

GENDER INFLUENCE ON STUDENTS' PERFORMANCE IN AGRICULTURAL SCIENCE IN BASIC EDUCATION CERTIFICATE EXAMINATION (BECE) IN KWALI AREA COUNCIL, FEDERAL CAPITAL TERRITORY (FCT), ABUJA

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ABSTRACT

This study was carried out to establish gender influence on students' performance in Agricultural Science in the Basic Education Certificate Examination in Kwali Area Council of FCT in the 2013/2014 examination session. The population of the study was 2,172 students, 190 students made up of 97 females and 93 males were randomly selected as the sample for the study. The students' Agricultural Science results in Basic Education Certificate Examination for 2013/2014 academic session accessed through Educational Resource Centre, Abuja, were analyzed to answer the research questions and hypotheses with the aid of percentage count and chi-square non-parametric test statistics respectively. The findings of the study revealed high level of performance by the students - 24 male students representing 12.63% passed the examination with distinction; 64 representing 33.69% had credit; 5 representing 2.63% had pass with no male student who failed. 27 female students representing 14.21% had distinction pass level; 63 representing 33.16% had credit passes and 7 representing 3.68% had pass with no female student who failed in the examination., the analysis of the hypothesis showed that, there is no significant difference in Students' performance in Agricultural Science in Basic Education Curriculum Examination based on their gender. Based on the findings, the following recommendations were put forward: that the style of assessment be sustained; education authorities should ensure that the terminal examination for the Junior Secondary Schools in the country is uniform; the examination is conducted by an assigned examination body so

that the result obtained can be tenable in any part of the country since the implementation of the 9-Year Basic Education Curriculum is a nationwide programme.

Keywords: Agricultural Science, Basic Education Certificate Examination, Gender Influence, Students' Performance,

INTRODUCTION

The 9-Year Basic Education Curriculum was introduced, made free and compulsory for all Nigerian children as an educational programme to run without breaking for nine years with the aim of achieving literacy. A key objective of the current National Policy on Education is the attainment of Universal Basic Education (UBE) by 2015 in line with the MDGs for education. The Federal Constitution of 1999 stipulates that the government should provide free education for all citizens as soon as possible. Education is a key component of the Vision 20:2020. Subsequently, both Federal and State Governments are seeking overall control and funding of basic education in order to ensure the attainment of the Universal Basic Education (UBE) goals and objectives. (World Bank Group, 2015).

At the completion of the 9-Year schooling terminal assessment examination for grandaunts who intend to continue schooling at the Senior Secondary School Levels are determined by the performance of the students from this examination that are conducted by the States' Ministry of Education of each State in the country. For the Federal Capital Territory, the Educational Resource Centre (ERC) is saddled with this responsibility and the examination is known as Basic Education Certificate Examination (BECE). A total mark of 30 % is apportioned for continuous assessment broken into 12.5% from cumulative JSS I result another 12.5% from cumulative JSS II result and 5% from cumulative first and second term of JSS III. The actual examination is based on 70%. (Educational Resource Centre, Abuja: Examination Management System 2013/2014).

Performance assessment based on gender is to discover differences between girls and boys performance academically. Some fields of study have been termed or regarded as males' (Engineering, Arts, Craft and Agricultural Science as a science and vocational subject is viewed by many as males' while catering, typing and nursing etc are regarded as those of females. The believe is that females are weaker vessels and do not have the physical strength to engage in certain subjects that require tasks. Fatokun and Odagboyi

(2011) noted that in most societies, the role of women is not giving prominence as their male counterparts, therefore, preventing them from participating in and benefiting from development offers. They added that some subjects such as science and mathematics are branded. In the same vein, Nwona (2015) noted in his study that Science, Technology and Mathematics were masculine subjects.

The role of gender (male and female) is very significant in the sustenance and development of any nation. Animasahum, (2007) argued that both boys and girls can perform brilliantly in learning if they are exposed to the same learning opportunities. This is critical for subject like Agricultural Science which culturally may have been classified as male or masculine inclined subject. In a study carried out by Fasiku (2011) in comparing the knowledge of male and female teachers in Social Studies, the researcher concluded that male social studies teachers were very vast in the knowledge of environment education than female social studies teachers.

Literature abound about classifying or regarding science subjects, technology, and mathematics as masculine while subjects like Economics, Secretarial Studies, catering etc are referred to as feminine subjects. Curricular are designed for study programme of various type with objectives that when learners are exposed to, can achieve. In view of the belief that students' gender may have impact on the students' academic performance, this paper therefore seeks to determine the performance of students in Agricultural Science in Basic Education Certificate Examination (BECE), and a subject termed to be masculine.

The purpose of this study was to assess the influence of gender in the students' performance in Agricultural Science in the 2013/2014 terminal Basic Education Certificate Examination (BECE) in Kwali Area Council of FCT.

