

RELATIONSHIP BETWEEN TEACHERS' TEACHING EFFECTIVENESS, KNOWLEDGE OF SUBJECT MATTER AND SENIOR SECONDARY SCHOOL STUDENTS' ACADEMIC ACHIEVEMENT IN ECONOMICS

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Abstract

This study examined the relationship among teachers' teaching effectiveness, knowledge of subject matter and senior secondary school students' achievement in Economics. Descriptive survey of ex-post facto design was used. Three hundred students and sixty teachers constituted sample for the study. Two research instruments; teacher questionnaire and Economics' academic achievement test were designed and validated. The instruments were given to two experts in the area of educational evaluation for perusal to ascertain content validity. Teachers' questionnaire was also trial tested on a sample of thirty teachers and the result yielded reliability co-efficient of 0.78 using Cronbach alpha statistic while item analysis was carried out on students' academic performance test before it was reduced to fifty items that constituted final draft of the instrument. Data collected were analyzed using Pearson Moment Correlation analysis. The findings of this study revealed that there is a significant relationship between teachers' teaching effectiveness and students' academic achievement in Economics, there is a significant relationship between teachers' knowledge of subject matter and academic achievement in Economics, Based on these findings, recommendations are made that teachers should periodically be given opportunities to update their knowledge through in-service training and retraining courses in their subject area and pedagogy.

Keywords: Teacher, Teaching Effectiveness, Knowledge of Subject matter, Students' Academic Achievement, Economics

Introduction

Teaching is a multidimensional complex activity, often requiring instructors to juggle multiple tasks and goals simultaneously and flexibly. Teaching is the specialized application of knowledge, skills and attributes designed to provide unique service to meet the educational needs of the individual and the society which yields desired results only when it is effective (Alebiosu, 2015). According to Dhir (2015), teaching effectiveness is the necessities of a talent- based teacher education,

which includes knowledge, skills and values. In similar perspective, it is referred to as the results a teacher gets or the amount of progress students make towards some specified goal of education.

The teacher is the spring board in the teaching learning process. Olanipekun and Aina (2016) alluded that teacher is a very important resource in any educational system, as Sabitu, and Nuradeen, (2010) opined that the success of any teaching and learning process which influences students' academic performance depend on how effective and efficient the teachers are. According to Dhir (2015), teacher effectiveness is broadly used to mean the collection of characteristics, competencies and behaviours of teachers at all educational levels that enable students to reach desired outcomes which may include the attainment of specific learning objectives as well as broader goals such as being able to solve problems, think critically, work collaboratively and become effective citizens.

Teacher's effectiveness depends on many factors which might be difficult to measure however an effective teacher could be known by the following according to Stronge, Ward and Grant, (2011); instructional effectiveness, use of assessment for student learning, positive learning environment and personal quality of the teacher. Other literature added motivation and subject-content –knowledge as indicators of teacher effectiveness (Aina, Olanipekun & Garuba, 2015). Teachers matter more to students' achievement than any other aspect of schooling. An effective teacher has a wide-range repertoire of different teaching and learning models, methods, approaches, strategies and techniques, different learning skills and learning styles, and knows how to create the right conditions for learning in order to obtain desired learning outcomes. Steele (2010), opined that every good teacher has personal qualities and therefore it is difficult to answer the question of “who is an effective teacher”? The researcher posits that for every good teacher there is a unique list of personal characteristics; however, there are some that frequently recur. Analysing the effective teacher, Çakmak and Akkutay, (2016) submitted that effective teachers are supportive, caring, competent in their field, excited with their job, and teach with good communication skills. Effective teachers are best identified by their performance not by their background or experience.

Aina, Olanipekun and Garuba, (2015) in conceptualizing teachers' effectiveness identified the following indices;

- Assessment (assessment for students and assessment and feedback),
- Instructional delivery (use of technology, recognize complex concepts and concentrate on meaningful ones, recognize students' academic and personal goals, maximize instructional time, use different teaching method)
- Learning environment and classroom control
- Teacher's personal quality, interaction and motivation.

Every effective teaching is expected to lead to students' successful learning and according to Çakmak and Akkutay, (2016) being an effective teacher requires a personal attempt. Steele (2010) identified three key characteristics that are important

for effective teaching as nonverbal communication, self- efficacy and servant leadership. The researcher alluded that understanding the concepts of effective teaching and characteristics of effective teacher are essential for enhancing teacher quality.

