

Teacher Variables and their Productivity in Lagos State Public Senior Secondary Schools, Nigeria

Charles Olukunle ILLO, PhD.

Department of Educational Management,
College of Specialized and Professional Education,
Lagos State University of Education, Oto/Ijanikin, Lagos State.
illoco@lasued.edu.ng

Abdullahi Ayinla OLOKOBA, PhD.

Department of Educational Management,
Faculty of Education,
Kwara State University, Malete, Ilorin,
Kwara State.
abdullahi.olakoba@kwasu.edu.ng

Fasilat Bolaji EGBOH, PhD.

Department of Educational Management,
College of Specialized and Professional Education,
Lagos State University of Education, Oto/Ijanikin, Lagos State.
egbohfb@lasued.edu.ng

Michael Elijah KUSIKA

Department of Educational Management,
College of Specialized and Professional Education,
Lagos State University of Education, Oto/Ijanikin, Lagos State.
kusikame@lasued.edu.ng

Abstract

Teacher productivity is central to the quality and effectiveness of secondary education, yet teachers differ in demographic and professional characteristics that may influence their performance. This study examined the relationship between selected teacher variables and teachers' productivity in public senior secondary schools in Lagos State, Nigeria. Specifically, the study investigated the relationships between teachers' gender, years of teaching experience and educational qualification and their productivity. A descriptive survey design of the correlational type was adopted. The study covered 315 public senior secondary schools with a teacher population of 3,113 across the six education districts of Lagos State. A sample of 1,027 teachers and 318 principals and vice-principals was selected using proportional, stratified and simple random sampling procedures. Data were collected using the Teachers' Variables, Teachers' Productivity Questionnaire, and Teachers' Productivity Checklist. Descriptive statistics, chi-square tests, multivariate analysis of variance (MANOVA), and related inferential procedures were used in the analysis. The findings reported a significant relationship between gender and teachers' productivity, $\chi^2(3, N = 1,825) = 106.440, p < .001$, with a reported phi coefficient of

.242 and phi-squared of .06. A significant relationship was also reported between years of teaching experience and productivity, $\chi^2(18, N = 2,624) = 67.492, p < .001$, with $\phi = .160$ and phi-squared = .03. Educational qualification was also reported to have a statistically significant multivariate relationship with teachers' productivity, with Wilks' Lambda = .765, $F = 11.614, p < .001$, and partial eta squared = .065. At the dimension level, educational qualification significantly predicted content mastery, content delivery, co-curricular participation, and ad hoc committee participation, but not quality record-keeping. The findings suggest that teacher productivity is associated with selected teacher characteristics, although the magnitude of these relationships varies across productivity dimensions. The study recommends evidence-informed teacher deployment, continuous professional development, mentoring, and equitable opportunities for career development.

Keywords: teacher variables, teacher productivity, gender, teaching experience, educational qualification, secondary schools, Lagos State

Introduction

Teachers are among the most important human resources in an education system. Their knowledge, professional competence, commitment and capacity to perform instructional and non-instructional responsibilities have important implications for the quality of schooling. In secondary education, teachers are expected not only to possess adequate subject-matter knowledge and pedagogical competence but also to participate in co-curricular activities, school committees, record-keeping, student support, and other activities that contribute to institutional effectiveness.

Teacher productivity, therefore, extends beyond classroom teaching. A productive teacher is expected to demonstrate adequate mastery of subject content, communicate knowledge effectively, participate purposefully in co-curricular activities, contribute to school committees and maintain appropriate educational records. The present study conceptualised teacher productivity across five dimensions: content mastery, content delivery, active and purposeful participation in co-curricular activities, active participation in ad hoc committees, and quality record-keeping. These dimensions provide a relatively broad conception of teacher productivity because they recognise both instructional and institutional responsibilities.

Teacher productivity can also be influenced by teachers' characteristics. Among the characteristics frequently considered in educational research are gender, educational qualification and years of teaching experience. These variables do not necessarily determine teacher effectiveness independently, but they may interact with professional knowledge, opportunities for development, school context and organisational support to influence how teachers perform their responsibilities. The literature on teacher characteristics and performance, however, has produced mixed and context-dependent findings. Some studies suggest that experience and qualifications

contribute to teachers' effectiveness, while others indicate that their effects depend on the nature of the work and the institutional environment. A recent study in Edo State, for example, reported that educational qualification and years of teaching experience significantly correlated with teachers' job effectiveness (Etu & Eimuhi, 2026). Similarly, research conducted in Lagos State has continued to demonstrate the importance of professional development for teacher productivity, with workshop participation, conferences, seminars, artificial intelligence training, and in-service training all reported as significantly related to productivity (Gbesoevi et al., 2025).

