

MENTORING, TUTORING AND SENIOR SECONDARY SCHOOL STUDENTS' LEARNING OUTCOMES IN OYO STATE, NIGERIA

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Abstract

Student Learning Outcomes (LOs) in English language and Mathematics in Oyo State were observed to be low as evidenced in the recent Senior School Certificate Examinations (SSCE) results. Study suggests that low LOs seem to be as a result of poor mentoring or tutoring between the teachers and students. It was against this underlying problem that the paper examined mentoring, tutoring and secondary school student learning outcomes in Oyo State, Nigeria. The study adopted descriptive survey research design of the correlational type. The population comprised 77,966 Senior Secondary School two students (SS II), 13,611 teachers and 628 schools with the same number of principals in public secondary schools in Oyo State. Purposive sampling technique was employed to select four zones and three local governments in each zone, making a total of 12 local governments. A proportionate to size sampling technique was used to select 20% of senior secondary schools while stratified sampling technique was used to select four teachers in each of the senior secondary schools selected for the study. This made a total number of 252 teachers and 1890 students representing total respondents of 2142. "Mentoring and Tutoring Questionnaire" and "Achievement Tests in English language and Mathematics Questionnaire" were used for data collection. Reliability of 0.78 and 0.79 were obtained through Cronbach's Alpha method of testing reliability. Research question was answered using descriptive statistics while Pearson Product Moment Correlation and multiple regression were employed to test hypotheses formulated at 0.05 level of significance. The results showed that mentoring was found to be significantly and positively related to student LOs ($r = 0.05$; $p < 0.05$). However, tutoring was not significantly related to student LOs in English language and Mathematics. The study equally revealed that there is no significant joint ($F_{(2,1877)} = 2.38$; $\text{Adj } R^2 = 0.001$; $p > 0.05$) and relative contributions of mentoring ($\beta = 0.05$; $t = 1.86$; $p > 0.05$) and tutoring ($\beta = -0.01$; $t = -0.20$; $p > 0.05$) to secondary school students' LOs in English language and Mathematics ($F_{(2,1877)} = 2.38$; $\text{Adj } R^2 = 0.001$; $p > 0.05$). Efforts should be put in place by government and school administrators to improve learning outcomes of senior secondary schools students. Seminars and workshops on the importance of mentoring and tutoring students should be organized for teachers in order to increase the performance of students in English language and Mathematics.

Keywords: *Student Learning Outcomes, Mentoring, Tutoring, Senior Secondary School*

Introduction

Student learning outcomes in English language and Mathematics at the secondary level of education have always been of general concern to stakeholders in education sector. They serve as link between the primary and tertiary education, preparing students for useful living within the society and higher institution of learning. These help students to acquire necessary knowledge, skills, values, culture and attitudes for the development of individuals and the nation.

Learning outcomes serve as indicators of success of an academic course or programme. These include knowledge, skills, interest, behaviour and attitudes measured by tests (Mrunal and Manvinder, 2017). Learning outcomes are a measure of the level of achievement of curriculum objectives of any educational system. It is a means of determining the effectiveness of the school system and providing empirical data that could enhance the attainment of desired goals. Learning outcomes are important because they determine quality of the secondary school products that constitute the human capital of a country. In many instances, diminishing student learning outcomes are observed in both internal and external examinations in many of Nigerian secondary schools. Previous studies confirmed that student learning outcomes are on the decline (Akiri and Ugborugbo, 2008; Egwu, 2008 and Okebukola, 2008). This may be due to poor academic performance of secondary school students in public examinations, negative attitude of students towards a particular subject teacher or lack of interest in English language and Mathematics. Umar, Wachikwu, Kevwe, Magnus-Arewa and Nwaukwu (2017); Umar and Usman (2014); Usman (2014) and

Adedokun (2011) confirmed that secondary school students have a poor performance in English language and Mathematics. Similarly, Lin and Zhang, (2013) and Hungi and Thuku (2010) stated that students were under performed in English language and a variation was found in reading achievement in English language.

