

INFLUENCE OF TEACHER QUALITY ON STUDENTS' ACADEMIC PERFORMANCE IN PUBLIC SENIOR SECONDARY SCHOOLS IN DUTSAIN-MA ZONAL QUALITY ASSURANCE, KATSINA STATE, NIGERIA

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Abstract

This study investigated the influence of teacher quality on students' academic performance in public senior secondary schools in Dutsain-ma zonal quality assurance, Katsina state, Nigeria. The study was guided by two objectives, research questions and hypotheses. The study used correlational survey research design. 418 Mathematics and English language teachers constituted the population of the study. Using simple random sampling, 84 teachers were selected as sample of the study. Students Academic Performance Checklist (SAPC) and Teachers Quality Checklist (TQC) were used as the instrument for data collection. The instruments were validated by experts in educational management and educational measurement and evaluation. Research questions were analyzed using frequencies and percentages while, Pearson product moment correlation was used to test the hypotheses. Findings revealed that the level of teacher quality in the educational zone was high. It also revealed that teachers' qualifications did not significantly influence students' academic performance. The study concluded that teachers in Dutsinma zonal quality assurance are highly qualified. The study recommended a greater emphasis to be placed on teachers' classroom effectiveness, commitment and instructional delivery.

Keywords: Influence, Teacher-Quality, Academic Performance.

Introduction

Education remains one of the most powerful instruments for national development and socioeconomic transformation. In Nigeria, education is regarded as a strategic tool for promoting national unity, economic growth, technological advancement and sustainable development. The achievement of these objectives depends largely on the quality of teachers available within the educational system, as teachers serve as the primary agents of curriculum implementation and student development. Consequently, teacher quality has become a central concern among educational planners, policymakers, administrators and other stakeholders seeking to improve students' academic outcomes (Darling-Hammond, 2021).

Teacher quality encompasses the professional qualifications, pedagogical competence, teaching experience, subject-matter knowledge, classroom management skills and commitment

that teachers bring to the teaching-learning process. Research has consistently shown that teacher quality is among the most significant school-based factors influencing students' academic achievement (Hanushek & Rivkin, 2019). Effective teachers possess the knowledge and skills required to facilitate meaningful learning experiences, motivate students and improve educational outcomes across subject areas, including English Language.

The growing concern about students' poor academic performance has generated considerable interest in factors that influence learning outcomes. Among these factors, teacher quality has received significant attention because of its direct impact on instructional effectiveness. Studies have demonstrated that students taught by professionally trained and experienced teachers tend to perform better academically than those taught by less qualified teachers (Kini & Podolsky, 2016; Darling-Hammond, 2021). Professional qualifications and continuous professional development equip teachers with the competencies required to employ appropriate teaching strategies, assess learners effectively and create conducive classroom environments.

In addition to qualifications and experience, teachers' commitment to professional growth plays a critical role in enhancing educational quality. Continuous professional development programmes, information and communication technology (ICT) training, mentoring, instructional supervision, and participation in professional learning communities have been identified as mechanisms for improving teacher effectiveness (Organisation for Economic Co-operation and Development (OECD, 2023). These initiatives help teachers adapt to changing educational demands and adopt innovative instructional practices that enhance student learning.

The issue of educational quality has become increasingly important in Nigeria due to public concerns regarding the competence of school graduates and the overall effectiveness of the educational system. Stakeholders often question whether schools are adequately preparing students with the knowledge, skills, values and competencies required for participation in contemporary society. Educational quality is commonly assessed through students' academic achievement, which reflects the effectiveness of teaching and learning processes within schools (UNESCO, 2024). Secondary education occupies a critical position in Nigeria's educational structure because it serves as a bridge between basic and tertiary education. Success at this level significantly influences students' opportunities for higher education and employment. However, persistent challenges such as inadequate teacher preparation, insufficient instructional resources, overcrowded classrooms, and limited opportunities for professional development have continued to affect educational outcomes in many secondary schools. These challenges are particularly evident in rural and underserved areas where access to qualified teachers may be limited (Federal Ministry of Education, 2023).

Within Katsina State, concerns regarding students' academic performance in English Language have drawn attention to the quality of teaching available in secondary schools. Although considerable efforts have been made by government agencies and educational authorities to improve instructional quality through teacher recruitment, training, and supervision, questions

remain regarding the extent to which teacher quality influences students' achievement in English Language. Understanding this relationship is essential for educational managers and policymakers seeking evidence-based strategies for improving learning outcomes.

