



An Investigation into The Relationship Between Specific Dominant Leadership Development Programs and The Administrative Performance Outcomes of Secondary School Principals in Delta State.

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Abstract

This study investigated the relationship between specific dominant leadership development programs and the administrative performance outcomes of secondary school principals in Delta State, Nigeria. Using a quantitative research design, data were collected from 150 principals through structured questionnaires. The study sought to identify the key characteristics of frequently utilized leadership development programs, evaluate the impact of mentorship programs on principals' administrative performance, and examine the perceived alignment between program content and the real-world administrative challenges faced by school leaders. Results showed that mentorship programs, formal training, and workshops were the most frequently utilized programs, with mentorship having the most significant influence on administrative performance. Principals who underwent mentorship programs demonstrated superior administrative effectiveness compared to those who did not, particularly in areas such as staff management, instructional supervision, and strategic planning. However, while participants acknowledged the relevance of leadership training content, a moderate alignment was found between these programs and the actual administrative challenges they face. The study concludes that effective leadership development must be context-specific, incorporate mentorship, and respond directly to the realities of the school environment. Recommendations include the institutionalization of structured mentorship frameworks, inclusion of context-driven content in training curricula, and expansion of blended learning platforms to reach more school leaders.

Keywords: Leadership development programs, mentorship, administrative performance, secondary school principals, Delta State.

Introduction

Effective educational leadership is a cornerstone of school improvement and student achievement, particularly in secondary schools where principals function as agents of change. In the context of Delta State, Nigeria, principals are often challenged by complex administrative demands, including policy implementation, instructional supervision, personnel management, and community engagement. These challenges necessitate that principals possess not only foundational administrative skills but also strategic leadership capacities that can be honed through systematic leadership development programs (LDPs). Leadership development programs are structured interventions designed to enhance leadership competencies through a range of activities such as mentorship, formal training, coaching, peer networking, and reflective practice (Bush, 2020). These programs have gained prominence globally and are increasingly recognized as essential mechanisms for cultivating effective school leaders (Day et al., 2016). In Nigeria, particularly within the diverse and educationally vibrant context of Delta State, there is a growing emphasis on LDPs as a strategic means to bolster principals' administrative performance. However, the effectiveness of these programs often varies based on their design, delivery, and contextual relevance.

Empirical studies have consistently demonstrated that participation in LDPs can significantly improve school leaders' capabilities in areas such as instructional leadership, change management, and human resource supervision (Chen & Wahab, 2024). For instance, in Eastern China, principals who participated in structured leadership training exhibited improved administrative performance and strategic planning skills, contributing to better school management outcomes (Chen & Wahab, 2024). Similarly, in a study conducted in South-West Nigeria, principals' leadership styles largely influenced by professional training and mentoring were found to significantly affect teacher productivity and morale (Asabia, 2024). Mentorship, in particular, has been identified as a critical element of leadership development. According to Ugwuanyi and Pietsch (2024), principals who engaged in mentorship-based LDPs reported higher levels of leadership self-efficacy and demonstrated greater adaptability to the dynamic challenges of school administration. Such findings emphasize the importance of continuous professional development through both formal and informal leadership support structures. However, the applicability of these findings to Delta State remains limited due to a paucity of localized research.

Research by Asiyai (2015) highlighted the importance of strategic management in higher education, advocating for curricula that promote peace and effective institutional governance. Although her study focuses on higher education, the principles of strategic leadership and the cultivation of a positive institutional climate are equally applicable to secondary education settings. Asiyai emphasizes that leadership development should not only impart administrative skills but also foster values that contribute to a harmonious and productive educational environment. Moreover, the alignment between the

content of LDPs and the real-world administrative challenges encountered by principals is a determinant of program effectiveness (He, Guo, & Abazie, 2024). In many cases, generic or externally imposed training modules fail to address the realities of educational leadership in rural or under-resourced Nigerian settings (Ibrahim, Mohammed, & Tambuwal, 2025). Research by Nkedishu (2022) accentuates the critical role of administrative efficiency in enhancing teacher productivity in Delta State secondary schools. The study found that principals' commitment to work and effective management of teaching facilities significantly predict teachers' productivity. This highlights the necessity for leadership development programs that cultivate administrative competencies among school leaders. Furthermore, Nkedishu and Okonta (2024) explored the implications of integrating Artificial Intelligence (AI) into secondary education in Delta State. Their findings suggest that while AI offers prospective advantages, its implementation is associated with critical issues, including ethical considerations and potential biases in decision-making. This underlines the need for leadership development programs to incorporate training on emerging technologies and their ethical applications in educational settings.

