

Administrative Support and Professional Development as Drivers of Instructional Efficiency Among Public Secondary School Teachers in Osun State, Nigeria

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DOI: <https://doi.org/10.51244/IJRSI.2026.13020019>

Received: 04 February 2026; Accepted: 09 February 2026; Published: 24 February 2026

ABSTRACT

This study examined the influence of administrative support and professional development on instructional efficiency among public secondary school teachers in Osun State, Nigeria. A mixed-method descriptive survey design was adopted to provide both quantitative and qualitative insights into leadership practices and professional learning experiences in schools. The population comprised all public secondary school teachers and principals in the state, from which a sample of 360 respondents (324 teachers and 36 principals) was selected using a multi-stage sampling procedure. Using a mixed-methods survey of 324 teachers and interviews with 36 principals, the study advances prior analysis by estimating a multiple regression model and integrating qualitative explanations of leadership and learning processes. Findings indicated that both administrative support and professional development significantly predict instructional efficiency, with professional development showing the stronger unique effect, while administrative support exerts both direct and enabling influences. Qualitative findings explain how feedback, recognition, time allocation, and resource access translate professional learning into classroom practice. The study contributes to international debates on instructional leadership by evidencing the complementary—rather than substitutive—roles of leadership support and sustained professional learning in resource-constrained systems. Limitations and policy-relevant implications are discussed. The study concludes that instructional efficiency in public secondary schools is best achieved through the integration of supportive leadership practices and sustained professional development. It is therefore recommended that education authorities institutionalize continuous professional learning and strengthen leadership capacity to improve teaching outcomes.

Keywords: Administrative Support, Professional Development, Instructional Efficiency, School Leadership, Teacher Effectiveness, Public Secondary Schools.

INTRODUCTION

Educational system plays crucial roles in shaping and determining the future of a nation and its citizens, as such the influence of teachers in allowing the goal and objectives of education to be achieved cannot be gainsaid. Teachers help to translate educational objectives into knowledge and skills, helping transform those objectives into well-learned students (Budiharso et al., 2023). It is, therefore, within teachers' great service that the entire educational system of a nation depends on them and they are held as pivots by which the field of education revolves (Al Hamad et al., 2024). Education holds an internationally strategic position and is often referred to as the backbone and the pillar supporting all other sectors of the nation as an indispensable tool for creating awareness, eradicating poverty, promoting social justice, and building an egalitarian society.

In the 21st-century educational landscape, the role of administrators has evolved beyond supervision into mentorship, capacity-building, and morale management. Instructional efficiency—the extent to which teachers can deliver curriculum effectively with available resources—is a function not only of teachers' skills but also of the quality of support and growth opportunities provided to them. In Osun State, Nigeria, where public schools face numerous systemic challenges, teacher performance is often constrained by inadequate administrative backing and limited professional development (Okoro, 2015). Addressing these constraints is critical to raising educational standards and achieving national development goals.

Instructional efficiency, defined as the ability of teachers to maximize student learning outcomes with available resources and time, is a cornerstone of effective education. Public secondary schools, often facing resource constraints and diverse student populations, rely heavily on the competence and dedication of their teachers. However, teachers cannot operate in isolation. The support they receive from school administrators and the opportunities they have for professional growth significantly influence their ability to deliver high-quality instruction.

Instructional efficiencies, in a strict sense, measures how efficiently teachers are able to deliver content and facilitate learning with minimum resources and yet with maximum effectiveness. Instructional efficiency looks at student engagement, clarity of instructional delivery, appropriateness of teaching strategies, and student performance relative to these variables. Instructional efficiency for public secondary schools is of utmost significance, as it affects students directly on the floor of their achievement, retention, and quality of education. This implies that teachers who are motivated are likely to be more active in their work, exhibit higher levels of job satisfaction, and ultimately deliver better instructional content for their students (Toropova et al., 2021). These difficulties can result in decreased morale that could negatively impact on instructional quality.

The study is anchored on Reinforcement Theory (Skinner, 1953) which posits that behaviour is a function of its consequences. Positive reinforcements—such as recognition, support, and inclusion in decision-making—strengthen desired behaviour like instructional excellence, as well as Organizational Support Theory (Eisenberger et al., 1986) which believes that employees develop beliefs about how much their organization values their contributions and well-being. When teachers perceive strong organizational support, their motivation and instructional performance improve.

