

Analysis of Academic Achievement of Business Studies Students Taught by Subject Specialist and Those Taught By Non-Specialist in Secondary Schools in Gadabuke Metropolis

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Abstract

This study examined the academic achievement of business studies students taught by subject specialist and those taught by non-specialist in selected Junior Secondary Schools Examination in Gadabuke metropolis in Toto Local Government of Nasarawa state. The study had three objectives, three research questions and three null hypotheses. Developmental research design was adopted in the study. JSCE business studies results for the year 2012/2013 for 257 students was the raw data for the study. Descriptive statistics of means was used to answer the research questions while t-test statistical tool was used in analyzing the data in the test of null hypotheses. The analysis of data was presented according to the specific research questions and hypothesis. All the null hypotheses were tested at significant level of 0.05. The results of the study indicated among others that students taught by specialist in business studies appeared to be more skillful in problem such as shorthand and book keeping. One of the recommendations made was that principals and heads of departments in secondary schools should imbibe the culture of making subject allocation based on teacher's area of specialization. This seeks to improve teachers' methodology, skills, efficiency and attitude in the classroom.

Keywords: Academic achievement, Trained teachers, Business studies, Junior Secondary Schools Examination.

Introduction

The adage that no educational system can rise above the quality of its teachers clearly demonstrates the role of trained teacher in achieving the educational goals. For teachers to impart desire knowledge and skills to students, they must be competent, skillful, hard work, versatile in the area and dedicated to their duty. Lassa (1992) earlier emphasized that in education, teachers are the foundation of quality; they hold trust for the implemented curriculum of formal education and therefore, are at the engine of the educative process. The report of Fazalur, Nabi, Yasmin, Saeed and Muhammad (2011) has similar statement as teachers' credibility depends on how they take up the rights and responsibilities, which are associated with the professionalism. To meet classroom challenges, teachers must keep abreast of the time, be talented in their discipline, skillful in the classroom and task accomplishment in their duties and competent in their discipline. The qualities will help teachers to reflect critically on their practice and approach to new knowledge and beliefs about content successfully. As Peretomode and Peretomode (2001) rightly identified those teachers that handle area of their specialization to be more capable of imparting desire

knowledge, skills, and attitudes that will improve the learning outcome. Thus quality of education system of a country depends upon the academic and professional qualification of teachers.

Research in the field of education shows that, teachers who are proficient in the disciplines and skills in the teaching have the potentials of motivating students (Berliner, 2005). Mcber (2000) earlier observed that teachers' specialization, their competency in the subject, teaching skills and professional characteristics are among the factors influence educational progress of students. Ayeni (2010) postulated that, a good teacher must be sound knowledge in his area of specialization and must be skillful in teaching. He stress that, this will help them to select appropriate and adequate facts for planning of lesson notes, effective delivery of lessons, proper monitoring and evaluation of students' performance, providing regular feed-back on students' performance, improvisation of instructional materials, adequate keeping of records and appropriate discipline of students. Hence serious teachers that hand area of their specialization are expected to achieve the broad objectives of secondary education in which emphasized on:- (i) preparation of students for useful living within the society; and (ii) preparation of students for higher education as contained in the National Policy on Education (FRN, 2004). Hence, teaching professional need to have the skills, knowledge and training needed to cope with the many changes and challenges which lie ahead. This explained why Maduekwe (2007) observed that in spite of the fact that most of the teachers have teaching qualifications, many of them do not have adequate knowledge of some concepts and they ended up imparting the wrong knowledge to their students. Considering that this situation is a serious problem in the teaching profession which constitutes threat to the attainment of quality assurance of most educational programme in Nigeria, the researcher investigated the academic achievement of business studies students taught by subject specialist and those taught by non-specialist in selected Junior Secondary Schools in Gadabuke metropolis in Toto Local Government of Nasarawa state.

Statement of the Problem

Teaching is a complex task that demands training, intelligence, skills and ability to impart desired knowledge from one generation to another. Researches in education by organisation and individuals such as The Organisation for Economic Co-operation and Development (OECD) (2005), Musset (2009) and Adamu & Sani (2013) acknowledge that, teachers' area of specialization, their skills and competencies are essentials on students' academic achievement of students in schools.

