



# TEACHER QUALITY AND ACADEMIC PERFORMANCE OF STUDENTS IN PUBLIC SECONDARY SCHOOLS IN RIVERS STATE, NIGERIA

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## ABSTRACT

*This study examined teacher quality and academic performance of students in public secondary schools in Rivers State, Nigeria. Three objectives with corresponding research questions and null hypotheses guided the study. Correlational survey research design was adopted for the study. The population of this study comprised of all the 6,893 teachers of 291 public senior secondary schools in Rivers State. A proportionate stratified random sampling technique was adopted to select a sample size of 1,033 teachers representing 15% of the entire population. Two instruments titled: Teacher Quality Scale (TQS) and Academic Performance Scale (APS) were used for this study. Cronbach alpha reliability test was conducted to ascertain the reliability of the instruments, of which the reliability coefficients of Teacher Quality Scale and Academic Performance Scale were 0.89 and 0.83 respectively. Research questions 1-3 were answered with the use of Pearson Product Moment Correlation, while z-ratio correlation statistics was used to test the corresponding hypotheses at 0.05 significance level with the help of statistical package in social science (SPSS). The result of the study revealed that, there was a very weak and positive relationship between teacher's teaching methods and academic performance of students, while teacher's time management and subject mastery were found to have moderate and positive relationship with academic performance of students in public secondary schools in Rivers State. Consequently, the study concludes that though there are quality teachers in public secondary schools in Rivers State, their quality does not reflect much on students' academic performance. Based on the results and conclusion, the study recommended among others that supervisors from the school board and principals should step up their supervisory roles and techniques to ensure that teachers vary their teaching method. Also, teachers should be motivated by the government through Ministry of Education to participate actively in training programmes and workshops to update their knowledge and pedagogical skills on time management.*

**KEYWORDS:** Teacher, Quality, Students, Academic Performance

## INTRODUCTION

Education in a simple term has to do with acquisition of knowledge and skills for individual and societal development. It is very vital for emancipating mankind. Each society puts a lot of capital on it to ensure that the entire generation acquires the necessary skills, knowledge and the desired attitudes critical for future survival. However, owing to educational value, the success of education is measured through assessment in examination. Students' academic performances are assessed to ascertain if the set educational objectives and goals have been achieved. This however, boils down to the qualities of teachers and their workplace. Education at secondary school level is the bed rock and foundation towards higher knowledge in the tertiary institutions. It is an investment as well as instrument that can be used to achieve a more rapid economic, social, political, technological, scientific and cultural development in the country. However, the quality of education one receive especially at the secondary school level is dependent on the quality of a teacher.

A teacher is an instructor, facilitator, educator or a person who imparts knowledge or has the ability to transfer knowledge to the students. A teacher is a person who teaches the students with the allocated time in the school to foster learning. They play an important role in ensuring quality education delivery. The most common role the teacher play is to dispense pertinent knowledge to the students by following a stipulated curriculum that guides that level of education. Teachers, as important members of the school



play pivotal roles in educating the students. Teachers use different teaching methods in teaching to ensure knowledge is dispensed. They set the tone of their classroom, build warm environment, and become role model. A teacher is responsible for the emotional, behavioural, planning, preparing and effectively teaching students in a class to support or enhance their success. Far beyond that, he carries out the role of a parent, counselor, mentor and many others. However, the primary role of a teacher is to impart knowledge to his students and ensure that their performance increase over time.

The teachers is expected to ensure a good progress in the performance of his students, monitor their emotional, social and moral development. He can help to address social problems that affect the student success. The teacher is projected to have advance knowledge and skills in order to be efficient and effective in the classroom for instructional delivery. He is expected to be proficient in the use of technologies in teaching and in management of the classroom for students academic performance. All of these and many more are the role of a quality teacher. Teacher quality is a key determinant of students academic performance. It is referred as to those attributes or qualities that a teacher possess. These attributes include teacher's teaching method, time management, subject mastery and many others. Teachers with these qualities to an extent influence their student academic performance.

