A COMPARATIVE STUDY OF MALE AND FEMALE STUDENTS IN AGRICULTURE AND BIOLOGY IN KWARA STATE COLLEGE OF EDUCATION, ILORIN.

BY

ADEYINKA, CHARLES, OLUFOLARIN

MECHANICAL ENGINEERING DEPARTMENT

FEDERAL POLYTECHNIC, OFFA.
ABSTRACT
This study was carried out to determine if there were significant differences in the performance of male and female students in Agriculture and Biology of the final year students of 2002 set in the department of agricultural education, kwara State College of Education, Ilorin. The data for the study is the result of the NCE 111 final year and were personally collected from the schools’ head of departments. Essentially, their cumulative Grade Point Average(CGPA) were used. A t-test was employed to analyze the students’ result at an alpha level of 0.05. Statistics revealed that there was no significant difference in the overall performance between the male and female students in the 2002 set. A number of recommendations were made to the teachers, government and parents to changing the orientation that everybody has a role to play in order to develop this nation especially in the area of Agriculture, which in one of the aims of millennium development goals, a challenge for today’s intellectuals.

Key words: Agriculture, biology, female students, male students performance

INTRODUCTION

Agricultural science is an elective course in senior secondary school and the students who want to further in agriculture go for universities, Polytechnics and college. In college of Education as it is found in other tertiary institutions, agricultural science is in the school of vocation technical Education. The importance of agriculture to West Africa is also a challenge to every student studying the subject, for it is mainly on agriculture that the prosperity of West Africa depends. These are the production of food for the growing population, the production of feeds for animals, the production of fibers for the industries, the production of employment and the foreign exchange earnings[ 1 ]. [ 2 ] said that agricultural science is a subject, which cannot be ruled out
in the midst of other science subjects. It is a vocational subject, which holds the key to the survival of living beings as any periodical food shortage to the people will make them undernourished.

A study on students in Makerere University in Uganda shows the drop in the rate of male to be three percent (3%) in comparison to twenty percent (20%) for female in another work on factors affecting female participation in education in some developing countries of Africa e.g. Guinea, Malawi, Rwanda, by [3] indicated that teachers believed that males are academically superior to females. In addition [3] stressed that the students in Cameroun, Kenya, Malawi revealed that both male and female have low expectation of career prospects.

Agricultural science is faced with many difficulties in Nigerian schools even though the subject is given a place of prominence in the national policy of education. One of the difficulties of agricultural science in the practical performance of students in fieldwork. The farmers' use of fertilizers can improve the fertility of the soil, irrigation during the dry season can enable the farmer to grow crops throughout the year, health and productivity of livestock can be improved by careful feeding. Government action in support of agricultural research and agricultural extension work.

Hence, the study is to analyze the number of students sex-by-sex that have studied agricultural education from 1997 to 2002 and their levels of performance in their final results at the College of Education, Ilorin. The analyses aim at ascertaining whether or not biological differences necessarily determine what males and females are able to do in agriculture.
HYPOTHESIS: The following hypothesis were formulated for the study.

1. There is no significant difference in the performance of male and female students in agricultural fieldwork in kwara state college of education, Ilorin.

2. There is no significant difference in the performance of male and female students in biology.

3. There is no significant difference in the performance of male students in agriculture and biology.

METHODOLOGY: For the purpose of this study the descriptive method of survey was used. The reason for choosing this method is that it allows for systematic and accurate method of getting the desired results. It is also aim at comparing male and female students performance in agriculture and biology in kwara state college of education, Ilorin. Secondary data were collected from the head of department (HOD), Agriculture Education, the results or scores of the students in 1997-2002 NCEIII final year for particular areas of agriculture and biology for male and female students. To test the hypothesis, a t-test statistical analysis was employed. The method was used because it is considered to be the most appropriate method of comparing means of two groups, which are subjected to the same condition. The mean scores of the male and female students performance in agriculture and biology were compared at an alpha level of 0.05 or 95% confidence interval of difference. All the statistical analysis were performed on a microcomputer using SPSS 11.0 for windows[ 4 ]. The standard deviation, one-sample test, and scheffe ad hoc at the probability level of 0.05% were computed.
RESULT AND DISCUSSION

Table I: The difference in computed final result of Agricultural fieldwork (2002 set)

<table>
<thead>
<tr>
<th>Period</th>
<th>Sex group</th>
<th>No of students</th>
<th>Mean score</th>
<th>Std. deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>Female</td>
<td>20</td>
<td>2.698</td>
<td>0.561</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>30</td>
<td>2.732</td>
<td>0.627</td>
</tr>
</tbody>
</table>

Hypothesis 1 is fulfilled in table 1, it could be observed that the males mean score was slightly higher than that of the females, 2.732 and 2.698 respectively. Likewise the standard deviation of 0.627 and 0.561 respectively, shows male higher than female.

Table II: The difference in computed final result of Biology (2002 set)

<table>
<thead>
<tr>
<th>Period</th>
<th>Sex group</th>
<th>No of students</th>
<th>Mean score</th>
<th>Std. deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>Female</td>
<td>20</td>
<td>2.698</td>
<td>0.561</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>30</td>
<td>2.732</td>
<td>0.627</td>
</tr>
</tbody>
</table>

Hypothesis 2 is fulfilled. The mean score of male is slightly higher than female from table II.
Table 111: The t-test analyses of male and female performance is agriculture and biology used in the relationship.

<table>
<thead>
<tr>
<th>Period</th>
<th>Sex group</th>
<th>No of students</th>
<th>Mean score</th>
<th>Std. deviation</th>
<th>Df</th>
<th>Tcal</th>
<th>Ttab</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>Female</td>
<td>20</td>
<td>2.698</td>
<td>0.561</td>
<td>29</td>
<td>6.398</td>
<td>44.56</td>
</tr>
<tr>
<td></td>
<td>male</td>
<td>30</td>
<td>2.732</td>
<td>0.627</td>
<td>29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From table 111, it shows that the t-calculated of 6.398 and the t table as 44.56. Comparing the two values show that t calculated is less that t table implying the acceptance of the hypothesis 3. Thus there is no significant difference between the male and the female students performance in agriculture and biology.

CONCLUSION

The statistical analysis of the students overall performances of the 2002 set revealed that there was no significant difference in the academic performances of the male and female students in Agriculture and Biology. [5] shows statistical outcome of the study showed that Agriculture and Biology involves physical activities such as land clearing, ridging, planting, fertilizer application, harvesting, and processing, laboratory practical works, e.t.c. does not prevent the females from performing equally well with their male counterparts. This situation seems to agree with the report of [6], and [7] that gender analysis of performance is not on biological differences. This is one of the aims of the millennium development goals, a challenge for today’s intellectuals that every hand must be on deck to develop this nation especially in the area of Agriculture.
RECOMMENDATIONS

In view of the findings of the study, the study recommends the following:

1. The student irrespective of sexes should be encourage to offer any course that they like.

2. Thus teachers should motive them in this regards.

3. The government should encourage female students in the drive to attain self- sufficiency in food production.

REFERENCES


SHORT PROFILE OF THE AUTHOR

Dr. Adeyinka, Charles Olufolarin is a principal lecturer at Mechanical engineering Department of Federal Polytechnic, Offa. He has B. Eng, M. Eng and Ph.D. He specialized in renewable energy. He has interest in engineering education. He is a registered engineer with the council for the regulation of engineering in Nigeria[COREN]. He is a pastor.