The question of gender is similarly complex. Gender differences in teachers' work should not automatically be interpreted as evidence that one gender is inherently more productive than another. Differences may instead reflect professional opportunities, school leadership practices, role expectations, deployment patterns, workload and other contextual factors. Recent Nigerian research has, for example, reported gender differences in principals' supervisory practices and found a positive relationship between supervisory practices and teacher productivity (Ojo et al., 2026).

Despite considerable research on teacher effectiveness, there remains a need for evidence concerning the combined contribution and individual associations of teacher characteristics with productivity in large public secondary-school systems. Lagos State provides an important setting for such an investigation because of the scale of its public secondary-school system and the diversity of schools and teachers across its six education districts.

1.1. Statement of the Problem

The quality of secondary education depends substantially on the quality and productivity of teachers. Although teachers are expected to perform extensive instructional, administrative, and co-curricular responsibilities, there is variation in the extent to which they perform these responsibilities effectively.

In Lagos State public senior secondary schools, teachers work within a system characterised by differences in professional qualifications, years of teaching experience and demographic characteristics. These differences raise questions concerning whether particular teacher characteristics are associated with higher or lower levels of productivity. Existing research has established relationships between some teacher characteristics and job performance, but

findings remain inconsistent across contexts. In addition, some studies concentrate primarily on classroom effectiveness or student achievement, leaving less attention to broader measures of teacher productivity that incorporate content mastery, content delivery, co-curricular participation, committee responsibilities, and record-keeping.

The problem addressed by this study is, therefore, the lack of an established empirical relationship between selected teacher characteristics and multidimensional teacher productivity in Lagos State public senior secondary schools. Understanding these relationships is important for teacher recruitment, deployment, professional development, promotion, mentoring and school management.

1.2. Purpose of the Study

The main purpose of this study was to examine the relationship between selected teacher variables and teachers' productivity in Lagos State public senior secondary schools.

Specifically, the study sought to:

1. determine the relationship between teachers' gender and teachers' productivity;
2. determine the relationship between teachers' years of teaching experience and teachers' productivity; and
3. examine the relationship between teachers' educational qualifications and teachers' productivity.

1.3. Research Questions

The following research questions guided the study:

1. What is the level of teachers' productivity in Lagos State public senior secondary schools?
2. What is the relationship between teachers' gender and teachers' productivity?
3. What is the relationship between teachers' years of teaching experience and teachers' productivity?
4. What is the relationship between teachers' educational qualifications and teachers' productivity?

1.4. Research Hypotheses

The following null hypotheses were tested:

H01: There is no significant relationship between teachers' gender and teachers' productivity in Lagos State public senior secondary schools.

H02: There is no significant relationship between teachers' years of teaching experience and teachers' productivity in Lagos State public senior secondary schools.

H03: There is no significant relationship between teachers' educational qualifications and teachers' productivity in Lagos State public senior secondary schools.

Literature Review

1. Concept of Teacher Variables

Teacher variables are characteristics of teachers that may be associated with their professional behaviour, effectiveness, or productivity. Such characteristics may include demographic variables, professional qualifications, experience, training and other personal or occupational characteristics.

The present study focused on three teacher variables: gender, educational qualification and years of teaching experience. These variables were selected because they represent readily identifiable characteristics of teachers and may have implications for teachers' professional knowledge, confidence, classroom practices and participation in school activities.

Teacher variables were operationally defined in terms of teachers' gender, academic qualifications and years of work experience.

2. Gender and Teacher Productivity

Gender is a demographic characteristic that may be associated with patterns of occupational participation and professional behaviour. However, gender itself should not be treated as a direct measure of competence. Gender-related differences may reflect social expectations, professional opportunities, organisational culture, workload, and other contextual conditions.

In educational organisations, male and female teachers may encounter different expectations concerning leadership, pastoral responsibilities, classroom assignments and

participation in school activities. These contextual factors may affect observed productivity. A statistically significant association was found between teachers' gender and productivity. Female teachers accounted for a larger proportion of positive responses than male teachers on the productivity categories examined.