It is against this background that this study seeks to investigate the influence of teacher quality on students' academic performance in English Language in secondary schools within the Dutsin-Ma Quality Assurance Zone of Katsina State, Nigeria. The study is expected to provide empirical evidence that will assist educational administrators, policymakers and other stakeholders in formulating strategies aimed at improving teacher effectiveness and enhancing students' academic achievement.

Statement of the Problem

The quality of education delivered in any nation is largely dependent on the quality of its teachers. Teachers play a crucial role in the teaching-learning process by facilitating knowledge acquisition, developing learners' skills and promoting positive attitudes necessary for academic success. Consequently, teacher quality has become a major concern among educational stakeholders, as it is widely recognised as one of the most important school-related factors influencing students' academic performance. Despite various educational reforms and investments in teacher development, concerns persist regarding the quality of teachers and the academic achievement of students in many secondary schools across Nigeria.

In recent years, students' academic performance in public examinations, particularly at the secondary school level, has continued to generate concern among parents, educators, policymakers and educational administrators. Reports from examination bodies such as the West African Examinations Council (WAEC) and the National Examinations Council (NECO) have revealed fluctuations in students' performance, with many students failing to attain the expected standards in core subjects. This situation has raised questions about the effectiveness of the educational system and the factors responsible for the persistent poor performance of students (West African Examinations Council (WAEC, 2024).

In Katsina State and particularly within the Dutsin-Ma Zonal Quality Assurance area, concerns have been expressed regarding students' academic performance in secondary schools. Despite government efforts to improve educational standards through teacher recruitment, training programmes, instructional supervision and quality assurance activities, the level of students' achievement in many schools remains unsatisfactory. Educational stakeholders continue to question whether the available teachers possess the necessary qualifications, experience, pedagogical skills, and professional competencies required to effectively facilitate learning and improve students' academic outcomes.

It is against this backdrop that this study seeks to investigate the influence of teacher quality on students' academic performance in Dutsin-Ma Zonal Quality Assurance, Katsina State, Nigeria. Specifically, the study intends to determine the extent to which teachers' qualifications, teaching experience, professional competence and other dimensions of teacher quality contribute to students' academic achievement. The findings of the study are expected

to provide useful information for educational administrators, policymakers, school managers and other stakeholders in developing strategies for improving teacher effectiveness and enhancing students' academic performance.

Objectives of the Study

The purpose of this study is to examine the influence of teacher quality on students' academic performance in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria. Specifically, the study set out to determine:

1. The level of teachers' quality in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria.
2. Assess the level of influence of teachers' quality on students' academic performance in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria.

Research Questions

The following hypothesis has been formulated to guide the study:

1. What is the level of teachers' quality in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria?
2. What is the level of students' academic performance in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria?

Hypotheses

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

1. Teachers' quality does not significantly influence students' academic performance in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria.
2. Academic qualification of teachers does not significantly influence students' academic performance in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria.

Methodology

This is a correlational study based on survey design using the ex-post-facto design. This is because it examined teacher quality as determinant of students' academic performance in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria. The study was centred on teacher quality as correlate of students' academic performance without the researchers manipulating the independent variable. It was a survey research design in the sense that it also helped to study the entire population covered in the study by collecting and analysing data from only a sample that was considered to be true representative of the entire group.

The population for this study consisted of 418 Mathematics and English Language teachers in secondary schools in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria. This comprised 216 English Language teachers and 202 Mathematics teachers respectively. The sample for this study was made up of 84 Mathematics

and English Language teachers in secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria. The sample was drawn using the simple random sampling technique after the population had been stratified according to Local Government Areas. The sample of Mathematics and English Language teachers was 20% of the entire population of the public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria.

The instruments used for collection of data were checklists titled: “Students’ Academic Performance Checklist (SAPC)” and Teacher Quality Checklist (TQC). The instrument (Students’ Academic Performance Checklist) consisted of two sections, “A” and “B” while Teacher Quality Checklist was made up of only one section. The checklist was used because the researcher only gathered data on respondents in their natural form. Validity was carried out only on the instrument (checklists). The instrument was subjected to face validity by experts especially in Educational Management and Educational Measurement and Evaluation for a review of the designed items. This ensured that the contents were relevant, clear and unambiguous. The corrections made by them were incorporated into the final draft. Reliability test was not carried out on the checklist. This was because the data collected were standardized. The secondary schools were visited and the relevant data collected using the checklist instrument. The research questions were analysed descriptively using frequencies and percentages while the Pearson Product Moment Correlation Coefficient was used to test the hypotheses. Academic qualifications were scored as follows:

B.Sc and Above = High, NCE = Medium, Below NCE = Low

Meanwhile, academic performance was graded as follows:

A1 to B3 = High, C4 to C6 = Average, D7 to F9 or P7 to F9 = Low

Results

Research Question 1: What is the level of teacher quality in secondary schools in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria?