Okubotimibi et al., (2022) emphasizes the impact of work experience on administrators' job performance in tertiary institutions in Delta and Bayelsa States. The study revealed that increased work experience, including training and organizational skills, leads to significant improvements in administrators' performance. This finding suggests that leadership development programs should be designed to enhance practical experience and organizational competencies among school principals. Without this alignment, leadership development programs may produce limited practical outcomes despite their theoretical rigor. Therefore, while LDPs hold significant promise, there remains a critical need to investigate their actual implementation and impact within specific contexts like Delta State. Understanding the characteristics of the most frequently utilized programs, evaluating their influence on administrative performance, and assessing the degree of alignment between program content and real challenges are essential for optimizing leadership development interventions in the region. This study aims to fill this gap by investigating the relationship between specific dominant leadership development programs and the administrative performance outcomes of secondary school principals in Delta State.

Statement of the Problem

Despite the recognized importance of leadership development programs (LDPs) in enhancing the administrative performance of secondary school principals, there exists a significant paucity of empirical research examining the specific characteristics, content structure, and delivery modes of these programs as they relate to measurable outcomes in Delta State. Over the years, various LDPs ranging from formal workshops and seminars to mentorship schemes and certificate-based training have been implemented through governmental, non-governmental, and institutional efforts. However, there is limited clarity on which of these programs are most frequently utilized by school leaders and whether their content is sufficiently robust to equip principals with the competencies needed to effectively manage their schools. Moreover, while theoretical models of school leadership stress the importance of capacity-building in areas such as instructional supervision, staff motivation, school-community relations, and data-driven decision-making, it remains unclear whether existing leadership programs in Delta State adequately cover these domains. The dynamic and often challenging educational environment in the region, characterized by resource limitations, policy inconsistencies, and diverse stakeholder expectations, demands leadership solutions that are both context-specific and adaptable. Yet, the extent to which current LDPs are tailored to address these localized realities remains largely unexplored. In addition, little is known about the perceptions of school principals regarding the relevance and practicality of these programs in addressing their day-to-day administrative challenges. This lack of alignment between professional development initiatives and real-world administrative demands may undermine the effectiveness of LDPs, resulting in underwhelming improvements in school governance, instructional quality, and student achievement. Consequently, the existing knowledge gap not only limits the capacity of policymakers and educational planners to design evidence-based leadership programs but also hinders the optimization of school-level management practices critical to educational reform and sustainable development.

Purpose of the study

The purpose of this study is to;

1. Identify the key characteristics of the most frequently utilized leadership development programs for secondary school principals in Delta State.
2. Examine how principals who have undergone leadership programs compare in their administrative performance to those who have not.
3. Examine the perceived alignment between the content and delivery of dominant leadership development programs and the actual administrative challenges faced by principals in Delta State.

Methodology

This study adopted a descriptive survey research design using quantitative method. The choice of a descriptive survey design is appropriate because the study sought to collect numerical data from a sizable population to examine the relationship between leadership development programs and the administrative performance outcomes of secondary school principals in Delta State. The quantitative approach allowed for the collection of objective data that could be statistically analyzed to test associations between variables and answer the research questions. The target population for this study comprised all public secondary school principals in Delta State, Nigeria. According to the Delta State Ministry of Basic and Secondary Education (2024), there are approximately 476 public secondary schools across the state, each headed by a principal. These individuals formed the accessible population for the research. A stratified random sampling technique was employed to select participants from the three senatorial districts in Delta State (Delta North, Delta Central, and Delta South) to ensure geographic representation. From the total population of 436 principals, a sample of 210 principals was drawn using Yamane's formula for sample size determination with a 5% margin of error. The stratification ensured that varying types of school environments (urban, semi-urban, and rural) were fairly represented in the sample.

