# EFFECT OF MIXED-GENDER STREAMING ON STUDENTS' PERFORMANCE IN ENGLISH LANGUAGE: A CASE STUDY OF ENGLISH AS A SECOND LANGUAGE CLASSROOM IN NIGER STATE, NIGERIA

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## ABSTRACT

The objective of this study was to investigate the effect of mixed-gender streaming on the performance of senior secondary school level students in English language in Niger State. In the course of the work, the researcher compared the performance of male and female students in the mixed-gender streams in English Language. The population of the study was 53,468 from 248 schools of both single and mixed gender streams. Out of this, one mixed-gender class of forty-four students was sampled from senior secondary schools in Minna metropolis. The researcher used quasi-experimental research design. The instruments used for data collection were the NECO 2011 November/December past question papers that served as the test instruments, the curriculum content and prepared lesson notes used during treatment. Frequency counts and the Arithmetic means were used for descriptive analysis. The t-test statistical technique was used for inferential analysis to test the hypotheses. This study is anchored on Bandura (1986)'s social learning theory. This theory emphasisis the importance of biological, social and cultural impacts on human behavioural development and learning especially on gender and genders specific traits and roles. The results revealed that there was no significant difference between the performance of male and female students in mixed-gender streaming. The female students, however, performed better than the male ones and the results of the two genders were generally poor. It was therefore, concluded that the mixed-gender streaming was less effective in enhancing better academic performance especially in English language in Niger State. Consequently, the researcher recommends that the Niger State Government review the system for better repositioning.

**Keywords**: Mixed-gender streaming, placement, mixed gender, male students, female students.

## INTRODUCTION

It is obvious that inspirations ginger actions, counteractions and their directions. Hence, students' poor performance in Senior Secondary Certificate Examination (SSCE) conducted by both the West African Examination Council (WAEC) and the National Examination Council (NECO) (Eze, 2011) is the first motivating factor. It is worthwhile to reiterate on the role and function of English language in Nigeria as that which warrants concern when students performance in it is poor. English language is used as the medium of instruction and in learning other subjects in all Nigerian educational institutions; and no student is qualified for admission into the Nigerian universities and other tertiary institutions without scoring a credit pass in it in addition to other four subjects in the Senior Secondary Certificate Examination (SSCE) conducted by the West African Examination Council (WAEC) and the National Examination Council (NECO). One other serious issue worthy of note at this point of discourse is that, in Nigeria today, during the placement of students into either schools or classrooms to enhance better performance, the factors mostly considered are ability, aptitude, occupation or trade or career choice, science or arts inclination but always at the exclusion of

gender streaming factor. Where and when gender comes to mind, it is an haphazard exercise not based on any policy guideline or research report and also not bearing academic performance benefit in mind but on grounds of morality or religious injunctions.

Secondly, this study was motivated by a number of factors that are related to gender equity in education in Nigeria despite several declarations and provision of legislative tools and other support by powerful international bodies such as UNICEF, World Bank, UNESCO etcetera on this issue. These include the inequity between female and male educational opportunities, low level of enrollment, alarming withdrawal rate resulting in low completion rate, poor or lack of attention and support for the girl-child education, unequal attention given to males and females students especially in coeducational classrooms.

Other motivating factors include the assertion that females have better aptitude and competence in learning language than their male counterparts and the availability of controversial and inconsistency of results of studies on the academic performance of both female and male students' performance when they are streamed according to gender. Positive study results include Lee and Lockheed (1990); Mallam (1996), Kurumeh' M. S, Igyu' C. O, and Mohammed A. S, (2013); Bosire, J. Mondoh H. and Barmao, A. (2008); Sax, (2007) etc and unfavorable study results include Rowe (1988); Oludipe (2012); Kang'ahi, (2012); Pahlke, E., Hyde, J. S. Allison, C. M. (2014) etc.

Therefore, this study investigated the impact of mixed gender streaming on students' performance in English language at the senior secondary school level in Niger State. The finding is aimed at curbing the high rate of students' failure in English language in West Africa Examination Council (WAEC) and National Examination Council (NECO) Senior Secondary Certificate Examinations in Niger State, Nigeria when implemented.

## OBJECTIVES OF THE STUDY

This study was designed to find out:
  (a) the impact of gender mixed gender streaming on the academic performance male and female students in English language in senior secondary schools in Niger state
  (b) the gender that performs better in academic performance in English language in senior secondary schools in Niger state.

## RESEARCH QUESTIONS

Research Question: Does the impact of gender mixed gender streaming result into a significant difference between the academic performance of male and students in English Language at the senior secondary school level in Niger state?

## RESEARCH HYPOTHESIS

Hypothesis (HO): Effect of mixed gender streaming does not result into a significant difference between the academic performance of male and female students in English Language at the senior secondary school level in Niger State.

**BASIC ASSUMPTIONS**

In this study, the researcher makes the following basic assumptions:

1.  Consideration of gender difference in students' placement into senior secondary will impact and improve on their academic performance in Senior Secondary Certificate Examinations in English Language in secondary schools in Niger State.