Table 1: Level of Teachers’ Quality in Secondary Schools

Teacher quality	Frequency	Percentage	Remarks
BSC and above	69	82.1%	High
NCE	14	16.7%	Medium
Below NCE	1	1.2%	Low
Total	84	100%	

Table 1 shows the percentage analysis of the level of teacher quality in secondary schools in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria. Out of the 84 teachers sampled, 69 (82.1%) had BSc and above, 14 (16.7%) had NCE while 1 (1.2%) had below NCE. From the benchmark set for this study, it can be concluded

that the level of teacher quality in secondary schools in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria was high.

Research Question 2: What is the level of teachers' quality on students' academic performance in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria?

Table 2: Level of students' academic performance in secondary schools in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria.

Academic Grades	WAEC	NECO	Remark
A1 to B3	220 (12%)	182 (9%)	High
C4 to C6	1104 (62%)	1201 (57%)	Average
D7 to F9	-	717 (34%)	Low
P7 to F9	476 (26%)	-	Low
Total	1800	2100	

Table 2 shows the level of students' academic performance in secondary schools in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria. The results for WAEC and NECO collected for 1800 students and 2100 students respectively showed that 220 students representing 12% of students had A1 to B3 in WAEC and 182 students representing 9% of students had A1 to B3 in NECO. Similarly, 1104 students representing 62% and 1201 students representing 57% had C4 to C6 in WAEC and NECO while 476 students representing 26% had P7 to F9 in WAEC and 717 students representing 34% had D7 to F9 in NECO respectively. It meant that the level of academic performance of students in Edo South Senatorial District was on the average. It was however found that the performance of students in WAEC was a little better than that of NECO with an average score of 62% against 57%.

Hypothesis 1: Teacher quality does not significantly influence students' academic performance in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria.

Table 3: Correlation between teacher quality and students' academic performance.

		Academic Qualification	Professional Qualification	Year of teaching experience	of Over students' academic performance
Academic qualification	Pearson Correlation of Sig. (2- tailed) N	1 84	-.055 .619 84	.325 .003 84	.091 .409 8
Professional Qualification	Pearson Correlation Sig. (2- Tailed) N	-.055 .619 84	1 84	-.142 .199 84	.065 .559 84
Years of teaching experience	Pearson Correlation Sig. (2- Tailed) N	.325 .003 84	-.142 .199 84	1 84	.149 .176 84
Overall academic	Pearson Correlation qualification Sig. (2- Tailed) N	.091 .409 84	.065 .559 84	.149 .176 84	1 84

Table 3 shows the relationship between teacher quality and students' academic performance in secondary schools in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria. The result indicated that there was no significant relationship between teacher quality and students' academic performance in secondary schools in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria, $r = 0.091$, $p > .05$ at 0.05 level of significance. Therefore, the null hypothesis was retained. This means that teacher qualification had no significant influence on students' academic performance in secondary schools.

Hypothesis 2: Academic qualification of teachers does not significantly influence students' academic performance in secondary schools in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria.

Table 4: Academic qualification of teachers and students' academic performance in secondary schools.

		Academic qualifications of teachers		Overall of academic performance	Students'
Academic qualifications of teachers	Pearson Correlation	1		091	.409
	Sig. (2-tailed)	84		84	
	N				
Overall academic performance	Pearson Correlation	.091		1	
Students'	Sig. (2-tailed)	.409		84	
	N				

Correlation is significant at the 0.05 level (2-tailed)

Table 4 shows the relationship between academic qualification of teachers and students' academic performance in secondary schools in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria. The result indicates that there was no significant relationship between academic qualification of teachers and students' academic performance in secondary schools in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria, $r(84) = 0.091$, $p > .05$ at 0.05 level of significance. Therefore, the null hypothesis was retained. This meant that academic qualification of teachers has no significant influence on students' academic performance in secondary schools in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria.

Discussion of Findings

The findings of the study revealed that the level of teacher quality in secondary schools was high. A substantial proportion of the teachers possessed bachelor's degrees and other higher qualifications, indicating the availability of qualified teaching personnel within the study area. This finding may be attributed to the policy of the Federal Government of Nigeria, which prescribes the Nigeria Certificate in Education (NCE) as the minimum teaching qualification, thereby encouraging teachers to pursue higher academic and professional credentials. The result suggests that secondary schools are staffed with teachers who possess the required educational qualifications for effective instructional delivery.

