



A COMPARATIVE ANALYTICAL STUDY OF STUDENTS ACADEMIC PERFORMANCES IN OSUN STATE OWNED SECONDARY SCHOOLS IN THE THREE SENATORIAL DISTRICTS

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Abstract: Education is placed at the front burner in state developmental agenda. This is so as education is the bedrock of sustainable human development. This research is aimed at investigating students' performance based on their Senatorial Districts in Osun State Public Secondary Schools. The source of data was secondary, extracted from content analysis of existence documents from the State Bureau of Statistics and West Africa Examinations Council (WAEC). The methodology employed the use of descriptive statistics, trend analysis and Chi-square test. The result of the analysis revealed that students' performances are independent of the three Senatorial Districts of the State and more importantly it revealed that students' performance is not tribal sensitive. It is recommended that Training and re-training of teachers on modern ways of teaching should be encouraged. There should be review of school curricula to align with WAEC syllabus. Government should employ more teachers to meet United Nations recommendation of 27:1 students: teacher ratio.

Keywords: Senatorial districts, Performance, Public Secondary Schools, WAEC, Gender, Osun State.

Introduction

Education is the totality of life experience acquired by people and which enables them cope with and derive satisfaction from living in the world and to achieve social competence and optimum individual development (Okorie et al, 2014). It is on this premise that Aduwa and Unwameiye (2006) posit that the quality of a nation's education is proportional to the level of its prosperity. The achievement of social competence and the level of academic development in education cannot be measured without examination.

Education is derived from the latin word "educio" which means to draw from within. Education is defined as the process of receiving or giving systematic instructions at a school. It is also defined as the theory and practice of teaching. Education is a means of achieving human capital and national development. Well organized education of citizenry produces broad minded citizens that will improve the life of others. In Nigeria, as put by (Ballantine 1989), evidence indicates that subtle and blatant sexism occurs at all levels of education.

In any society, education remains a vital tool through which the citizenry would positively contribute to

nation building. It is on the basis of this conviction that the Nigeria government introduced the 6-3-3-4 system of education with the aim of catching them young and with the foresight than high quality workforce, an enlightened citizenry, without which national development is impossible, could only be guaranteed by investing in education.

Adenike (2016) sees education as an essential tool for economic, social and cultural development of all societies. citizens cannot flourish and the nation cannot record consequential development. It is, therefore, incontestable that for individuals, education is the ladder of opportunity. For communities, it is the base of common values that holds diverse people together for nations; it is the engine of economic growth (Adenike, 2016).

Education is a means of achieving human capital and national development. Well organized education of citizenry produces broad-minded citizens that will improve the life of others. In Nigeria, as put by (Corder & Foreman, 2009), evidence indicates that subtle and blatant sexism occurs at all levels of education. Academic success is described as the scholastic

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standing of a student at a given moment. It refers to how an individual is able to demonstrate his/her intellectual abilities. This scholastic standing could be explained as the grades obtained in a course or groups of courses and the way in which a student has attained the grades including the time he or she passed examination too. (Ige, 1997); argues that a prediction of a future examination result could be made with reasonable success on the basis of the results of an earlier examination and the grades may serve as prediction measures and as criterion measures.

Examination is an integral part of the education system, which has certain objectives as it measures a student's progress towards determined objectives (Saima and Bukhsh, 2011). (Saima and Bukhsh, 2011) also believe that examination as a process is a means of testing the abilities or achievement of the study area of academic programmes which create obstacles to measure the real performance of the student.

Academic failure is described as a performance (cognitive aspect) that falls below a specified standard called pass mark. This pass mark is relative and may be referred to as criterion of excellence. It is a score which anybody who has gone through a specified institutional programme in an educational institution must attain to be deemed to have passed (J. Akinboye and D. Akinboye, 1998). Poor academic performance according to (Hammed, 2002) is one that falls below a desired standard. The concept of both poor and good performance is more subjective than academic failure because, a desired standard can be interpreted in various ways. Hence, poor academic performance is, therefore, any performance that falls below the adequate, appropriate, wished and wanted standard. Poor academic performance can span from zero to one hundred percent. A pass mark on the prime facie may be poor depending on the expectation or standard desired, (Hammed, 2002).