Contemporary Nigerian research also indicates that gender differences can be meaningful in educational leadership and supervision. Ojo, Akuchie and Ofoha (2026), for example, found significant gender differences in principals' supervisory practices and reported a positive relationship between supervisory practices and teacher productivity. Such evidence suggests that gender should be examined as a contextual variable rather than interpreted as a simple biological explanation for differences in teacher productivity.

3. Teaching Experience and Teacher Productivity

Teaching experience refers to the number of years a teacher has spent in the teaching profession. Experience can provide opportunities for teachers to develop pedagogical knowledge, classroom management skills, institutional knowledge, and professional judgement. From a human-capital perspective, experience represents accumulated professional knowledge that may improve productivity. Experienced teachers may have greater familiarity with curriculum requirements, assessment procedures, classroom management and school routines. However, experience alone does not guarantee effective performance. Without opportunities for professional learning, experienced teachers may continue to use practices that are no longer responsive to changing educational requirements.

Research in Nigeria has provided evidence of a relationship between experience and teacher effectiveness. A recent study in Edo State found that years of teaching experience were significantly correlated with teachers' job effectiveness (Etu & Eimuhi, 2026). Another study reported that teaching experience, educational qualifications and age jointly predicted teachers' job effectiveness (Osabuohien-Osarumwense & Osawaru-Ogbegie, 2025).

The present study contributes to this literature by examining experience in relation to a multidimensional conception of teacher productivity.

4. Educational Qualification and Teacher Productivity

Educational qualification represents the formal academic and professional preparation attained by a teacher. In principle, higher and more relevant qualifications should provide teachers with deeper subject knowledge, professional knowledge and exposure to educational theory and practice.

Qualification, however, should not be interpreted simply in terms of the possession of certificates. The relevance of the qualification, quality of teacher preparation, continuing professional development and opportunities to apply acquired knowledge are also important. Teachers' qualifications were considered in relation to five dimensions of productivity: content mastery, content delivery, co-curricular participation, ad hoc committee participation, and quality record-keeping. The results showed significant effects for several dimensions of productivity. In particular, educational qualification significantly predicted content mastery, content delivery, co-curricular participation, and ad hoc committee participation, while the effect on quality record-keeping was not statistically significant.

Recent evidence from Nigeria also supports the importance of qualification. Research in Edo State found that educational qualification was significantly associated with teachers' job effectiveness (Etu & Eimuhi, 2026).

5. Concept of Teacher Productivity

Teacher productivity refers to the extent to which teachers perform their assigned responsibilities effectively and efficiently within the school system.

Productivity in this study was operationalised through five dimensions:

1. content mastery;
2. content delivery;
3. active and purposeful participation in co-curricular activities;
4. active participation in ad-hoc committees; and
5. quality record keeping.

This operationalisation recognises that teachers contribute to school effectiveness in multiple ways. Content mastery is defined as teachers' expertise in their subject area and their ability to explain concepts clearly, while content delivery concerns how teachers present and communicate information, skills and knowledge during classroom instruction.

Co-curricular activities, committee responsibilities, and record-keeping are also important because secondary-school teachers have responsibilities that extend beyond direct classroom instruction.

Theoretical Framework

1. Human Capital Perspective

The study is informed by the human-capital perspective, which views education, training, knowledge and experience as forms of investment that can enhance individual productivity. Applied to teachers, the perspective suggests that professional knowledge and accumulated experience can improve their capacity to perform their work. Educational qualifications may provide foundational knowledge, while teaching experience can allow teachers to develop practical expertise. Professional development can further update and extend these competencies.

The human-capital perspective, therefore, provides a useful framework for understanding why educational qualification and teaching experience might be associated with productivity. At the same time, the theory does not imply that qualifications or years of service automatically produce higher productivity. The conversion of human capital into productive performance depends on opportunities to use knowledge, institutional support, leadership, resources and professional motivation.

2. Empirical Review

Previous research provides evidence that teacher characteristics are associated with professional effectiveness, although the strength and direction of the relationships vary. A study of teacher characteristics and teaching-learning activities in secondary schools found statistically significant effects associated with gender and years of experience, including interaction effects involving gender, qualification and experience (Faremi & Fakorede, 2022). This suggests that teacher characteristics may operate in combination rather than as isolated determinants.