Intellectual Dialogue

Effective school leadership influences teachers' commitment, innovation, and job satisfaction. Administrative practices such as fair delegation, collaborative decision-making, timely feedback, and emotional support foster a work environment conducive to high performance (Chiemeka-Unogu, 2020; Jumady & Lilla, 2021).

Administrative support encompasses a range of actions and policies implemented by school leaders to facilitate teachers' work and create a positive school climate. Some researchers noted some key aspects of administrative support. Okoro (2015) identified resource provision which involves ensuring teachers have access to necessary materials, equipment, and technology to effectively plan and deliver lessons. Adequate resources reduce the time teachers spend on sourcing materials and allow them to focus on instruction. Bragg, Walsh and Heyeres (2021) emphasised instructional leadership and that principals and other school leaders should provide clear instructional goals, monitor teaching practices, and offer constructive feedback. This includes observing classrooms, providing mentorship, and facilitating collaboration among teachers.

A positive school climate characterized by trust, respect, and open communication fosters teacher morale and reduces stress. Administrators can cultivate this climate by recognizing teacher achievements, addressing conflicts fairly, and promoting a sense of community (Eisenberger et al., 1986; Chiemeka-Unogu, 2020). According to Sancar, Atal and Sayin (2021) empowering teachers to make decisions about curriculum, instruction, and classroom management can increase their sense of ownership and motivation. Administrators should provide opportunities for teachers to participate in school-level decision-making processes.

Jumady and Lilla (2021) submitted that effective management of student behavior is crucial for maintaining a productive learning environment. Administrators should provide clear disciplinary policies, support teachers in addressing disruptive behavior, and ensure a safe and orderly school environment. Teachers often face numerous administrative tasks that detract from their instructional time. Administrators can streamline these tasks, delegate responsibilities, and provide support staff to handle non-instructional duties (Pollock & Tolone, 2020).

The Importance of Professional Development

Ongoing training updates teachers' knowledge and strengthens teaching strategies. Studies have shown that teachers who participate in structured professional development display improved classroom practices, subject mastery, and student outcomes (Lipowsky & Rzejak, 2015; Althaus, 2015).

Professional development refers to ongoing learning opportunities that enhance teachers' knowledge, skills, and practices. Effective professional development is:

- **Relevant to Teachers' Needs:** Professional development should address the specific challenges and needs of teachers, as identified through needs assessments, classroom observations, and teacher feedback.
- **Aligned with School Goals:** Professional development should be aligned with the school's overall goals and priorities, ensuring that teachers are equipped to implement school-wide initiatives and improve student outcomes.
- **Research-Based:** Professional development should be grounded in research-based best practices in teaching and learning. This ensures that teachers are learning effective strategies that have been proven to improve student achievement.
- **Collaborative:** Professional development should provide opportunities for teachers to collaborate with colleagues, share ideas, and learn from each other's experiences. This can be achieved through professional learning communities, mentoring programs, and peer observation.
- **Ongoing and Sustained:** One-time workshops are often ineffective. Professional development should be ongoing and sustained over time, providing teachers with opportunities to practice new skills, receive feedback, and refine their practice.
- **Evaluated for Impact:** Professional development programs should be evaluated to determine their impact on teacher practice and student outcomes. This allows schools to identify effective programs and make adjustments as needed.

The Interplay of Administrative Support and Professional Development

Administrative support and professional development are not independent factors; they interact synergistically to enhance instructional efficiency. These elements together form a synergistic relationship, wherein administrative support enables the implementation of new knowledge acquired during professional development and simultaneously shapes the conditions that motivate continued teacher learning (Bragg et al., 2021; Pollock & Tolone, 2020).

- **Administrative support enables teachers to implement what they learn in professional development.** For example, if teachers learn new technology integration strategies in a workshop, administrative support in the form of access to technology and technical support is essential for them to implement these strategies in their classrooms.
- **Professional development can inform administrative decision-making.** When administrators participate in professional development alongside teachers, they gain a better understanding of teachers' needs and challenges, which can inform their decisions about resource allocation, school policies, and instructional leadership.
- **A supportive school climate fosters a culture of continuous learning.** When teachers feel supported and valued, they are more likely to engage in professional development and experiment with new teaching strategies.
- **Administrative support can create time for professional development.** By reducing non-instructional burdens and providing substitute teachers, administrators can create time for teachers to participate in professional development activities.