In spite of the apparent merit attached to knowledge, skills and competency in teaching profession, there are still many secondary schools particularly in Gadabuke metropolis where area of specialization is not considered in subject allocation. This placed a serious problem on students' academic performance. Ogunu (2001), Ipaya (2002), Ayeni and Akinola (2008) and Zobaida (2008) cited wrong subject allocation as one of the problems affecting quality of education in Nigeria. The scenario instigated the researcher to determine the academic achievement of students taught by trained business studies teachers and those who are not trained in Junior Secondary School Examination in Gadabuke metropolis in Toto Local Government.

Objectives of the Study

The objectives of this study are to:-

1. Determine the differences that exist on the Problem solving skills of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis in Toto Local Government.

2. Determine the differences that exist on the approaches to questions of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis in Toto Local Government.
3. Determine the differences between performance of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis in Toto Local Government.

Research Questions

As a guide, the following research questions were raised

1. What is the difference in the Problem solving skills of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis in Toto Local Government?
2. What is the difference in the approaches to questions of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis in Toto Local Government?
3. What is the difference between performance of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis in Toto Local Government?

Null Hypotheses

The following null hypotheses were raised and tested at 0.05 level of significance.

1. There is no significant difference in the Problem solving skills of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis in Toto Local Government
2. There is no significant difference on the approaches to questions of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis in Toto Local Government
3. There is no significance difference between performance of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis in Toto Local Government

Methodology

Developmental research design was adopted in the study. In this study, results of students that were taught by trained business studies were compared with the results of those students taught by non business studies specialist. The researchers targeted 257 JS III students that offered business studies in the selected Junior Secondary School Examination in 2012/2013 calendar year. The students' JSCE final examination scripts were the main instrument used to answer research questions and test the three null hypotheses. The researchers used teachers that directly participated

in the marking the Junior Schools Certificate Examination for the year as research assistant. Before marking the scripts, the researcher went round the three schools to determine the area of specialization of teachers that handled the subject. Out of the three schools studies, only one school had specialist in the subject.

Descriptive statistics of means was used to answer the research questions while t-test statistical tool was used in analyzing the data in the test of null hypotheses. Students' score in aspect of Book keeping were used to answer research question one and test of null hypothesis one. Scores awarded in area of office practice and commerce were used to answer research question two and null hypothesis two while the overall scores were used to determine the level of performance in research question three and null hypothesis three. The analysis of data was presented according to the specific research question and hypothesis. All the null hypotheses were tested at significant level of 0.05.

Research Question One: What is the difference in the Problem solving skills of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis of Toto Local Government?

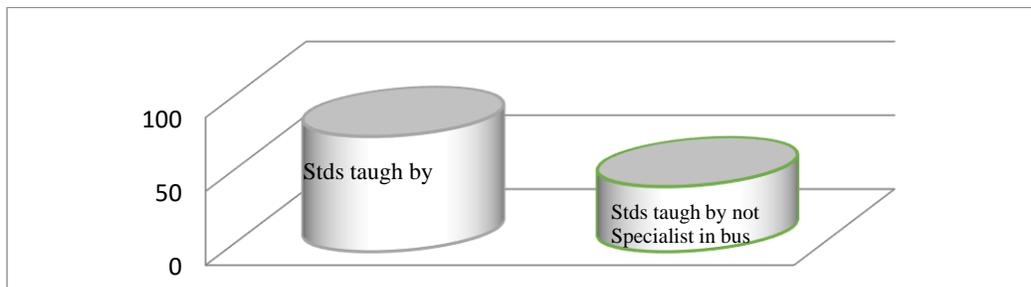


Figure One: Difference in the mean scores on skills of students taught by trained business studies teachers and those who are not trained

Analysis of data used to answer research question one shows a mean skills score of 67% for students taught by specialist in business studies which was greater than 41% for those that were taught by non specialist. The mean difference between the two groups was 26%. It was observed that, students taught by specialist in business studies appeared to be more skillful in skill in problem such as shorthand and book keeping.

Research Question Two: What is the difference in the approaches to questions of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis of Toto Local Government?