In Edo State, Etu and Eimuhi (2026) reported significant relationships between years of teaching experience, educational qualification and teachers' job effectiveness. Osabuohien-Osarumwense and Osawaru-Ogbegie (2025) similarly found that teachers' educational qualification and years of teaching experience, among other personal variables, predicted job effectiveness.

Recent evidence from Lagos State also emphasises the importance of professional learning. Gbesoevi, Lawal and Onasanya (2025) found significant positive relationships between teacher professional development practices, including workshops, conferences, seminars, artificial intelligence training, and in-service training, and teacher productivity. This finding is relevant because qualifications and experience may contribute to productivity, in part, through opportunities for continuing professional learning.

A recent study of principals' supervisory practices in North-Central Nigeria found that supervisory practices were positively related to teacher productivity and that significant gender differences existed in principals' supervisory practices (Ojo et al., 2026). This suggests that teacher productivity should be interpreted within the broader organisational environment rather than as a product of individual characteristics alone. Other studies have also shown that school-level conditions influence teacher productivity. Adeleke and Oyewole (2023), for example, examined school plant variables and teacher productivity in secondary schools in Ekiti State, while Abidogun, Mumuni and Kuponiyi (2026) examined teachers' attitudes, participation in professional development and teaching effectiveness in Lagos State. These studies reinforce the need to interpret teacher variables alongside institutional resources, attitudes, and professional learning opportunities.

Despite these contributions, there is still limited evidence from a large statewide sample examining the relationships between gender, teaching experience, and educational qualifications and multiple dimensions of teacher productivity. The present study addresses this gap in the Lagos State public senior secondary school context.

Methodology

1. Research Design

The study adopted a descriptive survey research design of the correlational type. The design was considered appropriate because the study sought to examine relationships between naturally occurring teacher characteristics and productivity without manipulating the variables. This design is suitable for examining associations among variables within a large population.

2. Population and Sample

The study covered all public senior secondary schools in Lagos State. At the time of the study, there were 315 public senior secondary schools, with a teacher population of 3,113. The study also included principals and vice-principals as part of the wider research population.

A sample of 1,027 teachers and 318 principals/vice-principals was selected from the six education districts. Proportional, stratified and simple random sampling techniques were employed.

The teacher sample was distributed across the six districts as follows:

Table 1

Education District	Teacher Population	Teacher Sample
I	462	152
II	594	196
III	408	135
IV	405	134
V	683	225
VI	561	185
Total	3,113	1,027

3. Instruments

Data were collected using researcher-developed instruments. The primary instrument for this article was the Teachers' Variables and Teachers' Productivity Questionnaire (TVTPQ). The questionnaire contained demographic information and items relating to teacher variables and productivity.

The teacher questionnaire included 25 items measured on a four-point Likert-type scale ranging from Strongly Agree to Strongly Disagree. Teacher productivity was examined through content mastery, content delivery, co-curricular participation, ad hoc committee participation, and quality record-keeping.

4. Validity and Reliability

The instruments were subjected to expert validation. Reliability was established through a test-retest procedure, with coefficients reported for the relevant instruments.

5. Data Analysis

Descriptive statistics were used to summarise teacher productivity. Chi-square analysis was used to examine relationships involving categorical teacher variables, while multivariate analysis was used to examine educational qualification in relation to the multiple dimensions of teacher productivity.

The hypotheses were tested at the 0.05 level of significance. Chi-square, MANOVA, Pearson product-moment correlation and multiple regression were among the statistical procedures employed.

Results

1. Level of Teachers' Productivity

Table 2 presents the mean scores for the dimensions of teacher productivity:

Table 2

Productivity Dimension	Mean
Content mastery	4.44
Content delivery	3.73
Co-curricular participation	2.51
Ad-hoc committee participation	2.17
Quality record keeping	1.48
Composite mean	2.87

The composite mean of 2.87 indicates a moderate overall level of teacher productivity. Content mastery recorded the highest mean, followed by content delivery, while quality record keeping recorded the lowest, with relative strength in core teaching responsibilities and weakness in ancillary duties.

2. Relationship between Gender and Teacher Productivity

A significant relationship was found between teachers' gender and productivity:

$$\chi^2(3, N = 1,825) = 106.440, p < .001; \text{Phi} = .242; \text{Phi}^2 = .06.$$

Table 3 presents the full contingency table for teachers' gender and productivity.