2.  Lack of consideration for gender difference in placement of students in senior secondary schools has contributed to the high rate of failure in their Senior Secondary Certificate (SSCE) Examinations in English Language in Niger State.

3.  The operation of mixed-gender streaming of students into senior secondary schools without policy guidelines is the practice currently in Niger State.

**SIGNIFICANCE OF THE STUDY**

In Nigeria, it is clear that the government does not give much attention to the issue of gender streaming when it comes to the matter of streaming or placing students into senior secondary school level or when allocating classes to them in schools. In most cases, government's concentration is on career/professional predictions such as arts, science, technical or vocation aptitudes, and day or boarding variables. The exploitation of gender streaming strategy for academic performance implications is never viewed with much seriousness. Therefore, since this study is designed to investigate whether or not streaming students according to gender composition can significantly impact on senior secondary students' academic performance particularly, in English Language, its findings may help teachers, school administrators and managers, school counselors, curriculum specialists, teacher trainers and teacher retrainers. The impact on all these stakeholders will result in ameliorating the alarming failure rate in English language in SSCE results in Niger State.

First, this study will be useful to Nigerian teachers in improving their instructional strategies to enhance learning through their better knowledge and understanding of the impact of gender differences. Secondly, this study will help in guiding teachers in students' sitting arrangement in the classroom, bearing in mind the seeing and hearing differences in males and females. This is of particular relevance in mixed gender learning environment. In addition, the knowledge of the fact that males and females learn differently, will positively influence the decision of teachers on the instructional strategies to adopt to cater for the differences in the students. This can be facilitated through their knowledge of the impact of some vital gender differences derivable from the results of this research.

In addition, the result of this study will be useful to teachers in enhancing effective classroom organization and management. Knowledge on the importance of basic differences between males and females will assist teachers while planning their lessons and during teaching, they will be able to make positive concession and consideration for gender differences. This way, the result will, no doubt, help improve the students' performance in their senior secondary examinations.

Furthermore, considering one of the roles and functions of English Language in Nigeria as the language of education (medium of instruction) in our schools, if the results impact on students' performance in English language, it will in turn enhance their effectiveness and proficiency to learn other subjects in the schools.

## REVIEW OF THE RELATED LITERATURE

There are a number of research works that revealed the positive impact of mixed gender streaming on academic performance especially at the senior secondary school level (Lee and Lockheed, 1990, Mallam, 1996 etc). Karthigeyan & Nirmala (2012) also rported a study that revealed the positive impact of mixed-gender streaming on academic performance of both male and female students in English language especially at the senior secondary school level

On the other hand, a number of researchers reported they found no significant difference in academic performance of male and female students in senior secondary school students in mixed-gender classrooms even though the mean scres of female were found to be higher than those of males (Akinyele, 2011; Kang'ahi, Indoshi, Okwach, & Osodo, 2012 and Oludipe 2012),

There are however, some propositions that assert that males and females vary in their cognitive abilities in language (Amin, 2006; Sax, 2007; Burman et al. 2008; Gomez, 2011; Hodgins, 2012 ecetera). Hence, the need to separate them in the course of instruction though challenged that these differences cannot cause any significant difference in the performance of the genders (Rowe, 1988;, Haker and Nash, 1997; Lee & Lockheed, 1990 and Pahlke, Hyde and Allison, 2014).

This study is anchored on Bandura (1986)'s social learning theory. This theory emphasises on the importance of biological, social and cultural impacts on human behaviour, development and learning especially on gender and genders specific traits, bevaviour and roles. These factors are what determine a person's gender stereotype action n and words. Some empirical reviews indicate that the mixed-gender stream classroom environment improves students' academic performance (Lee and Lockheed, 1990, Mallam, 1996, and Sax, 2007 etc) while others reported the contrary (Rowe, 1988; Oludipe, 2012;  Kang'ahi, 2012 etc.).

These review results indicate inconsistency and controversy which throws the change to undertake more research works of this one in this field of academic endeavor in Niger State, Nigeria.

## METHODOLOGY

In this study, quasi-experimental research design (Bichi 2004) was used. The population in this study was 53,468 senior secondary 3 (SS3) students of 2013/14 academic session from 248 senior secondary schools (SSS) spread across Niger State. A class of 44 students made up of 33 males and 11 females was sampled in Minna metropolis using simple balloting method.

The instruments used for data collection were the curriculum content culled from the National Curriculum, prepared lesson notes of the lessons taught during treatment by the research assistant, the November/December past question paper of National Examination Council (NECO) 2011 Senior Secondary Certificate Examination (SSCE) used for pretest and posttest.

The Niger State Secondary Education Board's school used for the study was personally visited by the researcher. First, a pretest was administered and treatment of the respondents followed for 8 weeks in its existing condition. The used mixed classroom was taught by the research assistant using the same textbooks, curriculum content, lesson notes and tested at the

same time using the same instrument for both pretest and posttest for all students. At the end of the treatment, a posttest was administered and the scores served as the data.