Statement of the Problem

Despite the centrality of instructional efficiency to educational outcomes, public secondary schools in Osun State continue to face persistent challenges such as poor teacher motivation, inconsistent classroom performance, and declining student outcomes. Evidence suggests that these issues are largely influenced by inadequate administrative support structures and limited access to meaningful professional development opportunities.

Although some school leaders demonstrate participatory leadership and provide periodic teacher training, these efforts are neither widespread nor consistently effective. As a result, many teachers operate in resourceconstrained environments with minimal guidance, support, or capacity-building. The gap between administrative practices, professional development provision, and actual classroom effectiveness necessitates a systematic inquiry into how these factors shape instructional efficiency in public secondary schools across the state.

Purpose of the Study

The purpose of this study is to examine the influence of administrative support and professional development on instructional efficiency among public secondary school teachers in Osun State, Nigeria. Specifically, the study seeks to:

- i. Investigate the perception of administrative support provided to public secondary school teachers in Osun State
- ii. Assess teachers’ participation in professional development activities.
- iii. Determine the relationship between administrative support, professional development, and instructional efficiency.
- iv. Explore how school administrators’ practices facilitate or hinder instructional effectiveness among teachers.

Research Questions

- a. What is the perception of administrative support provided to public secondary school teachers in Osun State?
- b. To what extent do teachers in public secondary schools in Osun state participate in professional development activities?
- c. To what extent do school administrators’ practices facilitate or hinder instructional effectiveness among teachers in public secondary schools in Osun state?

Research Hypothesis

Ho: There is no significant relationship among administrator practices, professional development participation and teachers’ instructional effectiveness

METHODOLOGY

A descriptive mixed-methods design was employed for this study. Quantitative data were collected using the Teachers’ Motivational Variables and Instructional Efficiency Questionnaire (TMVIEQ) from 324 teachers selected via multi-stage sampling across 36 public secondary schools. Qualitative data were obtained through semi-structured interviews with 36 principals. Quantitative analyses included descriptive statistics, Pearson correlations, and multiple regression. Qualitative data were thematically analyzed and integrated to explain quantitative patterns.

RESULTS

Research Question 1: What is the perception of administrative support provided to public secondary school teachers in Osun State?

Table 1: Perception of Administrative Support (n = 324)

Item	Frequency	Percentage (%)
Regular communication and feedback from school leadership	279	86.1%

Inclusion in decision-making processes	242	74.7%
Recognition of high-performing teachers	265	81.8%
Provision of adequate teaching materials	234	72.2%
Emotional support and mentoring by administrators	211	65.1%

From Table 1, the majority of teachers (86.1%) acknowledged receiving regular communication from school leaders. A substantial proportion also reported being recognized for good performance (81.8%) and included in decision-making (74.7%). However, fewer respondents (65.1%) reported receiving emotional support or mentoring from their principals.

Research Question 2: To what extent do teachers in public secondary schools participate in professional development activities?

Table 2: Participation in Professional Development Activities (n = 324)

Professional Development Activity	Frequency (f)	Percentage (%)	Extent of Participation
Attended at least one training workshop in the last year	252	77.8	High
Participated in peer mentoring	193	59.6	Moderate
Involved in lesson study / Professional Learning Communities (PLCs)	172	53.1	Moderate
Received certificate-based training	106	32.7	Low

Table 2 shows that teachers’ participation in professional development activities varies across different forms. Participation in training workshops is at a **high extent** (77.8%), indicating that short-term and seminar-based professional development opportunities are widely accessible to teachers in public secondary schools.

Participation in peer mentoring (59.6%) and lesson study or professional learning communities (53.1%) occurs to a **moderate extent**, suggesting that collaborative and school-based professional learning practices are present but not fully institutionalized.

However, participation in certificate-based professional development programmes is at a **low extent** (32.7%), revealing limited engagement in long-term and formally structured professional development. This pattern suggests an imbalance in professional learning opportunities, with greater emphasis on short-term training than sustained professional growth.