(Saima and Bukhsh, 2011) explained the concept of Academic Success, Academic Failure, Poor and Good Academic Performance. Academic Success is described as the scholastic standing of a student at a given moment. It refers to how an individual is able to demonstrate his/her intellectual abilities. This scholastic could be explained as the grades obtained in a course or groups of courses and the way in which a student has attained the grades including the time he or she passed

the examination too (Saima and Bukhsh, 2011). (Aduwa and Uwameriy, 2006) argued that a prediction of a future examination result could be made with reasonable success on the basis of the results of an earlier examination and the grades may serve as prediction measures and as criterion measures.

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According to (Schachter and Rich, 2011), learning is the cognitive, effective and psychomotor domains of educational objectives for necessary self-confidence, reliance, effective citizenship, responsiveness to opportunities and challenges of life. According to (FME, 2012), Student ethnicity has been identified as a likely influencing factor for student success. Ethnicity, like age and gender, is a fundamental category of social identity that defines society; and therefore, may serve as an influencing and/or interacting factor in distance learning achievement.

Across a number of countries, education inequalities tend to make success in higher education more difficult for ethnic minorities. Students may enter colleges and universities lagging behind the skills knowledge of their cohorts. Additionally, whether or not culture and ethnic identity play a role in cognitive learning styles that may affect how minorities interact within the virtual classroom has been hotly contested (Graff, Davies and McNorton, 2012). Cultural differences in ethnic identities and cognitive learning may be directly related to studying norms within a specific culture (Graff, Davies and McNorton, 2012).



Public examinations are viewed as external school examinations opened to the general public including students of private schools; they are conducted by external examination bodies using tests that have appropriate psychometric properties (Adeyegbe, 2004). Over the years, students' performance in external examinations has been poor due to many factors. However, several professionals and researchers in the education sector have organized different summits to proffer solutions to arrest this situation (Ige, 1997).

Culture and ethnicity are large components of social identity for many individuals. Ethnic identity is an aspect of acculturation. Acculturation concerns itself with changes in attitudes, values, and behaviours which are the result of direct contact between two different and distinct cultures (Phinney, 1990). Furthermore, it has been noted that components of identity and location are instrumental in educational achievement and must be engaged by various aspects of the course, including a course's internal culture (Schachter & Rich, 2011). This particular study examined the relationship between educational performance and student locations in the three Senatorial Districts of Osun state.

Academic achievement at any level of education is crowned a success in Nigeria of today. At the end of secondary school education, students are expected to sit for public examinations such as West African Senior School Certificate Examinations conducted by WAEC, Senior School Certificate Examination (SSCE) conducted by NECO and NABTEB examinations conducted by National Board for Technical Examination. These different examinations are conducted twice annually.

Table 1. Senatorial districts and its local government areas

S/N	Districts	LGAs
1	Central	Ifelodun, Boripe, Odo-otin, Osogbo Irepodun, Boluwaduro, Ifedayo Ila, Olorunda, Orolu
2	East	Ilesa East, Ilesa West, Atakunmosa East Atakunmosa West, Oriade, Obokun Ife central, Ife East, Ife North, Ife South
3	west	Ejigbo, Egbedore, Ayedire, Ede North Ede South, Iwo, Irewole, Ayedaade Isokan, Ola-Oluwa
Total	3	30

Osun State government in its effort to improve education standard has functional educational Administrative Commissions, Boards, and Agency for educational development in the State. These include Ministry of Education, Teaching Service Commission, Quality Education Assurance Agency, Zonal Teaching Service Commission, State Universal Basic Education Board, Local Government Universal Basic Education Authority, Board for Adult, Technical and Vocational Education among others.