Table 3

Gender	SA	A	D	SD	Total
Male	76 (39.6%)	105 (21.9%)	386 (47.9%)	181 (52.2%)	748 (41.0%)
Female	116 (60.4%)	375 (78.1%)	420 (52.1%)	166 (47.8%)	1,077 (59.0%)
Total	192 (100%)	480 (100%)	806 (100%)	347 (100%)	1,825 (100%)

Likelihood ratio = 111.955, $p < .001$.

The response distribution indicated that female teachers accounted for 60.4% of the strongly-agree responses and 78.1% of the agree responses, compared with 39.6% and 21.9%, respectively, for male teachers.

The null hypothesis, which stated there was no significant relationship between gender and teacher productivity, was therefore rejected. The contingency-table total was $N = 1,825$, comprising 748 male and 1,077 female responses, reflecting aggregated productivity-item responses across the teacher sample.

3. Relationship between Years of Teaching Experience and Teacher Productivity

A statistically significant relationship was found between teachers' years of work experience and productivity:

$$\chi^2(18, N = 2,624) = 67.492, p < .001; \Phi = .160; \Phi^2 = .03.$$

Table 4 presents the full contingency table for teachers' years of work experience and productivity.

Table 4

Years of Experience	SA	A	D	SD	Total
1 to 5 years	104	105	66	25	300 (11.4%)
6 to 10 years	264	315	104	43	726 (27.7%)
11 to 15 years	100	78	54	24	256 (9.8%)
16 to 20 years	176	207	68	24	475 (18.1%)
21 to 25 years	180	234	68	18	500 (19.1%)
26 to 30 years	120	132	26	7	285 (10.9%)
31 years and above	40	27	12	3	82 (3.1%)
Total	984	1,098	398	144	2,624 (100%)

Likelihood ratio = 67.519, $p < .001$.

Teachers in the 6–10-year experience category showed the strongest positive response pattern, followed by teachers with 21–25 years of experience. The result suggests a statistically significant but relatively small association between years of experience and productivity.

The contingency-table total was $N = 2,624$ across the seven experience categories. The effect-size interpretation, phi-squared = .03, indicates an association of approximately 3% between years of experience and productivity.

4. Educational Qualification and Teacher Productivity

A statistically significant multivariate relationship was found between teachers' educational qualifications and the dimensions of teacher productivity.

The multivariate result was reported as:

Wilks' Lambda = .765

F = 11.614

p < .001

partial eta squared = .065

Hypothesis df = 20, Error df = 2,757.065 (Wilks' Lambda).

The reported partial eta squared of .065 indicates that approximately 6.5% of the variance in the multivariate productivity outcome was associated with educational qualification, rather than 65%.

The dimension-level results were as follows:

Table 5

Productivity Dimension	F	R ²	Adjusted R ²	Significance
Content mastery	45.400	.179	.175	Significant
Content delivery	12.731	.057	.053	Significant
Co-curricular participation	5.394	.025	.021	Significant
Ad-hoc committee participation	3.819	.018	.013	Significant
Quality record keeping	2.240	.011	.006	Not significant

These findings indicate that educational qualification was most strongly associated with content mastery. The R² of .179 indicates approximately 17.9% of the variance explained for content mastery. For content delivery, R² = .057 represents approximately 5.7%, not 57%. Similarly, R² = .025 represents 2.5%, R² = .018 represents 1.8%, and R² = .011 represents 1.1%.

Teachers with B.Ed. Qualifications recorded the highest mean for content mastery (4.75), co-curricular participation (4.09), ad-hoc committee participation (4.219) and quality record keeping (4.44), while teachers with M.Ed. qualifications recorded the highest mean for content delivery (4.69).

Table 6 presents the full mean scores for each productivity dimension across the five qualification levels.

Table 6

Qualification	Content Mastery	Content Delivery	Co-curricular Participation	Ad-hoc Committee Participation	Quality Record Keeping
NCE	3.667	3.928	4.009	3.856	4.180
B.Sc/B.A	4.457	4.087	3.793	4.000	4.337
B.Ed	4.750	4.437	4.094	4.219	4.437
M.A/M.Sc	4.457	4.210	3.667	4.037	4.432
M.Ed	4.691	4.691	3.639	4.216	4.361

Discussion of Findings

1. Gender and Teacher Productivity

The finding that gender was significantly associated with teacher productivity suggests that productivity patterns differed between male and female respondents in the study. The result is consistent with the broader evidence that gender can interact with professional responsibilities and organisational conditions in education. However, the finding should not be interpreted as demonstrating that gender inherently determines teacher competence. Instead, it may reflect differences in professional roles, school assignments, participation in school activities, workload, leadership expectations or other contextual conditions.

