SEX OF TEACHERS AS CORRELATES TO STUDENTS’ PERFORMANCE IN BASIC TECHNOLOGY IN EDO STATE FOR NATIONAL DEVELOPMENT

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ABSTRACT

The study examined sex of teachers as correlates of student’s performance in Basic Technology in Edo State for national development. The population for this study was two hundred and forty-nine (249) students chosen from 18 schools from 3 Local Government Areas of Edo State of Nigeria. Thirty-two (32) respondents were used for this study, and the data that was collected was analyzed. The calculated correlation value fell within the acceptance region. This result allowed for the retention of the null hypothesis which states that there is no significant influence of teachers’ sex on academic performance of students in Basic Technology in Edo State. The researcher concluded that while the sex of the teachers is an important variable, it is not one that can influence students’ academic performance in Basic Technology in Edo State. It was recommended that the government should recruit Basic Technology teachers whether male or female, since gender has influence on the performance of students in Basic Technology in Edo state and that Basic Technology teachers whether male or female should be motivated by ways of giving them scholarship for further studies.

Keywords: Development, National, Performance, Teachers, Technology

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INTRODUCTION

Education is the process by which the society assists individuals to learn and understand the heritage of the past, participate productively, positively, and contribute meaningfully to the development of the society. Education is the wise, hopeful, and respectful cultivation of learning undertaken in the belief that all students have the chance to share in life, it is cultivating hopeful environments and relationships for learning. Educators need to focus on creating environments and relationship for learning rather than trying to drill knowledge into people. Education is all about the belief that all share in life and a picture of what might allow people to be happy and flourish which is a concern to act respectfully, knowledgeably, and wisely, joining with others to build relationships and environment for learning, at the various levels of education (Smith, 2015).

Pre-vocational education is a component of Technical, Vocational Education and Training that is at the junior secondary school level in Nigeria. It is an aspect of TVET that introduce children and youth to the world of work through exploratory activities with tools and machinery, materials, and processes of modern technology as part of general education for effective living in an environment which has become a technologically built (Uwameiye, 2010). The exposure of students to pre-vocational education also helps them explore their interests and aptitude, through prevocational education, students may also develop desirable traits and aptitudes such as pride in productive work and respect for authority (Uwameiye, 2017). At the Junior Secondary School level of education in Nigeria, Basic Technology is a component of pre-vocational education and is one of the compulsory subjects. The main purpose of Basic Technology at this level is to make the young learners create change in their learning environment. Basic Technology is taught in the Junior Secondary School level providing broad field of knowledge for a linkage for basic electronics, automobile, airflow, water flow, physics, chemistry, food preservation, ceramics, plastics, and building. The objectives of Basic Technology are:

1) provide pre-vocational orientation for further training in technology.
2) provide basic technological literacy for everyday living.
3) stimulate creativity and innovation (Federal Ministry of Science and technology, 2007)

Whereas these objectives of Basic Technology are laudable, but there are teachers’ factors impediments - such as sex of the teachers, that may not allow for easy realization of the objectives.

The sex of the teacher is also important when discussing the characteristics of the teacher. Teachers have great influence on the academic performance of students, whether the students perform well or poorly, the teacher has a crucial role to play in students’ educational attainment. In the teaching of subjects such as Basic technology, the sex of the teacher might have a relationship with the students’ academic performance because many people believe that girls don’t do well in practical subjects when they are taught by a male teacher this is in line with Lu and Song (2012), stated that girls are more likely to feel depressed, blue, or unhappy at school than boys if taught by a male teacher. They went further to say that female teachers improve girls’ overall satisfaction at school, as well as their social acclimation with classmates. In addition, female teachers counter the perception that girls are not as strong in Mathematics, and Science. While the gender might be a variable on academic performance, the continuous training of teachers (regardless of gender) will help to boost their level of confidence as well as their efficiency on the job (Okoro, 2011).
The Study was carried out on three Local Government Areas of Edo State: Egor, Esan – Central, and Owan – East. These Local Government Areas are highlighted in blue in the map of Edo (Figure 1).

The study is justified to be carried out because of the beliefs as found by other Researchers that girls perform poorly in practical subjects when they are taught by a male teacher, that girls are more likely to feel depressed if taught by a male teacher and that female teachers tend to improve overall satisfaction of female students at school.

The aim of the study is to proffer a statistical answer to the research question which bothered on the extent of the influence of the sex of teachers on secondary school student’s academic performance in Basic Technology in Edo State.

The research question that was raised to guide the study is:
To what extent is the influence of sex of the teachers on secondary school student’s academic performance in Basic Technology in Edo State?

The hypothesis that was tested at 0.05 level of significance in this study is:
There is no significant influence of sex of teachers on academic performance of students in Basic Technology in Edo State.

MATERIALS AND METHODS

This study utilized correlational survey research design; the design was chosen because correlational survey is used to determine the extent of relationship that exists between two variables. This design is applied to a study that seeks to establish if linear relationship exists between two or more variables. Such studies indicate the direction and the magnitude of the relationship between the variables being studied (Omorogiuwa, 2006). The design is one in which the investigator wishes to search back for possible factors that contributed to the variation in one factor and the extent to which the variation corresponds to a change in other factors. The design is very useful to this study because the design is appropriate in situations where the variables involved in the study cannot be controlled or manipulated.

The population of the study consists of all JSS III (249) students of all the Junior Secondary Schools in the three senatorial districts of Edo State drawn from the three senatorial districts through simple random sampling method.