Teacher's time management refers to the process whereby a teacher organizes and plans the amount of time to teach or deliver a lesson in the classroom for achievement of school goals and objectives (Sahito, et al.2016). Honing such quality is very necessary for a teacher, so as to avoid time wastage. When a teacher manages his time, it enables him to plan and deliver the lesson for the day without getting the students bored or tired in the class, which will result in better performance of the students. Another teacher quality is his teaching method. A teaching method comprises the principles and strategies adopted by a teacher to enable student learning and understanding of what is been taught (Isa, et al., 2020). These strategies are determined partly on subject matter to be taught and partly by the nature of the learner. For a particular teaching method to be appropriate and efficient it has to be in relation with the characteristics of the learner and the type of learning it is supposed to bring about (Isa, et al., 2020). Consequently, a teacher should design and select an appropriate teaching method that suits the nature of the subject matter and also how the students learn. This will help to promote a lot of creativity, effective teaching and learning process in the classroom, and as well enhance students performance. Commonly used teaching method may include dramatization, demonstration, lecture method, recitation, memorization, field trips or combination of all (Isa, et al., 2020).

Subject mastery is unarguably another teacher quality that is required from a teacher. According to Cohen (2010), teaching a course entails more than superficial knowledge of the subject. That is, the more a teacher understands a particular content, the more effective and efficient he will be to transfer knowledge to the students. For example, a teacher with the knowledge of Mathematics will deliver accurately and competently than a teacher who has little or no content knowledge on the subject. When a teacher has a strong content knowledge, it helps his students get better knowledge and understanding of the subject which translate or result in academic performance. Subject mastery helps the teacher to respond to students productively. Teachers understanding of the purpose and nature of a particular subject or discipline influences his/her manner or method of teaching, the ability to clearly explain and ask good questions, the ability to arouse students interest in the subject for better academic performance.

Academic performance is the outcome of education. It is the extent to which a student, teacher or institution has achieved their educational goals. Academic performance is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important- procedural knowledge such as skills or declarative knowledge such as facts (Annie, et al., 2016). Nevertheless, it refers to how students deal with their studies and how they cope with or accomplish different tasks given to them by their teachers. Academic performance is the ability to study and remember facts as well as the capacity to communicate the knowledge acquired either verbally or in writing. A student behaviour can be regarded performance, when it is observable and measurable in a particular situation.

Overtime several indicators have been used to measure teacher quality. Each teacher quality index provides a single measure of teacher quality based on a larger number of teacher quality measures, such as teacher experience, certification status, academic ability and even stability at school. Although there is ongoing argument about whether there is a link or connection between objective measures of teacher quality (such as teaching method, time management and subject mastery) and students' performance in school. It is on this premise that this study sought to reexamine the relationship between teacher quality (proxied by teaching method, time management and subject mastery) and academic performance of students in public secondary schools in Rivers State, Nigeria.



## STATEMENT OF PROBLEM

The career of teaching come with a lot of excitement, personal reward, challenges and chance to encourage and support others to achieve their dreams and aspirations. This is possible with an excellent teacher who knows how to work with his/her colleagues, parents, other professionals and community members to inspire the students to perform better in their academic works. Through several rigorous process and training teachers acquire qualities that are essential in ensuring a long-lasting change in students' behaviour. With such qualities, teachers are expected to motivate, guide and encourage students to study hard to improve their academic performance.

However, there have been public outcries that the academic performance of students in public secondary schools in Rivers State is below expectation. Many of the students perform woefully in both internal and external examinations, some cannot even boast of five credit in their West African Examination Certificate (WAEC), while some can even cannot read fluently, speak good English nor even solve simple Mathematical problems. These problems and more are not peculiar to only the students in public secondary school in Rivers State, but report from the public and external examinations outputs has it that there has been a decline in the standards of education in Nigeria. The question then is that does it mean the qualities teachers' possess does not have a positive and significant link with students' academic performance? It is on this background that this study sought to determine the relationship between teacher quality and academic performance of students in public secondary schools in Rivers State, Nigeria.