These organs working in synergy with other stakeholders are struggling to bring tremendous improvement into the students learning outcomes from pre-basic to tertiary levels of our educational institutions in the State. However, our standard of good performance is religiously pivoted on candidates' scores of at least 5 credit passes including English and Mathematics. This standard was adopted because it is national bench mark standard in Quality Assurance (Q.A) process in institutions below the tertiary level. Provisions contained in the 4th edition of National Policy on Education (NPE, 2004) states that 60% of the Senior Secondary School (SSS) learners should pass the National and Public Examination (SSCE) at Credit level in 5 papers including English language and Mathematics.

Osun State Senatorial Districts

Osun State is divided into three senatorial districts: Osun Cetral, Osun East and Osun West. Each senatorial district is made up of several local government areas. To categorize the local government areas (LGAs) into these senatorial districts:



Fig. 1: Osun state senatorial map

Research statements of the problems

The radical need to improve the Osun State student's performance in external examinations, including the ones organized by the West African Examination Council (WAEC) and National Examination Council (NECO) continues to top the agenda of the state government rolled out in its strategic plan for the state-owned secondary schools. The government is determined to provide enriched educational experience for students of public secondary schools through the provision of quality standards and deliberate attempt to improve on pass rate for Osun State students at the WAEC and NECO examinations by ensuring safety and friendly environment for learning in schools. However, there is no way every student in a group can have the same or similar performance in a subject or examination, some may have high performance while others have low. The differences in performances may be caused by various factors. It is therefore, surprising that despite the efforts of the Osun State government agencies in enhancing the educational development in

the state, the WAEC and NECO results obtained by public secondary schools' students in the recent time have shown that the general academic performance of students has greatly declined.

The focus of this research study therefore, is to comparatively examine the performances of students of state-owned secondary schools in the three Senatorial Districts of Osun State viz: the Osun Central District, Osogbo as the headquarters, Osun West Senatorial District at Iwo and the Ife/Ijesha District. The results of the performances of students in the 2017 and 2022 May/June West African School Certificate Examinations (SSCE) in the public secondary schools in these district areas are to be contently examined and comparatively analyzed in a bid to justify the success or otherwise of all the efforts and investments aimed at improving the quality of education by stakeholders and the performance of students in post primary exit examinations.

Objectives of the study



i.To study the performances of students in Osun State Public Secondary Schools.

ii.To test the independency of students' performance on location across the three senatorial Districts.

Hypothesis

i.H₀: Students performance is independent of location of residence across the three senatorial districts.

ii.H₁: Students performance depends on location of residence across the three senatorial districts.

Methodology

This paper is limited to 2017 and 2022 WASSCE results of all students in Osun State Public Schools. The data used for this paper is a secondary data obtained from Osun Education Factsheet 2018 and 2022, State Bureau of Statistics Osogbo and West Africa Examinations Council (WAEC). The population of this research work comprises of the totality of the population of Osun State owned public secondary schools.

For this research work, descriptive statistic of Multiple bar chart and inferential statistic of Trend analysis and Chi-square test were deployed for data analysis, with the aid of Microsoft Excel 2013 and SPSS IBM vs 23 statistical package.

Chi-square test (χ^2)

The χ^2 distribution could be used to determine whether the relative difference in two or more objects or items of similar kind is due to chance or because of difference in their quality. It could be used to weigh the relative importance in the view of different categories of people on sensitive issues or matters of public importance.

Observed and Expected Values

The observed value (O) of a variable are the values obtained as a result of a survey or performance of an experiment. On the other hand, the expected values (E) are the values that ought to result from the experiment under normal condition.

$$\chi^2 = \sum_{i=1}^n \frac{(O_i - E_i)^2}{O_i} \quad (1)$$

$$\chi^2 = \frac{(n-1)S^2}{\sigma^2} \text{ with the degree of freedom } (r - 1)(c - 1) \quad (2)$$

$$\text{The expected frequency is computed by } E = \frac{(\text{row total}) \times (\text{Column total})}{\text{Total Sample size}} \quad (3)$$

