things excellently well. Bandura (2001) cited in Durowoju and Onuka (2012) posited that self-efficacy is one's belief in one's ability to succeed in specific situations. It is people’s perception of their ability to plan and take action to reach a particular goal. In support of this, Tschannen-Moran & Woolfolk-Hoy (2001) referred to teacher self-efficacy as a teacher’s judgement of his or her capabilities to bring about desired outcomes of students’ engagement and learning even among those students who may prove difficult in being guided in learning tasks or is unmotivated to want to engage in learning tasks. According to George (2011), self-efficacy has to do with how a teacher feels about his or her ability to do his or her job. Similarly, teachers’ self-efficacy beliefs refer to “teachers’ beliefs in their capabilities to perform specific teaching tasks at a specified level of quality in a specified situation” (Dellinger et al., 2008, p. 753. Gordon (2001) observed that teacher self-efficacy is often considered to be an indicator or predictive index of teaching effectiveness. He further opined that an alternative word for self-efficacy is confidence in one-self. It is important to mention that a teacher who has the belief or confidence in his ability to teach all students regardless of their race, age, sex, ethnicity, learning ability, economic, social or family background and being able to achieve the set instructional objectives, is said to possess a high level of...
self-efficacy.

Furthermore, Eslami & Fatahi (2008) asserted that teacher self-efficacy is the belief that one is capable of exercising personal control over one’s behaviour thinking and emotion. They reiterated that effective teachers believe that they can make a difference in children’s lives and they can teach in ways that demonstrate this belief. It is expedient to mention that what a teacher believes about his/her capability is a strong predictor of his/her effectiveness. Teachers’ beliefs about their effectiveness (teacher efficacy) underlie many important instructional decisions which ultimately shape students’ educational experiences (Soodak & Podell, 1997). Teacher self-efficacy has been observed as a predictor of achievement (Moore & Esselman, 1992). To buttress this, Eslami & Fatahi (2008) stated that teacher self-efficacy is believed to be strongly linked to teaching practice and students’ learning outcomes. Durowoju & Onuka (2012) found in their study that teachers’ self-efficacy significantly determined students’ academic achievement in Economics. This implies that the higher the teachers’ self-efficacy, the better the academic performance of his/her students in Economics and vice versa. In line with this assertion, Moore & Esselman (1992); Gian, Claudio, Patrizia, & Patrick (2006) cited in Durowoju & Onuka (2012) submitted that teacher’s efficacy beliefs significantly influence students’ cognitive achievements and success at school. Lin & Tsai (1999), Gordon (2001), and George (2011) also confirmed that teachers with high levels of self-efficacy are linked to high students’ achievement.

In addition, Durowoju & Onuka (2012) citing Henson (2001); and Lin & Tsai (1999) reported that students whose teachers scored high on self-efficacy did better on standardized tests than their peers who were taught by teachers with low self-efficacy scores. Researchers such as Anderson, Greene, & Loewen (1988) found in their study that students of efficacious teachers generally outperformed students of teachers with low self-efficacy. The findings also revealed that teacher self-efficacy did significantly predicted achievement on the Iowa Test of Basic Skills, the Canadian Achievement Tests and the Ontario Assessment Instrument Pool. By implication teacher self-efficacy would engender students’ academic improved accomplishment.

It is believed that the teacher who possesses high self-efficacy could engender positive attitude to their job, motivates his/her students and explore innovative approaches of imparting knowledge in his/her students which in turn result into teaching effectiveness and improved students’ learning outcomes. Some researcher such as Trentham, Silvenr & Brogdon (1985) opined that teachers who hold strong self-efficacy beliefs tend to be more satisfied with their job and demonstrate more commitment; they also tend to have lower absenteeism (McDonald & Siegall, 1993), persist in failure situations (Gibson & Dembo, 1984), use new teaching approaches (Gibson & Dembo, 1984), get better gains in children’s achievement (Brookover, Beady, Flood, Schweitzer, & Wisenbake, 1979) and have more motivated students (Midgely, Feldlaufer, & Eccles, 1989). In his view, Bandura (1977), cited in Durowoju & Onuka (2012) submitted that teachers’ sense of efficacy can potentially influence both the kind of environment that they create as well as the various instructional practices introduced in the classroom.