The result is broadly consistent with recent evidence from Nigeria showing that gender differences can occur in educational leadership practices. Ojo et al. (2026) found significant gender differences in principals' supervisory practices and also reported a positive relationship between supervision and teacher productivity. The implication is that education managers should avoid

gender-based assumptions about productivity. Rather, management decisions should be based on professional competence, evidence of performance and equitable opportunities.

2. Teaching Experience and Teacher Productivity

The finding of a significant relationship between teaching experience and productivity is consistent with the proposition that professional experience can contribute to accumulated knowledge and practical expertise. Teachers develop familiarity with curriculum content, instructional strategies, classroom management and school procedures through professional practice. Experience may therefore enhance productivity when accompanied by continuous learning and opportunities to apply professional knowledge.

The finding is supported by recent Nigerian evidence. Etu and Eimuhi (2026) reported a significant relationship between years of teaching experience and job effectiveness among public senior secondary-school teachers in Edo State. Osabuohien-Osarumwense and Osawaru-Ogbegie (2025) similarly found that teaching experience and other personal variables predicted teacher job effectiveness.

However, experience should not be equated automatically with effectiveness. The continuing evolution of curriculum, technology and teaching methods means that experienced teachers require continuing professional development. Recent research in Lagos State found significant positive relationships between professional-development practices and teacher productivity, including workshops, conferences, seminars, AI training and in-service training (Gbesoevi et al., 2025).

Thus, the productivity benefits of experience are likely to be maximised when schools provide opportunities for experienced teachers to update their professional knowledge and mentor less-experienced colleagues.

3. Educational Qualification and Teacher Productivity

Educational qualification was significantly related to several dimensions of teacher productivity. The strongest relationship was observed for content mastery, followed by content delivery. This pattern is theoretically plausible because formal educational preparation is expected to contribute to subject knowledge and pedagogical competence. Teachers with stronger or more

relevant academic and professional preparation may possess greater knowledge resources for planning lessons, explaining concepts and responding to students' learning needs.

The relatively stronger association with content mastery is particularly noteworthy. It suggests that educational qualification may be more directly relevant to instructional knowledge than to some administrative or ancillary responsibilities. The finding is consistent with recent Nigerian evidence showing that educational qualifications are significantly associated with teacher effectiveness (Etu & Eimuhi, 2026; Osabuohien-Osarumwense & Osawaru-Ogbegie, 2025).

At the same time, the relatively small explained variance for several dimensions indicates that qualification is only one component of teacher productivity. For example, the reported R^2 of .057 for content delivery indicates that qualification accounted for approximately 5.7% of the variance, leaving substantial variation associated with other factors. The non-significant finding for quality record keeping is particularly instructive. Record keeping may depend less on academic qualification and more on school procedures, administrative monitoring, workload, training and access to appropriate record-management systems.

Implications for Educational Management

The findings have several implications for educational management in Lagos State.

First, teacher deployment and professional development should take account of teachers' existing competencies rather than relying solely on demographic characteristics. Gender should not be used as a basis for assumptions about teacher productivity.

Second, experienced teachers should be supported through structured mentoring and professional-learning opportunities. Rather than viewing experience simply as years of service, school management should leverage experienced teachers as mentors, instructional leaders and professional-learning facilitators.

Third, educational qualification should remain an important consideration in teacher recruitment and professional advancement, particularly because the study found a relatively strong association between qualification and content mastery.

Fourth, the comparatively low mean for quality record keeping indicates a need for targeted intervention. Training in educational documentation, digital record management and administrative procedures may improve this dimension of productivity.

Fifth, professional development should complement formal qualifications. Evidence from recent Lagos State research indicates that continuous professional-development activities are significantly associated with teacher productivity (Gbesoevi et al., 2025).