Frequency counts, simple percentile and statistical means were used in answering the research questions and t-test was used to test the hypotheses to determine if the difference between the means of the five paired sample variables were significant or not. All data was analyzed by using the Statistical Package for Social Science (SPSS) computer program. An alpha level of .05 was set as the criterion for the level of significance.

## PRESENTATION OF RESULTS AND ANALYSES

The presentation and analyses of the results of the study comparing the performance of the single gender stream students (SGSS) and the mixed gender stream students (MGSS) in the course of which, the research question was answered and the hypothesis was tested and reported as follows:

Table 1 below contains the mean and t-test scores of mixed gender stream male students (MGSMS) and mixed gender stream female students (MGSFS) in English Language in both pre-test and post-test at the senior secondary school level in Niger state.

**Table 1: Mean ($\bar{x}$) and t-Test Scores for Mixed Gender Stream Male Students (MGSMS) and Mixed Gender Stream Female Students (MGSFS) in Pre-Test and Post-Test**

| Test Type | Stream Type | N | Mean ($\bar{x}$) | SD | Calculated t | df | Critical t |
|---|---|---|---|---|---|---|---|
| Pre-test | MGSMS | 33 | 15.60 | 8.63 | | | |
| | MGSFS | 11 | 12.30 | 8.73 | 1.12 | 42 | 2.01 |
| Post-test | MGSMS | 33 | 15.40 | 9.51 | | | |
| | MGSFS | 11 | 13.20 | 9.52 | 0.68 | 42 | 2.01 |

Results in table 1 below show that the calculated mean scores of 15.60 with standard deviation 8.63 for mixed gender stream male students (MGSMS) and 12.30 with 8.73 standard deviation for mixed gender stream female students has resulted in a t-test score of 1.12. The 2.01 critical value of t at 42 degree of freedom has indicated that the difference between the academic performance of mixed gender stream male students (MGSMS) and mixed gender stream female students (MGSFS) was not significant in their pre-test.

Equally too, table 1 above show that the mean scores of 15.40 with standard deviation 9.51 and 13.20 with 9.52 standard deviation has resulted in the t-test calculated value of 0.68 in the posttest. The results of the difference between the academic performance of mixed gender stream male students (MGSMS) and mixed gender stream female students (MGSFS) was not significant with the 2.01 critical value of t-test at 42 degree of freedom. The results of both pre-test and post-test were insignificantly different and consistent.

## SUMMARY AND DISCUSSION OF FINDINGS

The objective of this study is to find investigate the impact of mixed-gender streaming on the academic performance of male and female students in English Language at the English as a second language stream senior secondary school in Niger state. The finding in the study revealed that mixed-gender streaming in English Language in English as a second language class did not result into a significant difference in academic performance of male and female

students at the senior secondary school level in Niger state. The females however, slightly performed better than the males in the mean scores. The finding was in consonance with the findings of a number of previous studies. Some of such were Lee & Lockheed (1990), Oludipe (2012) and Akinyele (2012) which revealed that no significance between the male and female students in mixed gender stream at the senior secondary level in Niger State. The result however, indicated that the females insignificantly performed better than the males in their mean scores. This is also in consonance with the above fifth finding. Another previous study's findings in consonance with the finding of this study is that of Kathigeyan & Nirmala's (2012) which revealed that females had a higher mean score in English Language in India compared to the males in English language.

In contrast with this finding in this study above that there was no significant difference between the male and female students in mixed gender stream, Pomerantz et. al. (2002) reported that there was a significant difference between boys and girls with the girls outperform boys in schools across all subjects.

The report by the Council for Women Concern (2012) that coeducated men and women often have different experience because they respond to different teaching methods, classroom organizations, questions and discussions which could be instrumental to their different performance indices, did not support the fifth finding of this study. Since the study revealed no significant difference in English Language performance between males and females in the coeducated schools. This is because by the postulated position above, a significant difference was anticipated.

From the discussion above, there appeared to be inconsistency in the results of mixed gender male and female students' performance in mixed gender stream (coeducational) environment. However, the results of the greater percentage of the accessed reviewed literature indicate that coeducational system (mixed gender stream) has proved to be less effective and detrimental to both males and females. This, clearly, is in consonance with the finding in this study.

## CONCLUSION

No significant difference was found between the performance of male and female students in mixed gender streams though the females performing slightly better than the males. The two genders performed poorly. It was then concluded that the mixed gender stream was less effective in enhancing good academic performance for both genders and was more detrimental to male students.

## RECOMMENDATIONS

Based on the findings of this study, it is recommended as follows:

1. The Niger State Government should revisit and review the use of mixed gender stream environment to deliver instruction due to the overall poor performance of both male and female students so as to find out why the two genders did not differ significantly in their poor performance academically.
2. The Niger State Government should adopt appropriate means to enhance improved performance in mixed gender schools students generally and, in particular, the male ones who seems to have performed less than females as indicated in their mean scores.

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