Analysis

Data Presentation

The data presented shows performance shows the number of male and female students that passed five subjects and above including English and Mathematics in the WAEC May/June 2017 and 2022 on local government area and Senatorial district basis

Table 2: Performance table for year 2017
The West African Examinations Council
WASSCE School candidates 2017
Ranked Performance of States By LGAs Osun

S/N	Lga	Total Sat			Min. of 5 credits including English & Maths			
		Male	Female	Total	Male	Female	Total	Percentage
1	Ifelodun	677	623	1300	391	295	686	52.77
2	Boripe	489	469	958	211	183	394	41.13
3	Odo-otin	522	547	1069	240	261	501	46.87
4	Osogbo	1559	1665	3224	765	857	1622	50.31
5	Irepodun	170	180	350	38	25	63	18
6	Boluwaduro	190	242	432	53	45	98	22.69
7	Ifedayo	274	199	473	42	39	81	17.12
8	Ila	384	479	863	126	166	292	33.84
9	Olorunda	949	1056	2005	613	675	1288	64.24
10	Orolu	99	97	196	19	24	43	21.09
	Osun Central (Mean score)	5313	5557	10870	2498	2570	5068	36.81
11	Ilesa East	761	725	1506	517	498	1015	67.4



12	Ilesa West	426	465	891	277	307	584	66.54
13	Atakunmosa East	341	305	646	104	92	196	30.34
14	Atakunmosa West	201	195	296	88	67	155	39.14
15	Oriade	975	944	1919	473	502	975	50.81
16	Obokun	388	373	761	47	50	97	12.75
17	Ife central	659	682	1341	339	324	663	49.44
18	Ife East	1578	1572	3150	721	713	1434	45.52
19	Ife North	347	572	919	162	202	364	39.61
20	Ife South	819	766	1565	299	327	626	39.5
	Osun East (Mean Score)	6495	6599	12994	3027	3082	6109	44.11
21	Ejigbo	552	480	1032	281	250	531	51.45
22	Egbedore	316	337	653	203	229	432	66.16
23	Ayedire	225	247	472	102	91	193	40.59
24	Ede North	578	560	1138	190	212	402	35.33
25	Ede South	337	337	674	108	91	199	29.63
26	Iwo	901	926	1827	346	416	762	41.71
27	Irewole	299	313	612	146	165	311	50.82
28	Ayedaade	700	673	1373	225	190	415	30.23
29	Isokan	125	143	268	28	41	69	28.76
30	Ola-Oluwa	284	266	550	26	14	40	7.27
	Osun West (Mean score)	4317	4282	8599	1655	1699	3354	38.2
	TOTAL	16145	16343	32488	7155	7332	14487	44.59