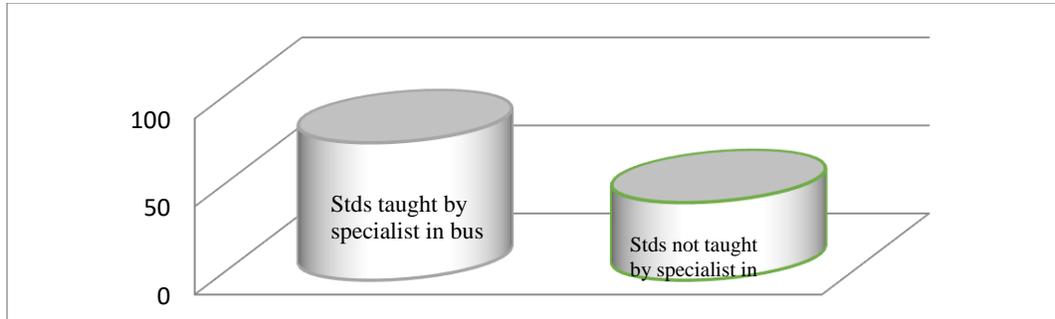


Figure Two: Difference in the mean scores on approaches to questions of students taught by trained business studies teachers and those

Analysis of data used to answer research question two shows that students that were taught by specialist in business studies have mean score of 58% in their approaches to question against their counterparts with 44% that were taught by non specialist. The analysis therefore shows that students that were taught by specialist were better in approach to questions; hence advantage mean score of 14% was accounted for them.

Research Question Three: What is the difference between performance of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis of Toto Local Government?

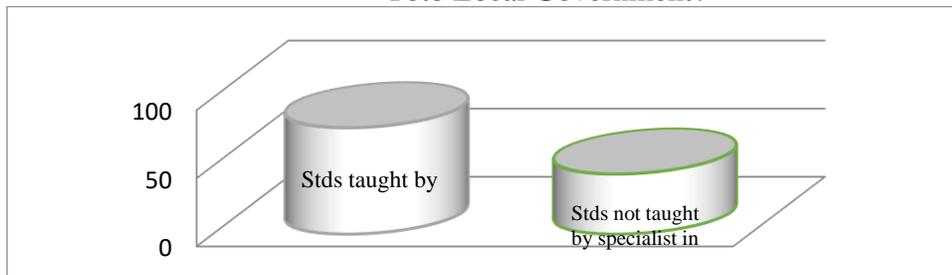


Figure Two: Difference in the mean performance of students taught by trained business studies teachers and those who are not trained

The analysis of data used to answer research question three shows mean performance of 78% for students taught by specialist in business studies. Those that were taught by non specialist have a mean performance of 42%. The analysis therefore indicated a mean difference of 36% in favour of students taught by specialist in business studies. The result further showed that, students who were taught by trained business studies teachers have the potentials of performing better in the subject.

Test of Hypotheses

T-test was used to test all the null hypotheses at significance level of 0.05. Results of test are presented in Table 1 to 3.

Hypothesis One: There is no significant difference in the Problem solving skills of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis of Toto Local Government.

Result of data used to test null hypothesis one is as presented in Table 1

Table 1: Test of differences in the skills of students taught by trained business studies teachers and those who are not

Groups	N	X	SD	df	t-cal	t-table	Decision
Students taught by specialist	112	67	3.01	255	2.09	1.96	Rejected
Students not taught by specialist	145	41	2.11				

Analysis of data used to test null hypothesis one in Table 1 shows a mean score of 67% for students that were taught by specialist in business studies against 47% for those taught by non specialist with standard deviation of 3.01 and 2.11 respectively. From the Table, the calculated value was 2.09 found to be greater than table value of 1.96. The analysis indicates that students taught by trained teachers have more skill in problem solving. Hence the null hypothesis is therefore rejected

Hypothesis Two: There is no significant difference on the approaches to questions of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis of Toto Local Government.

Analysis of data used to test null hypothesis three is presented in Table 2.

Table 2: Test of differences on the approaches to questions between students taught by trained business studies teachers and those who are not trained

Groups	N	X	SD	df	t-cal	t-table	Decision
Students taught by specialist	112	58	2.99	255	1.99	1.96	Rejected
Students not taught by specialist	145	44	1.98				

Table 2 presents the results of null hypothesis two. From the Table, the mean score of 58 was recorded for students that were taught by specialist in business studies with standard deviation of 2.99 against 44 and 1.98 for those taught by non specialist. The t-cal (1.99) was t.cal was found to be greater than t.crit value (1.96). Hence null hypothesis which states that there is no significance difference on the approaches to questions of students’ taught by trained business studies teachers and those who are not is rejected.

Hypothesis Three: There is no significance difference between performance of business studies students taught by subject specialist and those taught by non-specialist in Junior Secondary Schools in Gadabuke metropolis of Toto Local Government.

T-test analysis used to test null hypothesis three is as presented in Table 3.