The primary instrument for data collection was a structured questionnaire titled: Principals' Leadership Development and Administrative Performance Questionnaire (PLDAPQ). The questionnaire was divided into three sections: Section A: Demographic information (gender, years of experience, education level, school location). Section B: Items assessing participation in specific leadership development programs (e.g., mentorship, workshops, formal training, seminars). Section C: Items measuring administrative performance using indicators such as instructional supervision, staff coordination, resource management, and policy implementation. All items in Sections B and C were measured using a 5-point Likert scale, ranging from 1 = "Strongly Disagree" to 5 = "Strongly Agree". To ensure content validity, the draft questionnaire was reviewed by three experts in Educational Management and Foundations from Delta State University, Abraka. Their feedback led to revisions that improved clarity and alignment with the research objectives. For reliability, a pilot test was conducted with 30 principals not included in the final sample. The internal consistency of the instrument was calculated using Cronbach's Alpha, yielding a coefficient of 0.87, indicating a high level of reliability. Data were collected through direct administration of the questionnaire with the assistance of trained research assistants across the three senatorial zones. Principals were given one week to complete and return the questionnaire. Follow-up visits were made to ensure a high response rate. Out of the 210 questionnaires distributed, 198 were correctly filled and returned, representing a 94.3% response rate. The data collected were coded and analyzed using the Statistical Package for the Social Sciences (SPSS) version 26. The analysis included: Descriptive Statistics (mean, standard deviation, frequency, and percentage) to identify characteristics of the most utilized leadership development programs. Independent Samples t-test to compare administrative performance between principals who participated in specific programs (e.g., mentorship) and those who did not. Pearson's Correlation Coefficient to determine the relationship between the content alignment of leadership development programs and the administrative performance challenges experienced by principals. The level of significance was set at 0.05 for all inferential tests.

Results

Research Question 1: What are the key characteristics of the most frequently utilized leadership development programs for secondary school principals in Delta State?

Table 1: Frequency and Type of Leadership Development Programs Utilized by Principals

S/N	Leadership Development Program	Frequency (%)	Mean Score (\bar{x})	Std. Dev.
1.	Mentorship programs	82.8%	4.32	0.71
2.	Formal training (certification-based)	76.3%	4.15	0.88
3.	Workshops and seminars	69.5%	4.02	0.93
4.	Online/virtual training	44.1%	3.58	1.06
5.	Peer networking/community of practice	31.7%	3.12	1.14

Table 1 shows that mentorship programs were the most frequently utilized form of leadership development, reported by over 82% of respondents. They also received the highest mean score ($\bar{x} = 4.32$), indicating strong perceived usefulness. Formal training and workshops also ranked highly, suggesting a preference for structured, experience-based learning. Online programs and peer networks were less commonly utilized, potentially due to infrastructural or cultural limitations.

Research Question 2: How do principals who have undergone leadership programs compare in their administrative performance to those who have not?

Table 2: Independent Samples t-test Comparing Administrative Performance of Principals With and Without Mentorship Experience

Group	N	Mean Score (\bar{x})	Std. Dev.	t-value	p-value
With mentorship experience	137	4.18	0.56	5.82	0.000*
Without mentorship experience	61	3.62	0.73		

Table 2 revealed that principals who had undergone leadership programs demonstrated significantly higher administrative performance ($\bar{x} = 4.18$) compared to those who had not ($\bar{x} = 3.62$). The t-test result ($t = 5.82$, $p < 0.05$) confirms that this difference is statistically significant, supporting the effectiveness of leadership program in enhancing administrative competencies.

Research Question 3: Is there a perceived alignment between the content and delivery of dominant leadership development programs and the actual administrative challenges faced by principals in Delta State?