Research Question 3: To what extent do school administrators’ practices facilitate or hinder instructional effectiveness among teachers in public secondary schools in Osun State?

Table 3: Extent to Which Administrators’ Practices Facilitate or Hinder Instructional Effectiveness (n = 324)

	Frequency (f)	Percentage (%)	Interpretation
Regular communication and instructional feedback	279	86.1	High facilitation
Recognition of teachers’ instructional performance	265	81.8	High facilitation
Inclusion of teachers in decision-making	242	74.7	High facilitation
Provision of adequate teaching materials	234	72.2	High facilitation
Emotional support and mentoring	211	65.1	Moderate facilitation

Support in managing student discipline	198	61.1	Moderate facilitation
Reduction of non-instructional workload	184	56.8	Moderate facilitation

The results in Table 3 indicate that school administrators’ practices largely facilitate instructional effectiveness among teachers in public secondary schools in Osun State, though the level of facilitation varies across practices.

Administrative practices such as regular communication and instructional feedback (86.1%), recognition of teachers’ performance (81.8%), inclusion in decision-making (74.7%), and provision of instructional materials (72.2%) facilitate instructional effectiveness to a **high extent**. These practices create an enabling environment that enhances teacher motivation, instructional focus, and classroom performance.

However, practices related to emotional support and mentoring (65.1%), support with student discipline (61.1%), and reduction of non-instructional workload (56.8%) facilitate instructional effectiveness only to a **moderate extent**. This suggests that while administrators provide core instructional support, insufficient attention to teachers’ emotional well-being and workload management may hinder optimal instructional delivery for some teachers.

The findings imply that administrative practices in public secondary schools in Osun State facilitate instructional effectiveness more than they hinder it, but gaps in mentoring, emotional support, and workload reduction still constitute potential constraints on maximum instructional efficiency.

Hypothesis Testing

Ho: There is no significant relationship among administrator practices, professional development participation, and teachers’ instructional effectiveness.

Table 4: Pearson Product-Moment Correlation on the relationships among Administrative Support (AS), Professional Development (PD) and Instructional Effectiveness (IE)

Variable	Mean (M)	Standard Deviation (SD)
Administrative Support	4.12	0.64
Professional Development	3.78	0.71
Instructional Effectiveness	4.25	0.59

Figure: Combined Effect of Administrative Support and Professional Development on Instructional Efficiency

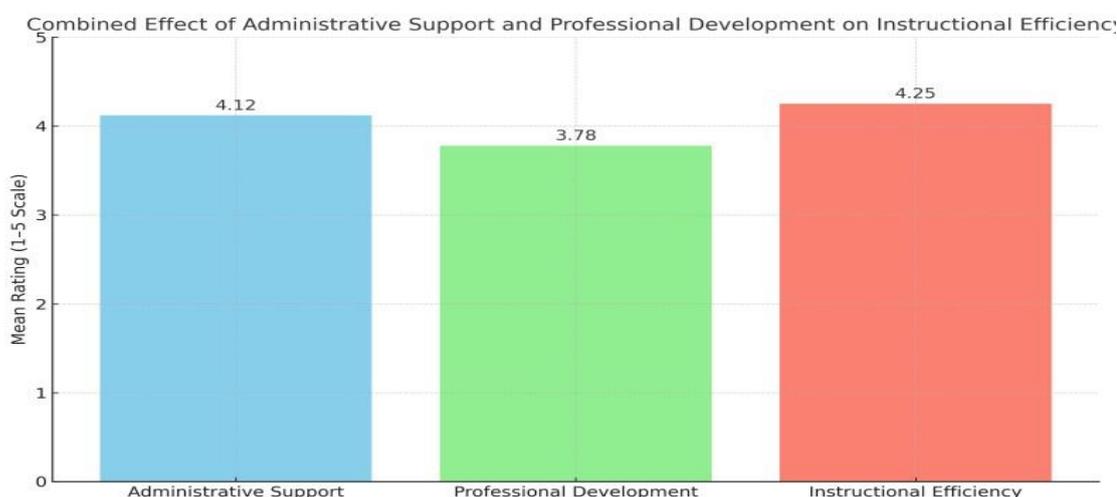


Figure 1: Combined Effect of Administrative Support and Professional Development on Instructional Efficiency