Effective teachers are those who achieve the goals they set for themselves or which were set for them by others (Dhir, 2015), and they are good managers of instruction. They are able to display the skills and the behaviour expected of them. These skills and behaviours are used to guide the learning process to the point of achieving stated educational objectives. It is imperative to note that teachers are indispensable in the scheme of educational attainment right from the primary to the tertiary level of education in Nigeria (Adetayo, 2011) and in every country. Teachers have been shown to have an important influence on students' academic achievement and they play crucial roles in educational attainment because the teacher is ultimately responsible for translating policy into action and principles based on practice during interaction with students. Agharuwhe, (2013) argued that the quality of education and performance of students depends on the teachers.

However, despite the significance of teachers on students' academic achievement it is sad to note that students are not performing to expectation in public examinations in Nigeria and the issue has been of much concern to all stakeholders. (Olaleye, 2013; Olanipekun & Aina, 2014). Though many virile factors have been identified to be cogent factors to improved students' academic performance in Nigeria, teachers' factors tend to be predominant (Olanipekun & Aina, 2014). It is undisputable that effective teachers are the most important factor contributing to students' achievement. Effective teaching is one of the key propellers for school improvement, hence teachers must be proficient. The study of Goldhaber, Liddle, Theobald and Walch (2010) on teacher effectiveness and achievement of Washington's students in Mathematics concluded that differences in teacher effectiveness have consequential implications for student achievement.

Meanwhile, another study of Agharuwhe, (2013) concluded that there was no significant relationship between teachers' effectiveness and students' academic performance in public secondary schools in Delta State Nigeria. The study alluded that teachers' classroom effectiveness had only a minimal influence on the academic performance of students. The finding was attributed to the fact that teacher's effort is not the sole determinant of students' academic outcome. Students related factors such as intelligence, parental education, socioeconomic status, and personalities which vary over wide margins in the study area may have significant effect on the academic performance of students in public secondary schools. This may also influence significantly on the academic performance of students and consequently may be responsible for the observed low performance of students when compared with the effectiveness of their teachers.

Olaleye, (2013) examined teachers' professional development and its effect in enhancing educational effectiveness in Osun State, Nigeria and observed that professional development programmes enhanced and improved teachers' skills in

teaching. The study recommended that teachers should be allowed and encouraged by the school administrators to attend conferences, workshop and seminars regularly. This recommendation is in congruence with Dhir (2015) study on teaching effectiveness and job satisfaction of secondary school Mathematics teachers who found that teaching effectiveness of teachers was on a low side. The need for teachers upgrading of knowledge, skill and competence is thus affirmed.

Consequent upon the observed deterioration in the academic achievement, attitude and values of secondary school students in public secondary schools one wonders if the high failure rates and the poor quality of the students is not a reflection of the instructional quality in the schools. The effectiveness of Economics teacher will determine the extent to which the objectives of Economics as stated in the National Curriculum for senior secondary schools will be achieved and contribution would be made to the development of the nation because Economics as a subject is tremendously important to the economy of any nation Nigeria inclusive, as it provides a solid foundation for the training of future economists, financial experts, managers and entrepreneurs.

It is important therefore, that Economics should be well and effectively taught to students and the influence of the teacher on the personal, social and productive lives of the students should be highly appreciated as this will depend on the professional training which the teacher has received. The sources of gender differences in educational matters have been a subject of considerable study and debate. Gender factor has always been investigated in educational research and literature suggests that teachers' gender too seems to influence students' academic performance generally (Nabwire, Toili, Ong'unya & Songok, 2014). Contrary to this position, the earlier study of Owolabi and Adebayo (2012) showed that teacher's gender has no effect on their ability to impact knowledge on students in senior secondary school Physics, just as Nabwire et al (2014) reported equal treatment by male and female teachers. Also, Igberadja, (2016) assessed the effects of teachers' gender and qualification on students' performance in industrial safety and found that students' performance was not related to the gender of the teacher. But the study of Dhir (2015) revealed that female teachers are in the category of low effective while male teachers are least effective. Arising from the foregoing, this study sought to investigate teachers' effectiveness, knowledge of subject matter and gender as correlates of students' academic achievement in financial accounting in Ogun State.