Furthermore, teachers with a high sense of self-efficacy are confident that even the most difficult students can be reached if they exert extra effort; while teachers with lower self-efficacy, on the other hand, feel a sense of helplessness when it as to do with dealing with difficult and unmotivated students (Gibson & Dembo, 1984 cited in Durowoju & Onuka, 2012). In the same vein, teachers with higher teaching efficacy find teaching meaningful and rewarding, expect students to be successful, assess themselves when students fail, set goals and establish strategies for achieving those goals, have positive attitudes about themselves and students, have a feeling of being in control, and share their goals with students (Ashton, 1985 cited in Adedoyin, 2010 ). On the other hand, Durowoju & Onuka (2012) found in their study that teacher’s self-efficacy when combined with classroom management do not contribute significantly to students’ academic achievement in Economics. The implication could be that the teachers could not effectively combine the two activities together in order to engender student improved learning outcome.

However, one other factor that could affect students’ achievement is school location. Sokoye (2009) cited in Adeyemi (2013) submitted that the location of a school has a significant effect on the academic performance of the child. Since self-efficacy could have effect on both teacher and students’ proficiency, environmental factors such as school locations (rural or urban) could also have effect or impact on the proficiency academic achievement of students. To corroborate this, Ekperekunmo (2002) submitted that location of school can predict or determine pupils achievement in Science. According to Onuka & Emunemu (2010), schools that have provided generations of children and young people with knowledge, skills and attitudes need to become autonomous and responsive. Schools play a vital role in developing and sustaining rural communities and are crucial to Nigeria’s sustainable growth and development. According to Philips (2003) cited in Onuka & Emunemu (2010), in the United States of America, ‘rural’ means a small town having a population of twenty-five thousand people and less, but in Nigeria, ‘rural’ is rather defined by the amenities available or non-existent. Such amenities include electricity, pipe-borne water, motorable roads, and health facilities, among others (Onuka & Emunemu, 2010).

achievement are geographical locations (rural or urban), resources, availability of technology and quality of teachers. In other words, students tend to learn and perform better in an educationally stimulating environment that is likely to arouse a higher degree of interest. Adeyemi (2013) found that there was significant main effect of school location on students’ achievement in and attitude to Economics. To buttress this, Brown & Susanson (2006) cited in Adeyemi (2013) found in their study that rural schools are typically less active than urban schools in the United States of America, although with some variation between states and countries. They claim that there is a large Mathematics achievement gap between rural and non-rural areas, although some rural areas are above average and others are just average. Okoye (2008) pointed out that, in Nigeria most rural-based schools lack enough qualified teachers, are poorly equipped and lack basic amenities, all serving as inhibiting factors to good academic performance.

It thus becomes imperative to find out the extent to which teacher self-efficacy and school location could have impact on students’ academic achievement in Economics in Senior Secondary Schools in Ibadan. Therefore, the study investigated the effect of teacher self-efficacy and location on students’ academic achievement of Economic students in Ibadan, Oyo State, Nigeria.

Hypotheses
Three null hypotheses were formulated for the study as follows:

1. There is no significant main effect of teachers’ self-efficacy enhancement on students’ academic achievement in Economics
2. There is no significant main effect of location on students’ achievement in Economics,
3. There is no significant interaction effect of teachers’ self-efficacy enhancement and location on students’ achievement in Economics

1.3. Methodology
1.3.1. Design
This study was a pre-test and post-test quasi-experimental/control group design.

1.3.2. Population
The target population for this study comprised all public Senior Secondary School teachers and students in Ibadan, Oyo State of Nigeria.