The performance of students at the national level, especially, in Oyo state was low as the state was ranked 24th out of the 36 States and the Federal Capital Territory (FCT) in the 2014 West African Senior School Certificate Examination (WASSCE) despite the state government adoption of the social demand approach towards provision of secondary education through funding and subsidising the Senior School Certificate Examinations (SSCE) fee in the state over a long period of time (Musa, Nwachukwu and Ali, 2016). About 19.06% (14,754 students) of the 77,672 students that wrote May/June 2014 WASSCE had a minimum of five credits, including English Language and Mathematics. In the 2015 May/June WASSCE, there was a success rate of 21.06%, with 16,588 out of 78,896 students that sat for the examination having a minimum of five credits including English Language and Mathematics (Musa, Nwachukwu and Ali, 2016). Though there was an increase in percentage of success, the State dropped by two positions from the previous year (May/June 2014) in the national ranking, thus, emerging 26th out of the 36 states and the FCT. This made the government to introduce seven reform measures to improve the performance of secondary school students in Oyo State.

This growing poor performance of students in the states had been widely reported to be

rampant in the public secondary schools while the private secondary schools are not excluded (Oladeji, 2017). Table 1.1 shows the percentage performances of candidates

with a minimum of five credits including English Language and Mathematics in WASSCE from 2010 to 2018 in the South-West, Nigeria.

Table 1: Percentage of candidates who had a minimum of five credits (including English Language and Mathematics) in WASSCE from 2010 to 2018 in the South-West, Nigeria

States	2010	2011	2012	2013	2014	2015	2016	2017	2018
Lagos	59.40	60.11	55.72	56.03	45.86	37.27	63.00	65.50	60.72
Ondo	31.06	30.77	32.40	32.12	32.40	35.45	64.80	44.27	52.21
Ekiti	32.7	32.78	33.56	33.34	33.80	37.75	54.30	71.83	56.81
Ogun	39.57	39.65	38.81	39.92	38.92	39.67	52.8	54.14	51.69
Osun	15.68	21.9	22.21	20.54	18.55	21.68	45.50	43.50	40.85
Oyo	13.4	16.38	21.64	21.79	19.19	21.61	36.00	53.58	37.87

Source: National Bureau of Statistics (NBS), 2019

Table 1 contains the percentage of candidates who had a minimum of five credits (including English Language and Mathematics) in WASSCE from 2010 to 2018 in the South-West, Nigeria. The performance of students in the South-West shows that Oyo State had low percentage performance of candidates who had a minimum of five credits (including English Language and Mathematics) in six years, 2010 to 2018 of the nine years reviewed. This indicates that the performance of students in the SSCE was below average. However, in 2017, the performance of students was above average, while acknowledging the state's improvement, it is still below the national average pass of 59% (Daily Post, 2017). Furthermore, Oyo State is not among the first top ten states in the national rating (Inyang, 2017). Hence, the performance of the state candidates was relatively low when compared to those of other states in Nigeria. Table 1 shows the detailed analysis of the number of candidates in Oyo State with a minimum of five credits including English Language and Mathematics from 2007 to 2018.

This poor academic performance of students in SSCE seems to be a pointer to low student cognitive and affective learning outcomes. However, mentoring is a relationship between two people that is likely to improve learning outcome. It is a structured and trusting relationship involving an experienced person referred to as mentor and a less experienced person, usually referred to as mentee or protégé in the relationship. It is a relationship between teachers and students, in which the student receives continuous guidance, direction and counselling that transcends classroom teaching and activities all in a bid that such a student attains high learning outcome (Abiodun-Oyebanji, 2016). The mentor provides guidance, instruction and encouragement aimed at developing the competence and character of the mentee. Mentoring relationship can be a new way of imparting, retaining and sustaining knowledge in a convenient way and developing positive attitude toward learning. Merrick (2007) noted that mentoring occurs when a teacher willingly invests time in the development of a student, when trust relationship is formed and the needs and

interest of the student are met. When mentoring services are put in place, the students learn and are integrated into the school culture. They learn about themselves which helps to boost their self-esteem.