Research Questions

In order to guide this study, the following questions were raised:

1. What is the relationship between Teachers' teaching effectiveness and students' Achievement in Economics?
2. What is the relationship between teachers' knowledge of subject matter and students' achievement in Economics?

Methodology

The study employed the descriptive survey of ex-post facto design; this design was chosen because the researcher intends not to manipulate any variable. The population of the study comprised all students and teachers in senior secondary school in Ijebu-North Local Government Area (LGA) of Ogun State. Random sampling technique was used to select six (06) schools out of nineteen (19) schools in the LGA. Ten teachers and fifty students were randomly selected from each school. In all three (300) hundred students and sixty (60) teachers randomly selected sample participated in the study. Data collected was analyzed using Pearson's moment correlation statistic. Two research instruments were used for the purpose of data collection, the teacher questionnaire and students' Academic Performance Test.

Teachers' questionnaire has three sections. Section A sought information on demographic data of the respondents, Section B consists of thirty items on a four-point Likert response mode measuring teachers' knowledge of subject matter while Section C consists of twenty-five items on a four-point Likert scale measuring teachers' teaching effectiveness. Students' Academic Performance Test was also developed by the researcher from the past WAEC objective test items in Economics. The instruments were given to two experts in the area of educational evaluation for perusal to ascertain content validity. Teachers' questionnaire was also trial tested on a sample of thirty teachers and the result yielded reliability co-efficient of 0.78 using Cronbach alpha statistic while item analysis was carried out on students' academic performance test before it was reduced to fifty items that constituted final draft of the instrument.

Results

The results of the analysis of data are as presented below:

Research Question One: What is the relationship between Teachers' teaching effectiveness and students' Achievement in Economics?

Table 1: Correlation of Teachers' Teaching Effectiveness and Students' Academic Performance in Economics

	Academic Performance
Teachers' Teaching Effectiveness	Pearson's correlation = *0.700**
	Sig. (2-tailed) = *000
	N = 360

Table 1 revealed that there is a significant relationship between teachers' teaching effectiveness and students' academic performance in Economics ($R = 0.700$, $P < 0.05$). This implies that teachers' teaching effectiveness have a significant relationship with students' academic performance.

Research Question Two: What is the relationship between teachers' knowledge of subject matter and students' Achievement in Economics?

Table 2: Correlation of Teachers' Knowledge of Subject Matter and Students' Academic Performance in Economics

	Academic Performance
Teachers' Knowledge of Subject Matter	Pearson's correlation = *0.906**
	Sig. (2-tailed) = *000
	N = 360

Table 2 revealed that there is a significant relationship between teachers' knowledge of subject matter and students' academic performance in Economics ($R = 0.906$, $P < 0.05$). This implies that the higher the teachers' knowledge of subject matter score, the higher the academic performance of the students in Economics.

Discussion of Findings

The finding in this study that teachers' teaching effectiveness has a significant relationship with students' academic performance support the position of Olaleye, (2013), Olanipekun and Aina, (2014) and Dhir (2015) who affirmed the need for teachers to upgrade knowledge, skill and competence. The finding is at variance with Agharuwhe, (2013) in which there was no significant relationship between teachers' effectiveness and students' academic performance. Nevertheless, effective teachers should produce students of higher academic performance.

The finding that there is a significant relationship between teachers' knowledge of subject matter and students' academic performance in Economics give credence to the findings of Aksu, Metin and Konyalioglu, (2014) that a competent teacher in his profession has a thorough knowledge of subject matter and has command over subject matter as he/she can provide more and more information to the students in the classroom. Similarly, Olanipekun and Aina (2014) considered teachers' self-efficacy and Pedagogical Content Knowledge (PCK) as two educational constructs that are germane to teacher effectiveness. In teaching students according to national and international standards, teachers need to have knowledge about subject matter profoundly and flexibly so they can guide the students for the creation of useful cognitive maps in correlating one idea to another without misconceptions. Teacher knowledge of subject matter is very important to improve students' academic performance in Nigeria.

Conclusion

From the findings of this study, that teachers' teaching effectiveness and knowledge of subject matter has positive significant relationship with students' academic performance, it is concluded that truly no education system can rise above the quality of its teacher.

Recommendations

Based on the findings it is recommended that teachers should periodically be given opportunities to update their knowledge through in-service training and retraining courses to update their knowledge of subject matter and there is also the need for improvement in their pedagogical knowledge from time to time.

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