1.3.3. Sampling and sample
Multi-stage sampling technique was employed to select the subjects for the study as follows: Ibadan was clustered along the existing two educational zones (city and less cities). The city zone is also referred to as zone 1, while the less city zone is referred to zone 2. From each of the zones, two local governments were randomly selected, namely: Ibadan South West and Ibadan North from city zone [urban], Lagelu and Akinyele from less city [rural] Local Government Areas. Thereafter, 15 public secondary schools were randomly selected from each of the local government. Thus, 60 secondary schools were used in the study. An arm of SS II was selected from each of the 60 schools as an intact class and one Economics teacher was also chosen from each school. Hence, a total of 60 Economics teachers and 541 students in the selected schools were used in the study.

1.3.4. Instrumentation
Instruments
The two instruments used in the study were:

1. Teachers Self-Efficacy Enhancement Scale [TSES]
2. Economics Achievement Test [EAT]

The Teacher Self-Efficacy Enhancement Scale (TSES)
The Teacher Self-Efficacy Enhancement Scale (TSES) was adapted from Teacher Self-Efficacy Scale-Long Form designed by Tschanne-Moran & Woolfolk-Hoy in 2001. It comprised of two sections. Section A elicited information on the demographic data of the respondents (teachers) while Section B consisted of 18 items. The responses were measured on a 4-Likert point scale. The TSES was pilot tested for validation and Cronbach Alpha reliability of 0.79 was obtained.

Economics Achievement Test
Economics Achievement Test (EAT) was a multiple choice test constructed by the researchers. It consisted of sections A and B. Section A is on bio-data of the students. Section B consists of an initial 75 multiple choice items with four alternatives A to D constructed from eight topics in SSS 2 third term curriculum. The test blueprint based on the last three levels of Bloom’s taxonomy of educational objectives was used to construct 75 items. The instrument was administered to 50 SSS 2 Economics students different from those who participated in the quasi experiment. The result of the pilot study was analyzed and the psychometric properties were
obtained. The items with difficulty indices that ranged from 0.41 to 0.66, and items with discriminating indices that ranged from 0.33 to 0.74 were finally selected. The reliability coefficient was determined using Kuder-Richardson (KR-20) and the reliability coefficient was 0.74. From the 50 items that survived the validation exercise 40 items were administered on the students.

Treatment package
Teacher Self-efficacy Enhancement Package was designed by the researchers to boost the self-efficacy of the teachers in the study. This package consists of four self-efficacy skills provided in two modules which were meant to enhance teachers' belief in their abilities to teach effectively in order to bring about positive or desirable change in students’ academic achievement. This treatment package was used to provide an orientation programme for the teachers. The orientation exercise lasted for two days after which the teachers taught the students for 4 weeks in order to practicalise what they have learnt during the enhancement programme. The treatment package consisted of the following four self-efficacy skills: performance accomplishments, vicarious experience, verbal persuasion, emotional and physiological arousal.

1.3.5. Data collection
The researcher trained six (6) research assistants who under the supervision of the researchers administered the instruments on the subjects. The researchers met with the principals of the selected schools to inform them about the purpose of this study and to solicit their support by allowing the selected teachers to participate in the enhancement programme. The Teachers’ Self-Efficacy Enhancement Scale (TSES) was administered on the teachers before the commencement of the enhancement programme while the Economics Achievement Test (EAT) was administered on the students in their schools by the research assistants as pre-test both in the treatment and control groups. The enhancement programme lasted for two days after which they were given the Teachers’ Self-Efficacy Enhancement Scale (TSES) as post-test. After the post-test, the teachers were allowed to teach the students for four weeks to enable them demonstrate the skills they have learnt during the teaching-learning process. After the expiration of the four weeks of teaching the students’, they (students) were given a post-test of the Economics Achievement Test (EAT).

1.3.6. Data analysis
The data were scored, collated and analyzed using Analysis of Covariance (ANCOVA). This is to test for the significant differences between group means and to control for the effects of covariates.