Masehela and Mabika (2017) assessed impact of the mentoring programme on student performance and concluded that the mentoring programme contributed to improving student success. Schnautz (2014) also analysed the effects of school-based mentoring on student achievement for junior high school students and showed that the mentoring programme showed significant effects in the number of students' discipline referrals along with the Texas Assessment of Knowledge and Skills (TAKS) Math scale scores.

In Nigeria, it has been observed that students in secondary schools and colleges are finding it increasingly difficult to achieve their academic goals due to poor mentoring and lack of adequate resources (Obidimma, 2014). Olu-Ajayi (2016) concluded that lack of mentoring accounted for students' negative attitude towards learning, stating further that the normal classroom teaching alone might not be adequate to ensure a positive attitude in poor and slow students, but complementing normal classroom teaching with mentoring seemed better for improved attitude towards learning in poor students. Stefanie (2014) observed that private tutoring improves students' academic outcome in reading. Jones (2014) in his study submitted that tutoring programme helped tutors and tutees through expanded understanding of academic, social, communication and life skills.

Kendricks, Nedunuri and Arment (2013) conducted study on minority students' perceptions of the impact of mentoring to enhance academic performance. The researchers found strong correlation between

academic success of scholars and their degree of acceptance of mentoring as a positive experience in their learning. This implies that good mentoring can lead to academic success. Woods and Preciado (2016) also noted that mentoring programme positively influence students' college attitudes, particularly for students who have lower baseline SAT scores. Wilson and Grigorian (2019) equally concluded that mentoring significantly influenced students' attitudes towards Mathematics. Hence, it is against this background that the study sought to examine mentoring and student learning outcomes of public secondary schools in Oyo State.

Statement of the Problem

Student learning outcomes of public secondary schools in Oyo State appear to be low in terms of academic performance. Student academic performance in Oyo State seems to be relatively poor when compared to other states in Nigeria. As evident in 2017 SSCE result released by WAEC, Oyo State is not rated among the first top ten states with best results. This shows that student learning outcomes in Oyo State seem to be declining.

Study suggests that low learning outcome of public secondary school students is related to mentoring between the teachers and students in the schools. It is against this background that this study examines mentoring and student learning outcomes of public secondary schools in Oyo State, Nigeria.

Research Question

1. What is the level of student learning outcomes in public secondary schools in Oyo State, Nigeria?

Hypotheses

The following hypotheses were formulated and tested at 0.05 level of significance:

Ho₁: There is no significant relationship between mentoring and student learning

outcomes in public secondary schools in Oyo State, Nigeria.

Ho₂: There is no significant relationship between tutoring and student learning outcomes in public secondary schools in Oyo State, Nigeria.

Ho₃: There no is significant joint contribution of mentoring and tutoring to secondary school student learning outcomes in Oyo State, Nigeria.

Ho₄: There no is significant relative contribution of mentoring and tutoring to secondary school student learning outcomes in Oyo State, Nigeria.

Methodology

The study adopted survey research design of the correlational type. The population of the study comprised 77,966 Senior Secondary School two students, 13,611 teachers and 628 schools with the same number of principals in public secondary schools in Oyo State. Four zones were selected using purposive sampling technique. The same

technique was also used to select three local governments from each of the four zones, making a total of 12 local governments. A proportionate to size sampling technique was used to select 20.0% of senior secondary schools while stratified sampling technique was used to select four teachers in each of the senior secondary schools selected for the study. This made a total number of 252 teachers and 1890 students representing total respondents of 2142. Two instruments were used and developed to collect the data from the respondents. These are namely: Mentoring Questionnaire (MQ) and Achievement Tests on English Language and Mathematics (ATELM). Reliability of 0.78 and 0.79 were obtained through Cronbach's Alpha method of testing reliability. The Research Question was analysed, using descriptive statistics while Pearson Product Moment Correlation and Multiple Regression were used for hypotheses.