## Aim and Objectives of the Study

The aim of this study is to examine teacher quality and academic performance of students in public secondary schools in Rivers State, Nigeria. Specifically, the objectives of the study sought to:

1. Ascertain the relationship between teacher's teaching methods and academic performance of students in public secondary schools in Rivers State.
2. Determine the relationship between teacher's time management and academic performance of students in public secondary schools in Rivers State.
3. Find out the relationship between teacher's subject mastery and academic performance of students in public secondary schools in Rivers State.

## Research Questions

The following research questions guided the study.

1. What is the relationship between teacher's teaching methods and academic performance of students in public secondary schools in Rivers State?
2. What is the relationship between teacher's time management and academic performance of students in public secondary schools in Rivers State?
3. What is the relationship between teacher's subject mastery and academic performance of students in public secondary schools in Rivers State?

## Research Hypotheses

The following hypotheses were tested at 0.05 level of significance.

1. There is no significant relationship between teacher's teaching methods and academic performance of students in public secondary schools in Rivers State.
2. There is no significant relationship between teacher's time management and academic performance of students in public secondary schools in Rivers State.
3. There is no significant relationship between teacher's subject mastery and academic performance of students in public secondary schools in Rivers State.

## METHODOLOGY

This study adopted a correlation survey design to ascertain if there is a relationship or co-variations among the variables using a quantitative method of research. The population of this study was made up of all the 6,893 teachers (i.e. 3,490 male and 3,403 female) of 291 public senior secondary schools in Rivers State. (Source: Planning, Research and Statistics Department, Rivers State, 2021). The sample size for this study was 1,033 teachers representing 15% of the entire population. The sample size was drawn from the entire population using the proportionate stratified random sampling technique. This ensured that all members of the population are given equal opportunity of being selected. The research instrument titled: Teacher Quality Scale (TQS) and Academic Performance Scale (APS) were used for this study. The instruments have two sections (A and B). Section A elicited demographic information from



the respondents, while section B elicited information on Teacher Quality Scale and Academic Performance Scale. The two instruments were coded in line with the modified four-point Likert rating scale as follows; Strongly Agree (SA) = 4 Points, Agree (A) = 3 Points, Disagree (D) = 2 Points, Strongly Disagree (SD) = 1 Point respectively. Cronbach Alpha reliability statistics was used to test the reliability of the two instruments. The reliability coefficients of Teacher Quality Scale and Academic Performance Scale are 0.89 and 0.83. For the data that were analyzed, research question 1 to 3 were answered using Pearson Product Moment Correlation (PPMC), while z-ratio statistics was used to test the corresponding hypotheses at 0.05 significance level with the help of Statistical Package in Social Science (SPSS).

## RESULTS AND ANALYSIS

As part of data collection efforts, the researcher designed and distributed 1,033 copies of the questionnaire to the respondents. One thousand and twelve (1,012) copies were retrieved and found suitable for analysis resulting in 97% retrieval rate.

**Table 1: Distribution of Respondents by their Gender**

S/No	Status	Frequency	Percentage (%)
1	Male	554	54.74
2	Female	458	45.26
	<b>Total</b>	<b>1012</b>	<b>100</b>

From the above Table 1, it was revealed that 554 of the respondents were male representing 54.74%, while the remaining 458 were female representing 45.26% of the total respondents.

**Research Question 1:** What is the relationship between teacher's teaching methods and academic performance of students in public secondary schools in Rivers State?

**Hypothesis 1:** There is no significant r relationship between teacher's teaching methods and academic performance of students in public secondary schools in Rivers State.