The objectives of the study were to determine:

1. The level of students' performance in Agricultural Science in the Basic Education Certificate Examination (BECE) in Kwali Area Council of FCT
2. The extent of gender influence on students' performance in Agricultural science in the Basic Education Certificate Examination (BECE) in Kwali Area Council of FCT

The following research questions were raised to guide the study:

1. What is the level of Students' Performance in Agricultural Science in Basic Education Certificate Examinations (BECE) in Kwali Area Council of FCT?

2. To what extent is gender influence on Students' Performance in Agricultural Science in Basic Education Certificate Examinations (BECE) in Kwali Area Council of FCT?

The following hypothesis was formulated and tested at 0.05 level of significance.

Ho₁: There is no significant difference in Students' performance in Agricultural Science in Basic Education Curriculum Examination based on their gender

METHOD

This study used the descriptive survey and ex-post facto research type. The students' Agricultural Science results in Basic Education Certificate Examination for 2013/2014 academic session for Kwali Area Council of the Federal Capital Territory accessed through the Educational Resource Centre, Abuja was used for the study. A total of 190 students randomly selected from the population of 2,172 were used as sample, out of this figure, 93 were males and 97 were females. The grading of the examination results were: 0 – 39 was fail (F), 40 – 54 was pass (P), 55 – 69 was Credit (C) and, 70 and above was distinction (A). Frequency and percentage count was employed in the analysis of the data to answer the two research questions raised to guide the study while the only hypothesis for the study was tested at 0.05 significant difference(s) on gender performance using chi square statistical data.

RESULTS

Research Question 1:

What is the level of Students' Performance in Agricultural Science in Basic Education Certificate Examinations (BECE) in Kwali Area Council of FCT?

Table 1: Percentage of Students' Performance in the Agricultural Science in the Basic Education Certificate Examination (BECE)

| Distinction % | | Credit % | | Pass % | | Fail % | | Total % | |
|---------------|-------|----------|-------|--------|------|--------|---|---------|-----|
| 51 | 26.84 | 127 | 66.84 | 12 | 6.32 | 0 | 0 | 190 | 100 |

Table 1 above showed that, of the 190 students, 51 representing 26.84% scored distinction; 127 students representing 66.84% had credit; 12 students representing 6.32% had pass and none of the students failed in the examination.

Research Question 2:

To what extent is gender influence on Students' Performance in Agricultural Science in Basic Education Certificate Examinations (BECE) in Kwali Area Council of FCT?

Table 2: Students' Performance in the Agricultural Science in the Basic Education Certificate Examination based on gender

| Gender | Distinction % | | Credit % | | Pass % | | Fail % | | Total % | |
|--------|---------------|-------|----------|-------|--------|------|--------|---|---------|-------|
| Male | 24 | 12.63 | 64 | 33.69 | 5 | 2.63 | 0 | 0 | 93 | 48.95 |
| Female | 27 | 14.21 | 63 | 33.16 | 7 | 3.68 | 0 | 0 | 97 | 51.05 |
| Total | 51 | 26.84 | 127 | 66.85 | 12 | 6.31 | 0 | 0 | 190 | 100 |

Table 2 above revealed that, 24 male students representing 12.63% passed the examination with distinction; 64 representing 33.69% had credit; 5 representing 2.63% had pass with no male student who failed. For the female students, 27 representing 14.21% had distinction; 63 representing 33.16% had credit passes and 7 representing 3.68% had pass with no female student who failed in the examination.

Research Hypothesis

Ho₁: There is no significant difference(s) in Students' performance in Agricultural Science in Basic Education Curriculum Examination based on their gender

Table3: Chi square analysis of gender Performance in Agricultural Science in Basic Education Certificate Examination

| Df | Calculated Chi | Critical or Table Chi |
|----|----------------|-----------------------|
| 2 | 2.158 | 5.991 |

@ 0.05 level of significance with 2 degree of freedom, table chi is 5.991. Therefore, the critical chi is greater than the calculated chi which is 2.158. Since the critical chi is greater than the calculated chi, the null hypothesis which state that: *T h e r e i s n o significant difference in Students' performance in Agricultural Science in Basic Education Curriculum Examination based on their gender* is retained.

DISCUSSION

The finding of the study as shown in table 1 revealed that the students' performance in Agricultural Science in the Basic Education Certificate Examination (BECE) 2013/14 (terminal 9-Year Basic Education Examination) in Kwali Area Council of the Federal Capital Territory was high with 26.84% distinction pass level; 66.84% credit pass level; 6.32% pass level with no failure. The high performance of students in this examination could be as a result of the continuous assessment mark of 30% left in the hands of the teachers through the schools. The teachers may have taught the students properly to the point that resulted in their performance or it could be that the teachers assisted the students to build up some level of scores that assisted the students in the overall performance in the examination.