Results

Research Question: What is the level of student learning outcomes of public secondary schools in Oyo State, Nigeria?

Table 2: Level of secondary school student learning outcomes in English language

Level	Range	Frequency	Percentage
Low	0-8	1773	94.3
High	9-15	107	5.7
Total		1880	100.0
Mean = 4.28			

Table 2 indicates that majority of the respondents 1773 (94.3%) have low achievement score in English language, while the remaining 107 (5.7%) have high achievement scores. Table 2 indicates a mean achievement score of 4.28 which implies that the performance of students in English language is low.

Table 3: Level of secondary school student learning outcomes in Mathematics

Level	Range	Frequency	Percentage
Low	0-8	1429	76.0

High	9-15	451	24.0
Total		1880	100.0
Mean = 6.55			

Table 3 reveals that most of the respondents 1429 (76%) have low achievement scores in Mathematics, 451 (24.0%) have high achievement scores in Mathematics. Table 3 indicates a mean achievement score of 6.55, which means that the students' achievement in Mathematics is low. The two tables revealed that student learning outcomes was low. The finding is in line with the findings of Umar and Usman (2014) who indicated in their study, a poor performance in English language among secondary school students. This finding also supports the findings of Lin

and Zhang, (2013) who in their study found that students under performed in English language in the classroom and on standardized tests. This agrees with the findings of Usman (2012) and Adedokun, (2011) who found that secondary school students have a poor performance in English language. This low achievement of students in English language supports the findings of Hungi and Thuku (2010) that there was a variation in reading achievement in English language.

Testing the Hypotheses

Hypothesis 1: There is no significant relationship between mentoring, tutoring and student learning outcomes of public secondary schools in Oyo State, Nigeria.

Table 4: Correlation Matrix showing relationship between mentoring, tutoring and secondary school student learning outcomes (English language and Mathematics)

Variables	Achievement	Mentoring	Tutoring
Achievement	1		
Mentoring	0.050* 0.030	1	
Tutoring	0.026 0.253	0.602* 0.000	1
Mean	10.83	13.96	18.04
STD.D	4.29	3.99	4.21

* denotes significant at $p < 0.05$ level of significant

Table 4 shows that there were positive, weak significant relationship between mentoring services ($r = 0.05$; $p < 0.05$) and student learning outcomes in English language and Mathematics. This implies that mentoring is related to student achievement. This indicates that as mentoring improves, student learning outcomes will also improve. Thus, hypothesis 1 was rejected for mentoring. Table 4 further reveals that there is a

positive, weak non-significant relationship between tutoring and student learning outcomes in English language and Mathematics. This implies that tutoring is not significantly related to student learning outcomes in English language and Mathematics. Thus, hypothesis 1 was not rejected for tutoring. This supports the findings of that Masehela and Mabika (2017) that mentoring programme contributed

significantly to improve student academic performance. Likewise, the finding is also in line with the result of Schnautz (2014) who indicated that the mentoring programme showed significant effects on student's TAKS Math scale scores. Also it agrees with the findings of Stefanie (2014) that private tutoring improves students' academic

outcome in reading. This agrees with the findings of Jones (2014) in his study that tutoring programme helped tutors and tutees through expanded understanding of academic, social, communication and life skills.

Hypothesis 2: There is no significant joint contribution of mentoring and tutoring to secondary school student learning outcomes in Oyo State, Nigeria.