Recommendations

Based on the findings, the study recommends that:

1. Teacher recruitment and deployment should prioritise professional competence. Educational authorities should ensure that teachers possess relevant academic and professional qualifications for the subjects they teach.
2. Continuous professional development should be strengthened. Workshops, seminars, conferences, mentoring and in-service training should be provided regularly to ensure that teachers update their knowledge and pedagogical skills.
3. Experienced teachers should be utilised as mentors. Schools should establish structured mentoring arrangements through which experienced teachers support early-career teachers in instructional planning, classroom management and professional practice.
4. Professional development should be differentiated according to need. Teachers should receive development opportunities based on identified competency gaps rather than generic training alone.
5. Record-management training should be strengthened. Given the relatively low mean for quality record keeping, schools should provide targeted training on maintaining accurate academic and administrative records.
6. Gender-equitable professional opportunities should be maintained. Educational administrators should ensure that leadership opportunities, professional development and additional responsibilities are distributed fairly and based on competence rather than gender stereotypes.

7. Teacher productivity should be monitored multidimensionally. School quality-assurance systems should assess classroom teaching alongside co-curricular participation, committee responsibilities and record keeping.

Contribution to Knowledge

The study contributes to the literature in three principal ways.

Firstly, it provides evidence from a large-scale study of public senior secondary schools across all six education districts of Lagos State. The study, therefore, extends evidence beyond small, localised samples.

Secondly, it adopts a multidimensional conceptualisation of teacher productivity. Rather than restricting productivity to classroom instruction, the study incorporates content mastery, content delivery, co-curricular participation, ad hoc committee participation, and quality record-keeping.

Lastly, the study demonstrates that teacher variables do not have uniform relationships with all dimensions of productivity. Educational qualification, for example, showed a stronger relationship with content mastery than with record keeping. This suggests that teacher characteristics should be analysed against specific dimensions of professional performance rather than treated as global predictors.

Conclusion

This study examined the relationship between selected teacher variables and teacher productivity in Lagos State public senior secondary schools. The findings reported significant relationships between gender and productivity, years of teaching experience and productivity, and educational qualification and several dimensions of productivity.

Overall, teacher productivity was moderate, with stronger performance reported in content mastery and content delivery than in co-curricular participation, ad hoc committee participation, and quality record-keeping. Content mastery recorded the highest mean of the five dimensions. Educational qualification showed the strongest relationship with content mastery among the productivity dimensions examined.

The findings support the view that teacher characteristics are relevant to understanding productivity, but they should not be regarded as sufficient explanations of teacher performance. Teacher productivity is multidimensional and likely shaped by the interaction between individual characteristics and professional development, leadership, resources, and organisational conditions.

The study, therefore, concludes that educational authorities should adopt a comprehensive approach to improving teacher productivity. Such an approach combines appropriate qualifications, continuous professional development, mentoring, supportive leadership and systematic performance monitoring.

References

- Abidogun, M. A., Mumuni, M. A., & Kuponiyi, Y. A. (2026). Teachers' attitudes, participation in professional development, and teaching effectiveness: A multi-factorial analysis of senior secondary schools in Lagos State.
- Adeleke, F., & Oyewole, B. (2023). School plant variables and teacher productivity in secondary schools in Ekiti State, Nigeria. *Canadian Journal of Educational and Social Studies*, 3(2).
- Etu, W. N., & Eimuhi, J. O. (2026). Teachers' input variables as correlate of teachers' job effectiveness in public senior secondary schools in Edo State, Nigeria. *Studies in Education*.
- Faremi, Y. A., & Fakorede, S. O. A. (2022). Interplay of teachers' characteristics and their teaching-learning activities in secondary schools. University of Lagos Institutional Repository.
- Gbesoevi, E. S., Lawal, R. O., & Onasanya, H. I. (2025). Teachers' professional development practices and their enhanced productivity in public senior secondary school, Lagos State Education District V, Nigeria. *UNIZIK Journal of Educational Research and Policy Studies*, 11(1), 33.
- Ojo, K., Akuchie, R. C., & Ofoha, D. (2026). Gender differences in principals' supervisory practices and teachers' productivity in public senior secondary schools in North Central geopolitical zone, Nigeria. *International Journal of Educational Management*, 23(2), 122–131.
- Osabuohien-Osarumwense, A., & Osawaru-Ogbegie, R. I. (2025). Teachers' personal variables as predictors of teachers' job effectiveness in public senior secondary schools in Edo State, Nigeria. *Educational Advancement and Development Journal*, 1(1), 36–46.