The figure presents mean scores (on a 4-point Likert scale) reflecting teachers' perceptions of administrative support (M = 4.12), professional development (M = 3.78), and instructional efficiency (M = 4.25). The chart illustrates the positive association between support mechanisms and effective instructional delivery in public secondary schools in Osun State

Correlation Matrix

Variables	1	2	3
1. Administrative Support	—		
2. Professional Development	.61**	—	
3. Instructional Effectiveness	.67**	.72**	—

*N = 324; *p < .01

Pearson correlation analysis revealed a **significant positive relationship** between:

Administrative Support and Instructional Effectiveness ($r = .67, p < .01$),

Professional Development and Instructional Effectiveness ($r = .72, p < .01$), and - Administrative Support and Professional Development ($r = .61, p < .01$).

These findings suggest that stronger administrative support and higher levels of professional development are significantly associated with increased instructional effectiveness among teachers in public secondary schools. Since the correlation coefficients between the three variables are statistically significant ($p < .01$), the null hypothesis stating that *there is no significant relationship* among administrator practices, professional development participation, and teachers' instructional effectiveness is rejected. This result implies that administrative practices and professional development interact positively to shape teaching outcomes. Administrators who support their teachers—by providing mentorship, feedback, and resources—create conditions that make professional development efforts more effective, thereby enhancing teaching quality and student learning.

Multiple Regression Analysis

To clarify relative and combined effects, instructional efficiency (IE) was regressed on administrative support (AS) and professional development (PD).

Table 1. Multiple Regression Predicting Instructional Efficiency (N = 324)

Predictor	B	SE B	B	T	p
Constant	0.84	0.18	—	4.67	< .001
Administrative Support	0.36	0.06	.34	6.00	< .001
Professional Development	0.48	0.05	.47	9.60	< .001

Model fit: $R^2 = .62$, Adjusted $R^2 = .61$, $F(2, 321) = 260.4, p < .001$.

The multiple regression model examining the combined effects of administrative support and professional development on instructional efficiency demonstrated a strong overall fit. The coefficient of determination ($R^2 = .62$) indicates that 62% of the variance in teachers' instructional efficiency is jointly explained by administrative support and professional development. This represents a **large effect size** in educational research, suggesting that the model accounts for a substantial proportion of the factors influencing instructional efficiency. The adjusted R^2 value (.61) closely approximates the R^2 , indicating that the model's explanatory power is stable and not inflated by the number of predictors included.

The overall model was statistically significant, $F(2, 321) = 260.4, p < .001$, confirming that the combination of predictors significantly improves the prediction of instructional efficiency beyond what would be expected by chance. This result demonstrates that administrative support and professional development, when considered together, form a meaningful explanatory framework for understanding variations in instructional efficiency among teachers.

At the individual predictor level, both administrative support and professional development made statistically significant unique contributions to instructional efficiency. Professional development emerged as the stronger predictor ($\beta = .47, p < .001$), indicating that teachers' participation in professional learning activities has a pronounced direct effect on their instructional effectiveness. This suggests that exposure to training, collaborative learning, and skill-enhancement opportunities plays a central role in shaping classroom practices.

Administrative support also exerted a **substantial independent influence** on instructional efficiency ($\beta = .34, p < .001$). This finding indicates that leadership practices—such as communication, feedback, recognition, and resource provision—contribute meaningfully to instructional outcomes even when the effects of professional development are controlled. Importantly, this underscores the role of school leadership not merely as a contextual factor but as an active determinant of teaching effectiveness.

The results indicate that instructional efficiency is best explained by the combined and complementary effects of leadership support and professional learning, rather than by either factor in isolation. While professional development provides the technical and pedagogical capacity for effective instruction, administrative support creates the organizational conditions necessary for the translation of professional learning into classroom practice.

Qualitative Findings

Qualitative analysis of principals' interviews revealed three interrelated themes that illuminate how and why administrative support interacts with professional development to influence instructional efficiency.

Leadership as an Enabler of Practice Transfer.

Principals consistently emphasized that instructional leadership practices—particularly regular feedback, classroom observation, and recognition of effective teaching—served as mechanisms that enabled teachers to translate professional development into classroom practice. Participants noted that follow-up supervision and constructive feedback increased teachers' sense of accountability while simultaneously building confidence to experiment with new instructional strategies. In schools where professional development was accompanied by visible leadership engagement, teachers were more likely to sustain instructional changes beyond initial training sessions.