Despite the high level of teacher quality observed, students' academic performance was found to be moderate. This implies that students' achievement in public examinations such as WAEC and NECO was neither exceptionally high nor poor. The moderate level of performance suggests that factors beyond teacher qualifications may influence students' academic outcomes. Such factors may include students' learning abilities, motivation, home background, and availability of learning resources and teachers' level of commitment to instructional duties. The study further revealed that teacher quality, particularly teachers' qualifications, did not significantly influence students' academic performance. This finding indicates that possessing

higher academic qualifications alone may not automatically translate into improved student achievement. Effective teaching requires not only academic credentials but also dedication, pedagogical competence, classroom effectiveness, and commitment to students' learning needs. It is therefore possible for highly qualified teachers to have limited impact on students' performance if they are not fully engaged in the teaching-learning process.

This finding is consistent with the study of Muhammad et al. (2021), who reported no substantial difference in the quality of teachers between high-performing and low-performing schools. Similarly, Jacob & Lefgren, (2024) and Onyekuru, & Ibegbunam, (2023) found that modest increases in teacher training did not significantly improve students' achievement in reading and mathematics. However, the finding contradicts the results of Akinsolu (2022), Daso (2023) and Adedoyin (2024), who reported significant relationships between teacher qualifications, teaching methods, teacher attitudes, training and students' academic performance. The differences in findings may be attributed to variations in research settings, subjects studied, sample characteristics and methodological approaches.

The study also showed that academic qualification alone is not a sufficient indicator of teaching effectiveness. Although teachers may possess advanced degrees and professional competence, their impact on students' learning depends largely on how effectively they apply their knowledge in classroom instruction. This supports the views of Uche (2012) and Adedoyin, (2011) who found that students rated their teachers highly in terms of professional competence but expressed concerns about inadequate supervision, poor preparation and limited interaction with learners. Consequently, teacher effectiveness should be assessed not only by qualifications but also by commitment, instructional practices and the extent to which teachers support students' academic development. Overall, the findings suggest that while teacher quality remains an important component of educational effectiveness, academic qualifications alone may not guarantee improved student performance. Greater attention should therefore be given to enhancing teachers' professional commitment, instructional competence, classroom practices and continuous professional development in order to achieve better academic outcomes among students.

Conclusion

This study concluded that secondary schools in public senior secondary schools in Dutsin-Ma Zonal Quality Assurance Area of Katsina State, Nigeria possess a highly qualified teaching workforce, as the majority of teachers hold bachelor's degrees and above. Despite this high level of teacher qualification, students' academic performance in WAEC and NECO examinations was only average. Furthermore, the findings revealed that teachers' qualifications and academic credentials did not significantly influence students' academic performance.

The study therefore suggests that possession of higher academic qualifications alone is insufficient to guarantee improved student achievement. Rather, factors such as teachers' commitment to instructional duties, effectiveness in classroom delivery, supervision of students, teaching methods and other student-related variables may play more significant roles

in determining academic outcomes. Consequently, educational stakeholders should focus not only on improving teachers' academic qualifications but also on enhancing their professional dedication, instructional effectiveness and engagement with students to achieve better academic performance in secondary schools.

Recommendations

1. Educational authorities should place greater emphasis on teachers' classroom effectiveness, commitment, and instructional delivery rather than focusing solely on academic qualifications during recruitment, promotion and evaluation processes.
2. School administrators should strengthen supervision and monitoring mechanisms to ensure that teachers are dedicated to their teaching responsibilities, adequately prepare their lessons and devote sufficient time to students' academic development.
3. Regular professional development programmes, workshops, seminars and training should be organized to improve teachers' pedagogical skills, teaching methods, classroom management techniques and student engagement strategies.
4. Government and school management should introduce motivation and incentive schemes that encourage teachers to demonstrate greater commitment, dedication and productivity in the teaching-learning process.
5. Guidance and counseling services should be strengthened in secondary schools to help students develop positive study habits, improve academic motivation and address personal factors that may hinder academic performance.
6. Parents should be encouraged to provide adequate academic support and monitor their children's learning activities, as students' performance is influenced by factors beyond the school environment.
7. School management should promote closer teacher-student interaction through mentoring, academic supervision and regular feedback mechanisms to enhance students' learning outcomes.
8. Educational policymakers should develop performance-based assessment systems that evaluate teachers not only on their academic credentials but also on their effectiveness in improving students' learning and academic achievement.
9. Adequate teaching and learning resources, including instructional materials, libraries, laboratories, and educational technologies, should be provided to support effective classroom instruction and improve students' academic performance.
10. Further studies should be conducted to investigate other factors influencing students' academic performance in secondary schools, such as teachers' attitude, teaching methods, school climate, parental involvement, students' motivation and socioeconomic background.

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