Table 5: Multiple Regression Analysis showing the joint contribution of mentoring and tutoring to secondary school student learning outcomes

Sources of Variance	Sum of Squares	Df	Mean Square	F	Significant
Regression	87.438	2	43.719	2.379	0.093
Residual	34498.783	1877	18.380		
Total	34586.221	1879			
R = 0.050 R Square = 0.003 Adjusted R Square = 0.001 Std. Error of the Estimate = 4.28716					

Table 5 indicates that there is no significant joint contribution of mentoring and tutoring to the prediction of secondary school student learning outcomes in English language and Mathematics ($F_{(2,1877)} = 2.38$; $\text{Adj } R^2 = 0.001$; $p > 0.05$). This implies that when mentoring and tutoring were taken together, they did not predict student learning outcomes in English language and Mathematics. Thus, hypothesis 2 was not

rejected. The result is contrary to the findings of Kendricks, et al (2013) that mentoring has a positive and significant effect on students' learning experience. Similarly, the finding is inconsistent with the findings of Stefanie (2014) that tutoring significantly improved student learning outcomes in reading.

Hypothesis 3: There is no significant relative contribution of mentoring and tutoring to secondary school student learning outcomes in Oyo State, Nigeria.

Table 6: Multiple Regression Analysis showing relative contributions of mentoring and tutoring to secondary school student learning outcomes

Model	Under standardize d Coefficients	Standardize d Coefficient		T	Sig.
	Beta	Std. Error	Beta (β)		
(Constant)	10.137	0.450		22.53	0.000
Mentoring	0.058	0.031	0.054	3	0.063
Tutoring	-0.006	0.029	-0.006	1.857	0.838
				-0.204	

Table 6 shows that there were no significant relative contributions of mentoring services ($\beta = 0.05$; $t = 1.86$; $p > 0.05$) and tutoring services ($\beta = -0.01$; $t = -0.20$; $p > 0.05$) to student learning outcomes in English language and Mathematics. This indicates that mentoring and tutoring separately do not predict student learning outcomes in English language and Mathematics. Thus, hypothesis 4 was rejected. This negates the findings of Woods and Preciado (2016) that mentoring programme positively influence students' college attitudes, particularly for students who have lower baseline SAT scores. This is also contrary to the findings of Wilson and Grigorian (2019) that mentoring significantly influences students' mathematical attitudes.

Conclusion

The study examined mentoring, tutoring and student learning outcomes in public secondary schools in Oyo State, Nigeria. The study established that student learning outcomes in Mathematics and English language was found to be low. The study submitted that mentoring improves student learning outcomes. However, the study also concluded that mentoring and tutoring did not relatively and jointly predict student

learning outcomes in English language and Mathematics.

Recommendations

Efforts should be put in place by government and school administrators to improve learning outcomes in English language and Mathematics of senior secondary school students. Seminars and workshop on the importance of mentoring and tutoring students should be organized for teachers in order to increase the performance of students in English language and Mathematics.

References

- Abiodun-Oyebanji, O. J. (2016). Emerging issues in mentoring junior academic in Nigeria universities. *Global perspective in education*. A book of reading in honour of late Professor Mobolaji Ogunsanya. F. S. Akinwumi and D. A. Olaniyan Eds. Ibadan: His Lineage Publishing.
- Adebayo, F. A. (2015). Time management and student academic performance in higher institutions, Nigeria - A case study of Ekiti State. *International Research in Education vol. 3: 2*