Source: Osun State Bureau of Statistics & www.waecnigeria.org

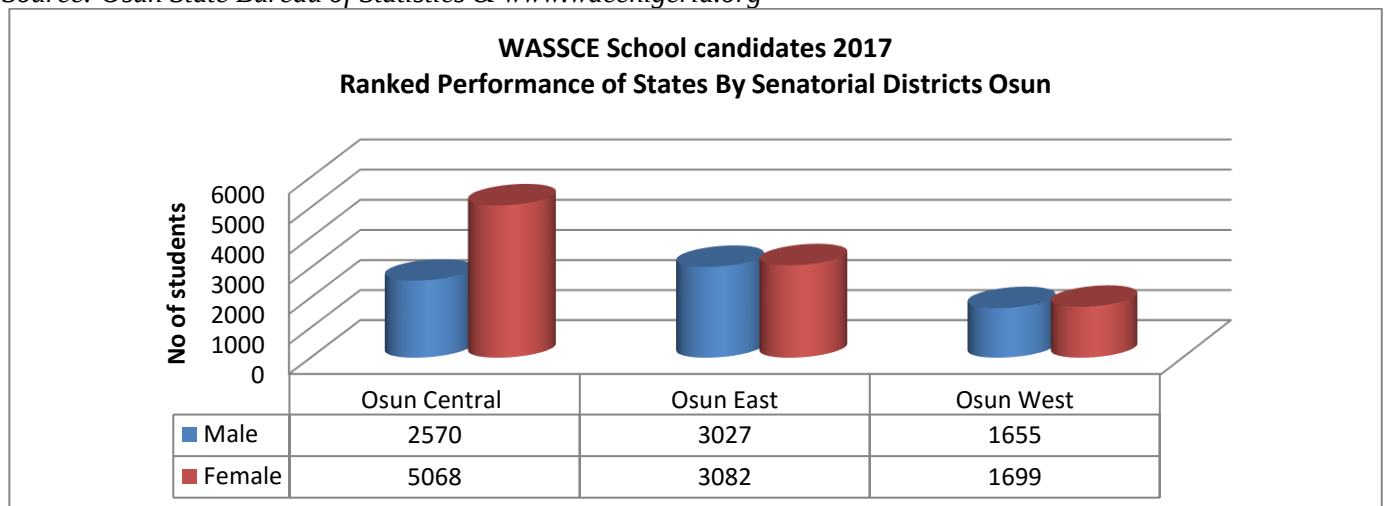


Chart 1: WASSCE 2017 performance by gender

Table 3: Performance table for year 2022

The West African Examinations Council

WASSCE School candidates 2022

Ranked Performance of States By Senatorial Districts Osun



S/No	Districts	Total Sat			Min. of 5 credits including English & Maths			
		Male	Female	Total	Male	Female	Total	Percentage
1	Osun Central Mean score	2174	2111	4285	832	822	1654	38.94
2	Osun East (Mean score)	3024	2975	5999	1323	1089	2412	40.21
3	Osun West (Mean Score)	3101	4934	5060	824	853	1677	33.14
	TOTAL	8299	7045	15344	2979	2764	5743	37.43

Source: Osun State Bureau of Statistics & www.waecnigeria.org

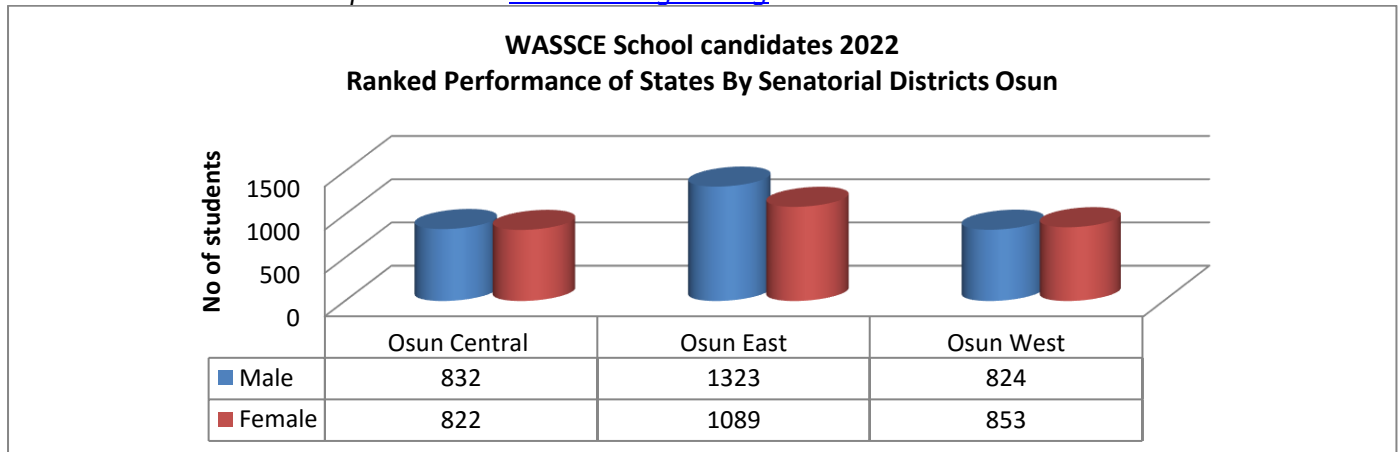


Chart 2: WASSCE 2022 performance by gender

Objective 1

To study the performances of students in Osun State Public Secondary Schools.