Table 3: Test of differences between performances of students taught by trained business studies teachers and those who are not trained

Groups	N	X	SD	df	t-cal	t-table	Decision
Students taught by specialist	78	78	3.07	255	2.05	1.96	Rejected
Students not taught by specialist	62	44	1.91				

Table 3 presents the results of the analysis conducted to test null hypothesis three. The result shows mean performance of 78 and 44 with standard deviation of 3.07 and 1.91 for students who are taught by specialist in business studies and those who are not. The calculated value was 2.05 against the critical value of 1.96. The result therefore shows that the performance of students’ that were taught by trained business studies teachers is better than their counterparts who are not taught by trained business teachers. Hence the null hypothesis is not accepted.

Discussion of the Results

Result of research question one and that of null hypothesis one indicated that students who are taught by trained business studies teachers are more skillful in problem solving. The result of the study is similar with that of Wenglinsky (2002), Gustafsson (2003), Wayne & Wayne and Youngs (2003) who all emphasized on importance of specialization and teaching skills on students academic achievement. Clotfelte, Ladd, & Vigdor (2008) further affirmed that, there have positive relationships between teachers' area of specialization and student educational achievement. Galgher, Resenthal & Stephen (2004) in Adamu (2013) observed that specialist in a subject can help students to develop better at problem-solving skills and encourage them to work together; learn critical thing skills and they will become self-directed learners. Yusof (2008) pointed out that trained teachers have better understand and skills to impart desire knowledge to students.

The study further revealed that students that were taught by business studies specialist have better approaches to questions than their counterparts who are taught by non specialist. This finding further affirmed the findings of Ballantine and McCourt (2009), Peterson and Miller (2004) who discovered that trained teachers who specialised in subject area they are teaching tend to improve in the students' interpersonal relations and communication skills. Similarly, Barnett, Alesha and Alan (2010) reported that knowledgeable teachers have the potentials to collaborate leadership (within and beyond the classroom) that can increase their efficacy and effectiveness, and improve the skills of students on how to answer questions.

Results of data collected also show that students that are taught by business studies specialist perform better in their achievement examination than those that are taught by non business studies specialist. Research in the field of teacher education tends to support this. A recent study by Decker, Mayer and Glazerman (2004) revealed that alternatively trained teachers who are knowledgeable in the subject produce greater achievement gains for their students. Supporting this view, Fajonyomi (2007) opined that the success of any educational enterprise depends largely on the availability of professional teachers. This is possible because the trained teachers have been taught the technical know-how for effective learning to take place in the learners. Similarly, Ghaith (2003) and Wheelan & Lisk (2000) also observed that handling area of specialization lead to higher academic achievements, increased productivity, more efficient processing and exchange of information, positive relationships among students and greater development of trust, social support and class cohesion than do competitive and/or individualistic learning situations. Akinsolu (2010) earlier asserted that availability of qualified teachers determined the performance of students in schools. Barnett Berry, Alesha Daughtrey, and Alan Wieder (2010) previously established that positive correlations exist between subject-specific professional development and student achievement growth.

Summary and Conclusion

From the outcome of the study, the researchers concluded that:-

1. students that were taught by subject specialist appear to be more skillful have better understanding of the subject. This foundation will enhance their performance and prepare them for future educational challenges in the related subjects at Senior Classes.
2. students that were taught by non specialist will not be well groom in the subject. This foundation will affect their performance and discourage them. In addition they will not be well prepare for future educational challenges in the related subjects at Senior Classes.

3. the primary objectives business studies in Junior Secondary Schools which emphasized on developing in students a deeper understanding of the world of business and to increase their knowledge and skills in the areas of book keeping, shorthand, office Practice, commerce and typewriting will not be fully achieved.

Recommendations

It is therefore recommended that:

- i. principals and heads of departments in secondary schools should imbibe the culture of making subject allocation based on teacher's area of specialization. This seeks to improve teachers' methodology, skills, efficiency and attitude in the classroom.
- ii. teachers should be provided with the opportunities for professional development. This will help to develop teacher's skills, competency and understanding of their subjects.
- iii. school principals and heads of departments should promote capacity development of teachers through internal intensive and regular seminars/workshops based on needs assessment of professional practices of teachers. This will help them to become more confident in themselves, improve their knowledge, pedagogical skills and competence in their subjects, with a view to enhancing the quality of teaching and learning processes in schools.

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