1.4. Results discussion
1.4.1. Results
Hypothesis 1: There is no significant main effect of teacher self-efficacy enhancement and students’ achievement in Economics

Table 1: ANCOVA: Effect of Teacher self-efficacy enhancement, School Location and Students’ Achievement in Economics

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III sum of squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
<th>Partial Eta Squared</th>
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<td>Corrected Model</td>
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<td>12</td>
<td>603.745</td>
<td>62.591</td>
<td>.000</td>
<td>.755</td>
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<tr>
<td>Intercept</td>
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<td>1</td>
<td>4705.267</td>
<td>487.801</td>
<td>.000</td>
<td>.615</td>
</tr>
<tr>
<td>Pretest</td>
<td>643.308</td>
<td>1</td>
<td>643.308</td>
<td>66.693</td>
<td>.000</td>
<td>.179</td>
</tr>
<tr>
<td>Teacher self-efficacy</td>
<td>1670.823</td>
<td>1</td>
<td>835.411</td>
<td>86.608</td>
<td>.000</td>
<td>.362</td>
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<tr>
<td>enhancement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>464.719</td>
<td>1</td>
<td>464.719</td>
<td>48.178</td>
<td>.000</td>
<td>.136</td>
</tr>
<tr>
<td>Teacher self-efficacy</td>
<td>48.278</td>
<td>1</td>
<td>24.139</td>
<td>2.503</td>
<td>.084</td>
<td>.016</td>
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<tr>
<td>enhancement* location</td>
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<td></td>
<td></td>
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<tr>
<td>Error</td>
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<td>540</td>
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</tbody>
</table>

R Squared =.755 (Adjusted R Squared =.743)

Table 1 gives a summary of the effect of teacher self-efficacy and school location on students’ achievement in Economics. From the table 1 revealed the F-value for the treatment (teacher self-efficacy enhancement), 86.608 which is significant at 0.05, (p < 0.05). Since P – value (0.000) of the F-ratio was significant, it follows that the hypothesis on the main effect of teacher self-efficacy enhancement on students’ academic achievement in Economics was rejected. This implies that there is a significant main effect of teacher self-efficacy on achievement in Economic. The adjusted R square value of 0.743 indicates that the independent variables accounted for 74.3% of the variation in the students’ academic achievement in Economics. The partial
Eta squared estimated was 0.362. This indicates that teacher self-efficacy enhancement accounted for 36.2 percent of the variance observed in the post-test achievement test in Economics.

1.4.2 Discussion

This finding agrees with Eslami & Fatahi (2008) who stated that teacher self-efficacy is believed to be strongly linked to teaching practice and students’ learning outcomes. The result is also in tandem with Trentham, Silvern & Brogdon (1985) who opined that teachers who hold strong self-efficacy beliefs tend to be more satisfied with their job and demonstrate more commitment; they also tend to have lower absenteeism (McDonald & Siegall, 1993); persist in failure situations (Gibson & Dembo, 1984); use new teaching approaches (Gibson & Dembo, 1984); get better gains in children’s achievement (Brookover et al, 1979) and have more motivated students (Midgely et al, 1989).

Hypothesis 2: There is no significant main effect of location on students’ achievement in Economics.

From the table 1, the F-value for school location showed 48.178 which is significant at 0.05, (p < 0.05). Since P – value (0.000) of the F-ratio was significant, it follows that the hypothesis on the main effect of school location on students’ academic achievement in Economics was rejected. This implies that there is a significant main effect of school location on achievement in Economics. The adjusted R square value of 0.743 indicates that the independent variables accounted for 74.3% of the variation in the students’ academic achievement in Economics. The partial Eta squared estimated was 0.136. This means that school location accounted for 13.6 percent of the variance observed in the post-test achievement test in Economics.

![Fig. 1: Academic Performance of Urban and Rural Students in Pre-test and Post-test](image)

Table 1 indicates the main effect of location on student’s academic performance in Economics while figure 1, gives the picture of the difference. Students in the urban schools had higher mean score than students in the rural school in the pre-test and post-test in Economics achievement. This implies that urban students achieved more through the treatment (teacher self-efficacy enhancement) than the rural students.