Table 4: Students Performance in WASSCE (2006-2022)

S/N	Year	Number of student enrolled	5 credits and above including English & Maths	Percentage
1	2006	37,428	4,085	10.95
2	2007	36,171	2,483	6.86
3	2008	37,715	3,813	10.11
4	2009	39,676	5,545	13.98
5	2010	43,216	6,777	15.68
6	2011	53,293	11,674	21.91
7	2012	51,463	11,444	22.24
8	2013	47,009	9,654	20.54
9	2014	47,686	8,844	18.55
10	2015	48,853	9,522	19.49
11	2016	36,685	16,681	45.47
12	2017	32,488	14,487	44.59
13	2018	30,098	13,045	43.34



14	2019	16,248	8150	50.16
15	2020	14,324	686	4.78
16	2021	12,443	4051	32.53
17	2022	32,448	5743	37.43

Source: West Africa Examination Council (WAEC) 2006-2022.

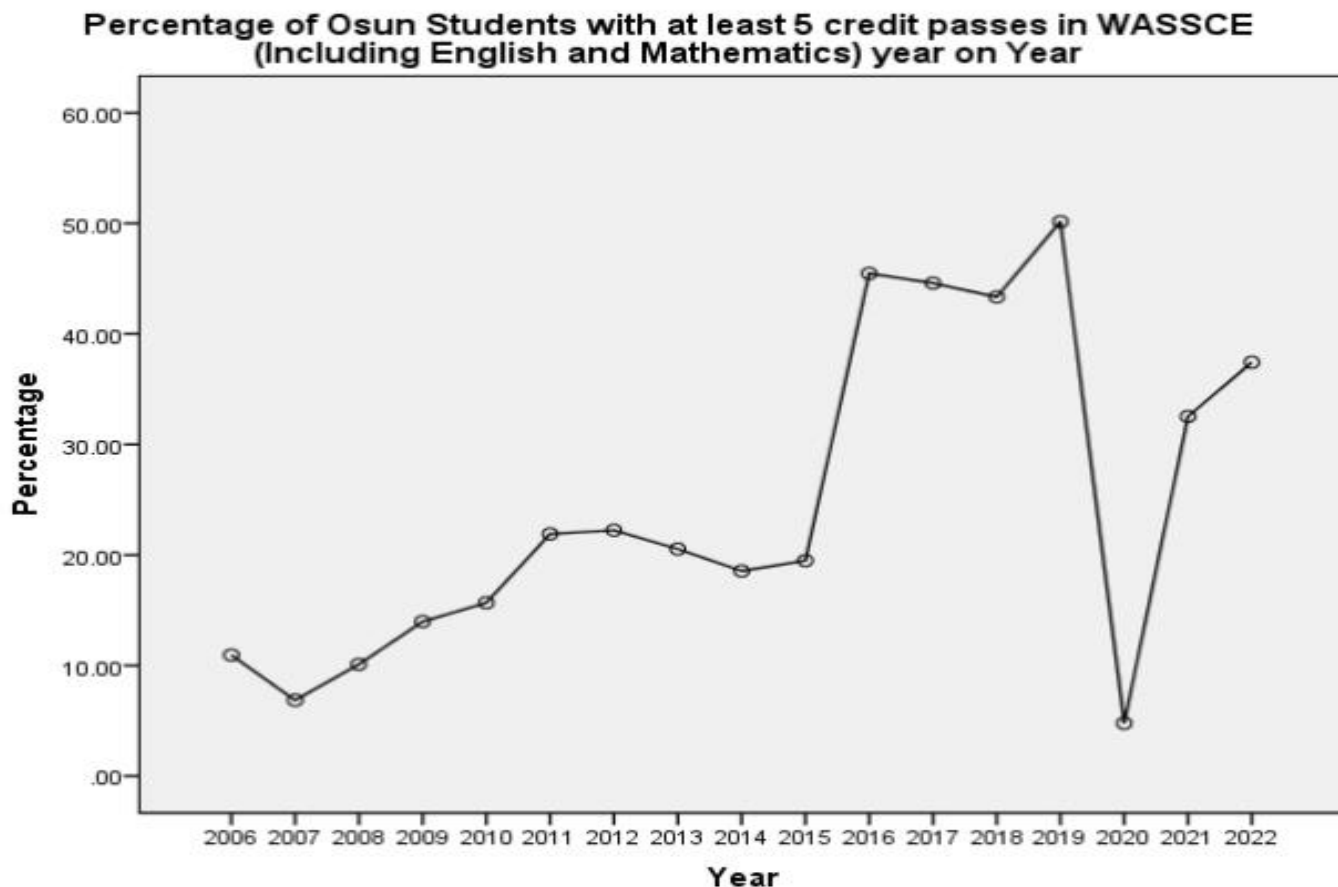


Chart 3: Trend analysis from year 2006 to 2022.

Finding

The state recorded 10.91 in 2006, 6.86% in 2007, 10.11% in 2008, 13.98% in 2009, 15.68% in 2010, 21.9% in 2011, 22.21% in 2012, 20.54% in 2013, 18.55% in 2014 and 21.64% in 2015. The performance of the state improved to 45.5% in 2016 with a short decline of 43.50% and 40.85% in 2017 and 2018 respectively. However, there was laudable improvement in 2019 May/June WAEC performance as the state recorded 50.16%. But the law of diminishing return seems to have set in for the state as it descends

from 2019's 50.16% to 4.78% in 2020, 32.55% in 2021 and 37.43 in 2022.

Objective 2

To test the independency of students' performance on location across the three senatorial Districts.

Hypothesis

- iii. H_0 : Students performance is independent of location of residence across the three senatorial districts.
- iv. H_1 : Students performance depends on location of residence across the three senatorial districts.

Table 5: Performance (%)

Year	Osun Central	Osun East	Osun West	Total
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2017	36.81 (38.99)	44.11(43.40)	38.2 (36.72)	119.12
2022	38.94 (36.76)	40.21 (40.91)	33.14 (34.62)	112.29
Total	75.75	84.32	71.34	231.41

Chi-Square Test: Osun Central, Osun east, Osun West
Expected counts are printed in bracket observed counts
Chi-Square contributions are printed below
Chi-Sq = 0.3981, DF = 2, Chi-Sq (P-value) = 0.624,