**Table 1: Pearson Product Moment Correlation (PPMC) showing the relationship between teacher's teaching methods and academic performance of students in public secondary schools in Rivers State.**

Variables	N	df	R	P (Sig.)	Decision
Teaching Method	1012	1010	0.172	0.081	Accepted Ho <sub>1</sub>
Academic Performance	1012				(Not Significant) P > 0.05

**Decision Rule:** 0.00 – 0.19 = Very Weak, 0.20 – 0.39 = Weak, 0.40 – 0.59 = Moderate, 0.60 – 0.79 = Strong, 0.80 – 1.00 Very Strong

To answer the research question 1, results from Table 1 produced a correlation coefficient, 'r' of 0.172; which by percentage is 17%. This value shows there is a very weak and positive relationship between teacher's teaching methods and academic performance of students in public secondary schools in Rivers State. In other words, teaching method as part of teacher quality to a very weak extent correlates with academic performance. Hence, any improvement in teacher's teaching method will lead to a corresponding increase in r academic performance of students in public secondary schools in Rivers State.

For hypothesis 1 tested, it is revealed also from Table 1 that the correlation for hypothesis one shows a significant correlation at  $r = .172$  where  $p\text{-value} = 0.081$  ( $P > 0.05$ ). Since the  $p\text{-value} 0.001$  is higher than the alpha level 0.05, we therefore accept the null hypothesis, thus, there is no significant relationship between teacher's teaching methods and academic performance of students in public secondary schools in Rivers State.

**Research Question 2:** What is the relationship between teacher's time management and academic performance of students in public secondary schools in Rivers State?

**Hypothesis 2:** There is no significant relationship between teacher's time management and academic performance of students in public secondary schools in Rivers State.

**Table 2: Pearson Product Moment Correlation (PPMC) showing the relationship between teacher's time management and academic performance of students in public secondary schools in Rivers State.**

Variables	N	df	R	P (Sig.)	Decision
Time management	1012	1010	0.572	0.000	Rejected Ho <sub>2</sub>
Academic Performance	1012				(Significant) P < 0.05

**Decision Rule: 0.00 – 0.19 = Very Weak, 0.20 – 0.39 = Weak, 0.40 – 0.59 = Moderate, 0.60 – 0.79 = Strong, 0.80 – 1.00 Very Strong**

To answer the research question 2, results from Table 2 produced a correlation coefficient, 'r' of 0.572; which by percentage is 57%. This value shows there is a moderate and positive relationship between teacher's time management and academic performance of students in public secondary schools in Rivers State. In other words, time management as part of teacher quality correlates with academic performance. Therefore, any improvement in teacher's time management will lead to a corresponding improvement in academic performance of students in public secondary schools in Rivers State.

For hypothesis 2 tested, it is revealed also from Table 2 that the correlation for hypothesis two shows a significant correlation at  $r = .572$  where  $p\text{-value} = 0.000$  ( $P < 0.05$ ). Since the  $p\text{-value} 0.000$  is less than the alpha level 0.05, we therefore reject the null hypothesis, thus, there is a significant relationship between teacher's time management and academic performance of students in public secondary schools in Rivers State.

**Research Question 3:** What is the relationship between teacher's subject mastery and academic performance of students in public secondary schools in Rivers State?

**Hypothesis 3:** There is no significant relationship between teacher's subject mastery and academic performance of students in public secondary schools in Rivers State.

**Table 3: Pearson Product Moment Correlation (PPMC) showing the relationship between teacher's subject mastery and academic performance of students in public secondary schools in Rivers State.**

Variables	N	df	R	P (Sig.)	Decision
Subject Mastery	1012	1010	0.511	0.000	Rejected Ho <sub>3</sub>
Academic Performance	1012				(Significant) P < 0.05

**Decision Rule: 0.00 – 0.19 = Very Weak, 0.20 – 0.39 = Weak, 0.40 – 0.59 = Moderate, 0.60 – 0.79 = Strong, 0.80 – 1.00 Very Strong**

To answer the research question 3, results from Table 3 produced a correlation coefficient, 'r' of 0.511; which by percentage is 51%. This value shows there is a moderate and positive relationship between teacher's subject mastery and academic performance of students in public secondary schools in Rivers State. In other words, subject mastery as part of teacher quality correlates with academic performance. Thus, any improvement in teacher's subject mastery will lead to a corresponding improvement in academic performance of students in public secondary schools in Rivers State.