Table 3: Perceived Alignment Between LDP Content and Administrative Challenges

S/N	Item Description	Mean Score (\bar{x})	Std. Dev.
1.	Relevance of training content to real school challenges	3.85	0.78
2.	Timeliness of program delivery in relation to needs	3.49	0.81
3.	Flexibility of programs to accommodate local school context	3.22	0.94
4.	Use of real case studies in program content	3.41	0.89
5.	Engagement of experienced school leaders as facilitators	3.97	0.69

Table 3 shows that the principals generally perceived moderate alignment between leadership development programs and their administrative challenges. While they rated the engagement of experienced facilitators highly ($\bar{x} = 3.97$), lower scores for flexibility and contextual sensitivity ($\bar{x} = 3.22$) suggest that some programs may not be adequately tailored to the local realities of school leadership in Delta State.

Discussion

The first research question examined the most frequently utilized leadership development programs. The results revealed that mentorship programs, formal training, and workshops are the most common forms of leadership development accessed by secondary school principals. Mentorship, in particular, stood out with the highest frequency and mean score, indicating its high relevance and perceived value among principals. This finding aligns with Bush (2020), who asserts that leadership development is most impactful when it involves mentoring and coaching by experienced professionals within the education sector. The preference for formal and workshop-based training may be attributed to the structured delivery of knowledge and perceived credibility of certificate-based learning. However, the relatively low adoption of online learning and peer networking programs suggests persistent barriers such as inadequate digital infrastructure, lack of professional learning communities, or limited digital literacy among some principals. This contrasts with global trends where online platforms and peer-based collaborative models are becoming central to leadership development (Day et al., 2016). These findings imply that while Delta State principals value face-to-face and experiential learning, there is an urgent need to integrate blended learning approaches and create communities of practice to encourage continuous, peer-driven professional development.

The second research question focused on the comparative performance of principals who have undergone mentorship versus those who have not. The significant difference in administrative performance (mean difference of 0.56) underlines the transformative impact of mentorship programs. Principals who were mentored demonstrated enhanced performance in areas such as instructional leadership, staff management, and resource mobilization. This result echoes the work of Ugwuanyi and Pietsch (2024), who emphasize that mentorship plays a crucial role in fostering leadership efficacy and adaptive leadership behaviors. Through mentorship, novice or mid-career principals gain access to the lived experiences of seasoned leaders, thereby shortening their learning curves and improving their decision-making capacity. Moreover, mentorship relationships often provide psychosocial support that enhances leaders' confidence and resilience in facing administrative challenges (He, Guo, & Abazie, 2024). The significant effect size also suggests that mentorship is more than just a supplementary component; it is a core driver of professional growth in the field of educational leadership. This reinforces the need for the institutionalization of mentorship programs within Delta State's professional development policy for school leaders.

The third research question investigated whether there is a perceived alignment between the content and delivery of LDPs and the real-world administrative challenges faced by principals. The moderate ratings across various alignment indicators (means ranging between 3.22 and 3.97) reflect a mixed perception. While principals appreciated the use of experienced facilitators and found some relevance in the content, they identified gaps in contextual flexibility and practical applicability. This finding supports the argument made by Ibrahim, Mohammed, and Tambuwal (2025), who criticized the one-size-fits-all approach to leadership training in Nigeria. Leadership development programs often replicate imported models or national standards without adequately considering the unique socio-economic and operational challenges of specific regions, such as those found in Delta State. As a result, principals are trained in areas that may not be directly translatable to their work environment, leaving critical challenges such as student discipline, low teacher morale, infrastructure limitations, and community engagement unaddressed. Additionally, the limited use of real-life case studies and simulations, as indicated by the principals, points to a lack of problem-based learning, which is essential for adult learners. This aligns with the views of Chen and Wahab (2024), who recommend context-specific, scenario-based training for school leaders in complex environments.

Collectively, these findings highlight several critical issues for educational policymakers and program developers. Firstly, there is a clear demand for sustained, mentorship-driven development that blends theoretical training with hands-on guidance. Secondly, leadership training must shift from generic content to more localized, context-responsive models that reflect the realities of schools in Delta State. Thirdly, the integration of flexible delivery formats such as online platforms and professional learning communities remains an underutilized opportunity for cost-effective, scalable leadership support. Furthermore, the positive relationship between leadership development and performance lends credence to leadership theories that link leader preparation with organizational outcomes, such as transformational leadership theory (Leithwood & Jantzi, 2005) and distributed leadership models, where the capacity of school leaders is developed and shared across multiple layers of the institution. If leadership development programs are to serve as effective tools for educational reform in Nigeria, they must evolve from sporadic, externally-driven interventions to sustainable, institutionally embedded processes aligned with the strategic goals of educational improvement.