Level of significance = 0.05

Finding

From Chi-square calculated, p-value is 0.624 which is higher than 0.05 (specified alpha level), we therefore accept H_0 and conclude that students performance is independent of senatorial district of residence based on the performance in 2017 and 2022 WAEC results.

Conclusion

The State's education standard of good performance is religiously pivoted on candidates' scores of at least 5 credit passes including English Language and Mathematics. This standard was adopted because it is the national benchmark standard in Quality Assurance (QA) (FME, 2010) process in institutions below the tertiary level. The findings led to the conclusion that students' performance is independent of senatorial district of residence based.

Recommendations

Based on the findings of the study, it is recommended that Government needs to broaden access to quality education, service delivery through e-classroom interaction/learning/or virtual learning for the basis of the robust innovation for both male and female students. Training and re-training of teachers on modern ways of teaching should be encouraged. There should be review of school curricula to align with WAEC syllabus. Government should employ more teachers to meet United Nations recommendation of 27:1 students: teacher ratio. It is recommended that the State must initially meet the national benchmark standard of excellence in order to produce globally competitive schools and learners. Government should design rounded intervention programmes on the two key subjects (Mathematics and English Language) to include comprehensive capacity buildings for teachers using experts from National Mathematical Centre and the Universities, embracing of e-classroom interaction. Working on the psyche of learners, ensuring effective guidance counseling in the areas of study habit, preparation and succeeding in examinations and the use

of the concepts of Learning for Mastery (LFM) and Personalized System of Instruction (PSI) by teachers among others.

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