For hypothesis 3 tested, it is revealed also from Table 3 that the correlation for hypothesis three shows a significant correlation at  $r = .511$  where  $p\text{-value} = 0.000$  ( $P < 0.05$ ). Since the  $p\text{-value} 0.000$  is less than the alpha level 0.05, we therefore reject the null hypothesis, thus, there is a significant relationship between teacher's subject mastery and academic performance of students in public secondary schools in Rivers State.

### Discussion of Finding

The first finding of this study revealed that there is a very weak and positive relationship between teacher's teaching method and academic performance of students in public secondary schools in Rivers State. In other words, this simple means that the teaching method adopted by teachers is not sufficient enough to contribute or improve the academic performance of students in public secondary schools in Rivers State. This result of the study is tandem with Adunola in Kayode and Ayodele (2015) who reported that



regrettably, poor academic performance by the students in Nigeria is fundamentally linked to application of ineffective teaching methods by teachers to impact knowledge to learners. According to the scholar, most teachers in public schools in Nigeria barely vary their method of teaching. Adgoke in Ogide (2017) stated that in our institutions, teachers use mainly the lecture method which is a teacher – centered method and the implication is that learners are passive and learning tends to be superficial. Asikhia in Sahito (2016) found that, qualifications of teachers and students' environment factors do not influence students' poor performance but teachers' methods of teaching influence poor performance. According to Adunola in Kayode and Ayodele (2015), regular poor performance by majority of students is fundamentally linked to application of ineffective teaching methods by teachers to impact knowledge to learners. Also, the finding confirms the findings by Hake (1998) as cited in Oke (2020) who reported that students' little or no active involvement in the learning process could lead them to perform poorly in their academics. This finding substantiate the hypothesis tested which revealed that there is no significant relationship between teacher's teaching methods and academic performance of students in public secondary schools in Rivers State.

The second finding of the study showed that there is a moderate and positive relationship between teacher's time management and academic performance of students in public secondary schools in Rivers State. In other words, time management as part of teacher quality correlates with academic performance. Therefore, any improvement in teacher's time management will lead to a corresponding improvement in academic performance of students in public secondary schools in Rivers State. This result corroborates the findings of Isa, et al (2020) who observed that there is a positive relation between time management of teachers training and performance of students in the classroom. That's why it was recommended that teachers should improve their time management skills through consciousness about controlling their time (Kayode & Ayodele, 2015). If a teacher who possess good quality especially in time management, findings from Akinwonmi (2006) as cited in Greewait (2021) reported that it has a significant impacts on students' academic performance. Hence, this is evident in the hypothesis tested which revealed that there is a significant relationship between teacher's time management and academic performance of students in public secondary schools in Rivers State.

Lastly, the third finding of the study revealed that there is a moderate and positive relationship between teacher's subject mastery and academic performance of students in public secondary schools in Rivers State. In other words, teaching method as part of teacher quality to a very weak extent correlates with academic performance. This means that, any improvement in teacher's teaching method will lead to a corresponding increase in academic performance of students in public secondary schools in Rivers State. This finding is in consonance with Thomas and Amaechi (2019) who opined that subject mastery content of a teacher has a strong relationship with the quality of teaching and academic performance of students. Concurring to this view, Shanes and Latham (2012) buttressed that when a teacher has a strong content knowledge he is better able to assist in the cognition and transmission of knowledge to students. The teacher specializes on the subject(s) to be taught which generally equips the teacher with scholarly knowledge of those subjects and integrates with professional education leading to new understanding and skills for professional performance in the school for students performance. Also in line with the finding, Darling-Hammond in Oke (2020) postulated that among other things, teachers knowledge of teaching subject matter and qualifications attained in teacher training largely determine the effectiveness of a teacher in his work environment and as well how he/she prepare the students for better grades. However subject mastery knowledge is a necessary skill for all teachers because it helps the teacher function effectively in arousing better performance in his students. Without continuously learning, the teacher might have an encounter with precocious students losing baffling questions, if not given accurate respond/feedback embarrass teachers and undermine their authority in the classroom (Darling-Hammond, 2006 as cited in Oke, 2020). Therefore, there is a significant relationship between teacher's subject mastery and academic performance of students in public secondary schools in Rivers State.