The study further revealed as shown in table 2 that the students' high performance cut across both the males and the females students. There was no failure in the 2013/14 Agricultural Science in the Basic Education Certificate Examination (BECE) in Kwali Area Council of the Federal Capital Territory. The only hypothesis that guided the study tested at 0.05 level of significance also showed that there is no significant difference(s) in the performance of the students based on the gender. This finding is in agreement with the studies of Abubakar and Oguguo (2011) who in their comparison found no significant difference between the performance of boys and girls in mathematics and science, Uduosoro (2011) in a similar study found no significant difference between the performance of boys and girls in mathematics and Animasahun (2007) who earlier reported that both boys and girls can perform brilliantly in learning if they are exposed to the same learning opportunities.

CONCLUSION

Agricultural Science is one of the science subjects and at the same time vocational in the 9-Year Basic Education Curriculum and examinable at the terminal Basic Education Certificate Examination (BECE) in the Federal Capital Territory and other parts of the country. The students, both male and female used for this study were selected from Kwali Area Council of the Federal Capital Territory, they both performed highly even though the subject is regarded as masculine inclined.

RECOMMENDATIONS

Based on the findings of this study, the researcher put forward the following recommendations:

1. The style of continuous assessment which adopted 30% mark and 70% for the examination be sustained.
2. The Universal Basic Education Commission (UBEC) should ensure that the (Basic Education Certificate Examination (BECE) presently conducted by the Educational Resource Centre (ERC) in the Federal Capital Territory and the (ERCs) in the States should be conducted uniformly throughout the country, since the implementation of the 9-Year Basic Education Curriculum is a nationwide programme.
3. An examination body should be saddled with the responsibility for the conduct of the Basic Education Certificate Examination (BECE) on nationwide.

REFERENCES

- Abubakkar, R.B, and Oguoguo, O.O. (2011). Age and gender as creditors of academy achievement of college mathematics and science students proceeding of the 2011 international conference on teaching, learning and change.
- Agbaje, Rashidat O, & Alake, Ese M (2014). Students' Variables as Predictor of Secondary School Students' Academic Achievement in Science Subjects. *International Journal of Scientific and Research Publications*, Volume 4, Issue 9, September 2014
- Animasahum, G. S. (2007). An Investigation into the Indifference of Girls towards the Study of Physical Sciences in Nigerian Secondary Schools. *Journal of the Science Teachers Association of Nigeria*, 2(1)
- Awofala, A. O. A & Nneji, L. M. (2011). Effect of Framing and Team Assisted Individualized Instructional Strategies on Students' Achievement in Mathematics. *African Journal For The Study Of Educational Issues* 4(3,4) pp. 75-89
- Ayodele, C.S & Adebisi, D.R (2013). Study habits as influence of academic performance of university undergraduates in nigeria. *Research Journal in Organizational Psychology & Educational Studies* 2(3) 72-75. © Emerging Academy Resources (2013)

- Dania Peter O. (2014). Effect of Gender on Students Academic Achievement in Secondary School Social Studies. *Journal of Education and Practice*.
- Fasiku, A.M 2011. Gender Influence on Social Study Teacher's Sensitivity Environmental Education in Junior Secondary School in Ekiti State. *Educational Focus* 3(1)
- Fatokun, K.V.F & Odagboyi I.A (2010) Gender Disparity and Parental Influence On Secondary School Achievement in Nasarawa State, Nigeria. *Journal of Research in National Development*.
- Kolawole, E. B. & Ala, E. A. O. (2014). Effect of continuous assessment and gender on students' academic performance in mathematics in some selected states in the south west Nigeria. *Education Research Journal* Vol.4(1):
- Nicodemus, O. A. (2009). Teaching Vocational Agriculture in Schools. University of Agriculture, Makurdi, Benue State. Retrieved on 1st November, 2016
- Nwona, H.A & Akogun N.A (2015). Breaking Gender Barrier in Science, Technology and Mathematics Education. *Nigeria Journal of Research in Education*. 98-108
- Okon Cecilia E. (2013). Teachers' attitudes to social studies and students' performance in junior secondary three certificate examination. *Asian Journal of Social Science and Humanities*, 3 (3)
- Okon Cecilia E. & Archibong U. I. (2015): School Type and Students' Academic Performance in Social Studies
- Samuel, I. (2012). Catching Farmers Young: Stimulating Youth Interest in Agriculture. Retrieved on 2nd November, 2016
- Uduosoro, U.J (2011). The Effect Of Gender And Mathematics Ability On Academic Performance of Students In Chemistry. *African Research Review*.
- World Bank Group Education, (2015). Governance and Finance Analysis of the Basic Education Sector in Nigeria