Time and Resources as Conversion Mechanisms.

Teachers' ability to enact professional learning was strongly conditioned by the availability of time and instructional resources. Respondents highlighted that reduced non-instructional workload, access to teaching materials, and administrative support for lesson preparation were critical in converting professional learning into improved instructional delivery. Where such enabling conditions were absent, professional development was described as largely symbolic, with limited influence on classroom practice. This finding suggests that administrative support functions as a structural mechanism that determines whether professional learning yields practical instructional gains.

Culture of Continuous Learning.

A culture of ongoing professional learning emerged as a distinguishing feature of schools reporting sustained instructional improvement. Schools that institutionalized peer mentoring, professional learning communities (PLCs), and collaborative reflection demonstrated deeper and more enduring changes in instructional practice. In contrast, schools relying primarily on one-off workshops without systematic follow-up reported minimal longterm impact. Participants emphasized that collaborative norms fostered shared responsibility for instructional improvement and normalized continuous pedagogical refinement.

These themes clarify that administrative support does not substitute for professional development but rather amplifies its effectiveness. Leadership practices shape the organizational conditions under which professional learning is enacted, sustained, and embedded in daily teaching. The qualitative findings therefore provide explanatory depth to the quantitative results, demonstrating that instructional efficiency emerges from the interaction between leadership-enabled conditions and teachers' engagement in meaningful professional learning.

DISCUSSION OF FINDINGS

The findings demonstrate that instructional efficiency is jointly shaped by leadership support and professional learning. The stronger unique effect of professional development aligns with international evidence that sustained, practice-focused learning is central to instructional improvement (Darling-Hammond et al., 2017; Lipowsky & Rzejak, 2015). However, the significant independent effect of administrative support confirms leadership's pivotal role in creating conditions for enactment—consistent with instructional leadership and organizational support theories (Eisenberger et al., 1986; Robinson et al., 2008).

Qualitative evidence clarifies the mechanism: leadership practices (feedback, recognition, time allocation) convert professional learning into classroom change. This supports research showing that leadership influence on student outcomes is largely indirect, operating through teachers' working conditions and learning opportunities (Leithwood et al., 2020). In resource-constrained contexts, this complementarity is particularly salient.

CONCLUSION

This study provides empirical evidence that administrative support and professional development exert significant and complementary influences on teachers' instructional efficiency in public secondary schools. The findings demonstrate that professional development constitutes the stronger direct predictor of instructional efficiency, while administrative support operates both as an independent influence and as a critical enabling condition for the effective enactment of professional learning.

By integrating multiple regression analysis with qualitative insights, the study advances understanding of how leadership practices shape the conditions under which professional development translates into classroom practice, particularly within resource-constrained educational contexts.

However, the findings should be interpreted with caution in light of several limitations. First, the cross-sectional design precludes strong causal inferences regarding the directionality of relationships among administrative support, professional development, and instructional efficiency. Second, the study relies primarily on self-reported data, which may be subject to social desirability bias and perceptual inflation of instructional effectiveness.

Third, the focus on public secondary schools within a single Nigerian state limits the generalizability of the findings to other educational systems or governance contexts.

Despite these limitations, the study contributes meaningful empirical evidence to the international literature on instructional leadership by demonstrating the interactive—not substitutive—relationship between leadership support and professional learning. Future research should employ longitudinal or experimental designs, incorporate classroom observations and student outcome measures, and examine multi-level effects to further clarify the mechanisms through which administrative support and professional development influence instructional quality.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made:

The Ministry of Education should mandate and fund regular, subject-specific training programs that are job-embedded and research-informed. Principals should be trained in transformational and participative leadership models to better support and motivate teachers.

Schools should develop peer mentoring frameworks where experienced teachers support early-career colleagues, enhancing collaborative learning. School leaders should provide emotional support through recognition programs, wellness initiatives, and counseling access to promote teacher well-being.

Government and education partners should subsidize certification-based training to ensure deeper pedagogical development and career advancement for teachers. Administrative workloads should be streamlined to allow more time for lesson planning and participation in professional development

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