## CONCLUSION

From the finding of the study, it could be concluded that though there are quality teachers in public secondary schools in Rivers State, their quality does not reflect much on students academic performance. It was observed that there is a very weak and positive relationship between teacher's teaching methods and academic performance of students, while teacher's time management and subject mastery was found to have moderate and positive relationship with academic performance of students in public secondary schools in Rivers State.

## RECOMMENDATIONS

The following were the recommendations for the study:

1. Supervisors from the school board and principals should step up their supervisory roles and techniques to ensure that teachers vary their teaching method. Stepping up their supervisory roles would not only keep the teachers alert, but enable them to work diligently to improve on the academic performance of the students.



2. Teachers should be motivated by the government through Ministry of Education to participate actively in in-service training programmes and workshops to update their knowledge and pedagogical skills on time management. This would help them vary their methods of teaching to suit the subject matter to be taught for students' better understanding and academic improvement.
3. In a bid to sustain and improve teachers' subject mastery, school administrators should encourage teachers to take time to plan and prepare their lessons before going to the classroom.

## REFERENCES

1. Amaechi, I. (2012). Teachers' utilization as correlate of students' academic performance in senior secondary schools in River State, Nigeria. *European Journal of Educational Studies*, 4(2), 282-287.
2. Annie, W., Howard, W. S., & Mildred, M. W. (2016). Achievement and Ability Tests - Definition of the Domain. *Educational Measurement*, 2(1), 24-32.
3. Ekundayo, H. T., Konwea, P. E., & Yusuf, M. A. (2010). Towards effective time management among lecturers in Nigerian Universities. *Journal of Emerging Trends in Educational Research and Policy Studies*, 1(1), 22-24.
4. Greewait, J. F. (2021). Managing your time, energy and talent in ministry. *Fathers and Brothers of S & Paul*.
5. Hall, B. L., & Hursch, D. E. (1982). An evaluation of the effects of a time management training program on work efficacy. *Journal of Organizational Behaviour Management*, 3, 73-98. [http://dx.doi.org/10.1300/J075v03n04\\_08](http://dx.doi.org/10.1300/J075v03n04_08)
6. Isa, S. G., Mammam, M. A., Badar, Y., & Bala, T. (2020). The impact of teaching methods on academic performance of secondary school students in Nigeria. *International Journal of Development Research*, 10(6), 37382-37385.
7. Kayode, G. M., & Ayodele, J. B. (2015). Impacts of teachers' time management on secondary school students' academic performance in Ekiti State, Nigeria. *International Journal of Secondary Education*, 3(1), 1-7. <http://dx.doi.org/10.11648/j.ijsedu.20150301.11>
8. Kayode, G. M., & Ayodele, J. B. (2015). Impacts of teachers' time management on secondary school students' academic performance in Ekiti State, Nigeria. *International Journal of Secondary Education*, 3(1), 1-7.
9. King, A. C., Winett, R. A., & Lovett, S. B. (1986). Enhancing coping behaviours in at-risk populations: the effects of time-management instruction and social support in women from dual-earner families. *Behaviour Therapy*, 17, 57-66.
10. Oke, A. A. (2020). Teachers' teaching methods and students' academic performances in Ibarapa East Local Government Area Secondary Schools. *International Journal of Advanced Academic Research (Arts, Humanities and Education)*, 6(10), 15-28.
11. Sahito, Z., Khawaja, M., Panhwar, U. M., Siddiqui, A., & Saeed, H. (2020). Teachers' time management and the performance of students: A comparison of government and private schools of Hyderabad, Sindh, Pakistan. <http://dx.doi.org/10.5430/wje.v6n6p42>
12. Shanes, L., & Latham, H. (2012). Construction of activity duration and time management potential. *Applied Cognitive Psychology*, 8, 155-68.