- Adedokun, A. O. (2011). Notes on language linguistics (phonetics and phonology) and English language method
- Akiri, A. A. and Ugborugbo, N. M. (2008). An examination of genders influence on teachers' productivity in secondary schools. *Journal of Social. Science*, 17.3: 185-191.
- Egwu S. O. (2009). Road map for Nigeria educational section, Abuja Federal Ministry of Education, Federal Ministry of Education Abuja.
- Hungi, N and Thuku, F. (2010). Differences in pupil achievement in Kenya; Implication for policy and practice. *International Journal of Educational Development*. 30:33-43
- Inyang, I. (2017). WAEC: Abia, Rivers lead nationwide in 2017 May/June WASSCE results [See top 10]. <http://dailypost.ng/2017/07/24/waec-abia-rivers-lead-nationwide-2017-mayjune-wassce-results-see-top-10/>
- Jones, C.J. (2014). Characteristics of supplemental educational services providers that explain heterogeneity of effects on achievement. Sage Journals.
- Kendricks, K. D., Nedunuri, K. V., Arment, A. (2013). Minority student perceptions of the impact of mentoring to enhance academic performance in STEM disciplines. *Journal of STEM Education: Innovations and Research*. 14.2:38-46.
- Lin, C.K. and Zhang, J.M. (2014). Investigating correspondence between language proficiency standards and academic content standards: A generalizability theory study 31:413–431.
- Masehela, I. and Mabika, M. (2017). An assessment of the impact of the mentoring programme on student performance. *Journal of Student Affairs in Africa*. 5:10.
- Merrick, L. (2007). Mentoring: Good Practice Guide Resource Centre for Women in Science, Engineering and Technology. United Kingdom.
- Mrunal, M and Manvinder, K. S. Singh. (2017). Importance and Benefits of Learning Outcomes. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)* 22.3:65-67
- Musa, K. L., Nwachukwu, K. I. and Ali, D. G. (2016). Expectancy beliefs and English Language performance of secondary schools students in Maiduguri Metropolis, Borno State, Nigeria. *Journal of Education and Practice*, 7.26: 62-68.
- Obidimma, E. (2014). Fostering innovation and leadership in the African academy: A pathway for personal transformation. Book ISBN softcover 978-1-4931-2138-0, eBook 978-1-4931-2139-7. 122pages. Xlibris LLC.
- Okebukola, P. A. (2008). Principles and policies guiding current reforms in Nigeria University. *Journal of Higher Education in African* 4:15-26.

- Oladeji, O. (2017). Oyo House deliberates on poor performance of students. <http://thenewsnigeria.com.ng/2017/08/oyo-house-deliberates-on-poor-performance-of-students/>
- Olu-Ajayi, F. E. (2016). Effects of mentoring on low-performing secondary school students of Biology in south-west, Nigeria. *IOSR Journal of Research and Method in Education*, 6.5: 68-72.
- Schnautz, B. D. (2014). The effects of school-based mentoring on student achievement for junior high school students. Doctoral dissertation, Texas A & M University. Available electronically from <http://hdl.handle.net/1969.1/153847>.
- Stefaine, H. (2014). Does private tutoring work? The effectiveness of private tutoring: A nonparametric bounds analysis. *Education Economics*. 22
- Daily Post Editorial, (2017), Sep. 13, Oyo records best WASSC result in 18 years – Arulogun. The Daily Post <https://dailypost.ng/2017/09/13/oyo-records-best-wassc-result-18-years-arulogun/>
- Usman, A. (2014). Relationship between educational resources and students academic achievement in Borno State senior secondary schools. M.Ed. Research Proposal, University of Maiduguri.
- Umar Sa'ad, T. and Usman, R. (2014). The causes of poor performance in English Language among senior secondary school students in Dutse Metropolis of Jigawa State, Nigeria. *Journal of Research & Method in Education*, 4.5:41-47.
- Wachikwu, T., Kevwe, O.A, Magnus-Arewa, E. A. and Nwaukwu, C. (2017). Psychological factors and students' academic achievement in Mathematics in Ughelli-South Local Government Area of Delta State, *Nigeria British Journal of Education*, 5.10:8-21.
- Wilson, A.T. and Grigorian, S. G. (2019). The near-peer Mathematical mentoring cycle: studying the impact of outreach on high school students' attitudes toward Mathematics. *International Journal of mathematical education in science and technology*. 50(1):46-64
- Woods, C. S. and Preciado, M. 2016. Student-mentor relationships and students' college attitudes. *Journal of Education for Students Placed at Risk*, 21.2:90-103.