The sample size for this study was 32 teachers and 249 students of Basic Technology which were randomly selected from Egor, Owan – East and Esan – Central Local Government Areas. Six schools were selected from each L, G. A. through the balloting sampling technique from 6 secondary schools in each Local Government Area. The number of teachers from each school in the various Local Government Areas can be seen in Table 1.

The following instruments were used for this study:
1. Basic Technology Teachers Gender Questionnaire (BTTGQ)
2. Basic Technology Examination Results, 2013 – 2017

The Basic Technology Teacher Questionnaire (BTTFGQ) was demographic in nature to collect data from teachers. The teachers were required to tick the appropriate responses applicable to them and answer questions like sex of the teacher, location of school and name of school.
The instruments were administered by the researcher and two trained research assistants to help the researcher. The researcher and research assistants visited the 18 sampled secondary schools to administer the instruments. The instruments were administered to the teachers sampled from the 18 secondary schools for the study. The co-operation of the principal in each of the schools was solicited for by the researcher. The Junior Secondary School Examination Results for the sessions under study were requested for.

The instruments were administered within six weeks mainly due to long distances to the various locations of the schools; the instruments were retrieved on the spot to enhance maximum return.

RESULTS AND DISCUSSION
The data collected from the schools were analyzed using inferential statistics, and Point-Biserial Correlation Coefficients. The level of performance of the students of Basic Technology from 2013 – 2017 can be seen in table 2.

RESEARCH QUESTION
To what extent is the influence of sex of the teacher on secondary school student academic performance in Edo State? From Table 3, male teachers make up 54.5% of the total teachers sampled while, female teachers make up 45.5% of the population.

HYPOTHESIS
There is no significant influence of teacher’s sex on academic performance of students in Basic Technology in Edo State. Table 4 shows a Point-Biserial Correlation of 0.11 and a p-value of 0.292 testing at an alpha level of 0.05, The calculated value falls within the acceptance region.

CONCLUSION
Based on the findings of this study, it is concluded that while the sex of the teachers is an important variable, it does not influence academic performance in Basic Technology in Edo State.

Furthermore, based on the findings the researcher recommends the following:

1. The government should recruit Basic Technology teachers whether male or female since gender has no influence on the performance of students in Basic Technology in Edo state.
2. Basic Technology teachers whether male or female should be motivated by ways of giving them scholarship for further studies.

COMPETING INTERESTS
The author declares that there are no competing interests.
**TABLES AND FIGURES**

### Table 1: Number of Teachers in each School in each Local Government Area

<table>
<thead>
<tr>
<th>S/N</th>
<th>Sampled LGA</th>
<th>Sampled Schools</th>
<th>Number of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>

### Table 2: Level of Performance in Basic Technology 2013 - 2017

<table>
<thead>
<tr>
<th>Year</th>
<th>No of students that sat for the exam</th>
<th>No of students that passed with distinctions (A &amp; B)</th>
<th>No of students that passed with Credit (C)</th>
<th>No of students that passed with Pass grade (P)</th>
<th>No of students that failed the exam (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>1959</td>
<td>94 (4.79%)</td>
<td>357 (18.22%)</td>
<td>459 (23.45%)</td>
<td>1049 (53.54%)</td>
</tr>
<tr>
<td>2014</td>
<td>1779</td>
<td>97 (5.45%)</td>
<td>364 (20.46%)</td>
<td>306 (16.20%)</td>
<td>1017 (57.16%)</td>
</tr>
<tr>
<td>2015</td>
<td>1855</td>
<td>152 (8.19%)</td>
<td>229 (12.18%)</td>
<td>226 (12.18%)</td>
<td>1248 (67.27%)</td>
</tr>
<tr>
<td>2016</td>
<td>1802</td>
<td>71 (3.94%)</td>
<td>106 (18.59%)</td>
<td>335 (18.59%)</td>
<td>1290 (75.58%)</td>
</tr>
<tr>
<td>2017</td>
<td>1811</td>
<td>87 (3.69%)</td>
<td>135 (7.45%)</td>
<td>235 (12.97%)</td>
<td>1374 (75.86%)</td>
</tr>
<tr>
<td>Total</td>
<td>9206</td>
<td>481 (5.22%)</td>
<td>1191 (12.94%)</td>
<td>1561 (16.96%)</td>
<td>5978 (64.95%)</td>
</tr>
</tbody>
</table>

**Source:** Edo State Ministry of Education, Iyaroe, Benin-City

### Table 3: Percentage Distribution on Teachers Gender

<table>
<thead>
<tr>
<th>S/N</th>
<th>Status</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td>Male</td>
<td>18</td>
<td>54.5</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Female</td>
<td>14</td>
<td>45.5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>32</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 4: Point – Biserial Correlation of Performance of Students Taught by both Genders

<table>
<thead>
<tr>
<th>Sex</th>
<th>N</th>
<th>$\bar{x}$ (score)</th>
<th>Point-Biserial r</th>
<th>P</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>18</td>
<td>56</td>
<td>.11</td>
<td>.292</td>
<td>Retained</td>
</tr>
<tr>
<td>Female</td>
<td>14</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sd = .38; $\alpha = .05$

Figure 1: Location of the study highlighting the country (green), the state (red) and the local government areas (blue)

REFERENCES


Uwameiye, R. (2017). Venturing into Technical Vocational Education and Training in Nigeria: The Skilled, the Killed or be Killed Paradox. 66th Inaugural Lecture Ambrose Alli University Ekpoma, Edo State, Nigeria.