The findings show that there is significant main effect of location of students on their achievement in Economics. The study reveals that the students in the urban schools had higher mean score in the pre-test and post-test in Economics achievement when compared students from rural schools.

1.4.3 Discussion

This finding supports the claim of Sokoye (2009) in Adeyemi (2013) that the location of schools has significant effect on the academic performance of students. The findings are also in consonance with the finding of Brown (2003) in a study carried out in the United State of America that the performance of the students in the urban schools was higher than that of the students in the rural schools. The finding also agree with Okoye (2008) that stated, in Nigeria, students in rural schools record lower achievement than those in urban because rural schools
lack basic infrastructures that inhibits high cognitive performance. This implies that a stimulating and enriched environment in urban schools assisted urban students’ higher achievement than students in rural schools.

**Hypothesis 3:** There is no significant interaction effect teacher self-efficacy enhancement and school location on students’ achievement in Economics

From the table 1, the F-value for school location showed 2.503 which is not significant at 0.05, (p > 0.05). Since P – value (0.084) of the F-ratio was not significant, it follows that the hypothesis on the main effect of teacher self-efficacy and school location on students’ academic achievement in Economics was accepted. This implies that there is a significant interaction effect of teacher self-efficacy and school location on achievement in Economics. The adjusted R square value of 0.743 indicates that the independent variables accounted for 74.3% of the variation in the students’ academic achievement in Economics.

1.4.4. Discussion

The findings on table 4.7 that shows that there is no significant interaction effect of teacher self-efficacy and school location on students’ achievement in Economics which means that high variation in student post achievement mean scores was not influence by the interaction of teacher’s self efficacy enhancement introduced as treatment and the student school location whether rural or urban. This is an indication that teacher self-efficacy is not sensitive to the location of school as both students in urban and rural schools recorded high achievement after the treatment, this finding disagree with the work of Okoye (2008) that students’ poor performance is attributed to attending school in rural areas. The findings contradict that of Brown and Susanson (200) in Adeyemi (2013) who submitted that rural schools are typically less active than urban schools in the United States of America, although with some variation between states and countries.

1.5. Conclusion

Teacher self-efficacy is significant in the teaching-learning process. Teacher’s belief in his/her capability to perform his job well will engender high level of self-efficacy in students which would in turn bring about desirable change in students’ behaviour and achievement. It was revealed in this study that teachers’ self-efficacy had significantly main effect on students’ academic achievement in Economics when not combined with the other variables. Furthermore, the study revealed that school location had significantly main effect on students’ academic achievement in Economics. However, it was evident in the study that teachers’ self-efficacy and school location had no interaction effect on students’ academic achievement in Economics. The implication is that the students in the urban and rural areas responded positively to the treatment regardless of their location. Thus, it is evident that teachers at the urban and rural areas should be exposed to teacher self-efficacy enhancement programme where they will be given adequate orientation and counsel which will serve as an eye opener to the importance and the nit gritty of building in themselves the spirit of self-efficacy in order to engender improved students’ academic achievement.

1.6. Recommendations

Based on the findings of the study, the following recommendations were made:

1. The government and school heads should organise self-efficacy enhancement programme for the teachers to enable them develop self confidence in their ability to effectively impact knowledge in their students irrespective of their students’ age, sex, socio-economic status or family background.
2. Teachers should be made to understand and accept the fact that their students can perform excellently in their academic work regardless of their school location if they develop themselves a high level of self-efficacy.
3. Educational planners and administrators should organise workshops, seminars and conferences that will bring teachers both at the urban and rural areas together to enable them interact freely and share ideas with one another and among themselves which will thereby enable these teachers to develop self confidence in their ability to effectively organise and implement the teaching-learning process to bring about improved performances in students’ academic.
4. Teachers should ensure that they show and establish warmth, care, affection, openness and effective communication for and with their students so that they can encourage and assist their students’ to develop self-efficacy or confidence in their ability to perform excellently well in their academic pursuit.

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