Conclusion and Recommendations

This study investigated the relationship between dominant leadership development programs and the administrative performance of secondary school principals in Delta State. It found that mentorship and formal training are the most prevalent and effective leadership development strategies. Principals who participated in mentorship programs demonstrated significantly higher administrative performance. However, there is only moderate perceived alignment between the content of LDPs and the actual administrative challenges faced, indicating the need for more context-sensitive program design. It is therefore recommended that: the Ministry of Education in Delta State should formalize mentorship initiatives as a mandatory part of principal development frameworks. Program designers should involve current school leaders in needs assessments to better align content with the everyday challenges faced in the field. Government and non-government actors should expand access to certified leadership programs, especially in rural and underserved areas. Real-life case studies from Nigerian schools should be incorporated into training modules to enhance practical relevance. Leadership development programs should include a feedback mechanism to evaluate their impact on school leadership outcomes over time.

References:

- Asabia, E. M. (2024). The impact of principals' leadership styles on the teachers' productivity: A study of public secondary schools in Ondo State, South West, Nigeria. *Journal of International Relations and Peace*, 1(1). <https://journals.e-palli.com/home/index.php/jirp/article/view/2207>
- Asiyai, R. I. (2015). Strategies towards effective management of higher education for building a culture of peace in Nigeria. *International Journal of Higher Education*, 4(2), 127–135. <https://doi.org/10.5430/ijhe.v4n2p127>
- Bush, T. (2020). Leadership development and school improvement: Contemporary issues in leadership development. *Educational Management Administration & Leadership*, 48(1), 3–6. <https://doi.org/10.1177/1741143219886075>
- Chen, F., & Wahab, J. L. A. (2024). The impact of leadership development programs on school management in secondary schools in Eastern China. *International Journal of Education and Humanities*, 16(1), 93–97. <https://www.researchgate.net/publication/384394932>
- Day, C., Sammons, P., Hopkins, D., Harris, A., Leithwood, K., & Gu, Q. (2016). *The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies*. National College for School Leadership.
- He, P., Guo, F., & Abazie, G. A. (2024). School principals' instructional leadership as a predictor of teacher's professional development. *Asian-Pacific Journal of Second and Foreign Language Education*, 9(63). <https://sfleducation.springeropen.com/articles/10.1186/s40862-024-00290-0>
- Ibrahim, B., Mohammed, A. T., & Tambuwal, H. M. (2025). Impact of staff development programmes on the principals' performance in administering secondary schools in North-West Zone, Nigeria. *RIJESSU*. <https://rijessu.com/volume-3/impact-of-staff-development-programmes-on-the-principals-performance-in-administering-secondary-schools-in-north-west-zone-nigeria/>
- Nkedishu, V. C. (2022). Administrative efficiencies and teachers' productivity in Delta State secondary schools, Nigeria. *Asian Journal of Education and Social Studies*, 26(3), 1–9. <https://doi.org/10.9734/AJESS/2022/v26i330627>
- Nkedishu, V. C., & Okonta, V. (2024). Artificial intelligence and future of secondary education in Delta State: Implications for educational administration. *Journal of Asian Scientific Research*, 14(3), 277–288. <https://doi.org/10.55493/5003.v14i3.5073>
- Okubotimibi, J. E., Egwunyenga, E. J., & Akpotu, N. E. (2022). Effectiveness of work experience on administrators' job performance in tertiary institutions: Evidence from Bayelsa and Delta State, Nigeria. *International Journal of Academic and Applied Research*, 6(12), 37–43. <https://ijeais.org/wp-content/uploads/2022/12/abs/IJAAR221206.html>
- Ugwuanyi, C. S., & Pietsch, M. (2024). Promoting leadership for learning in Nigeria: The interplay of leadership mastery experience and leader self-efficacy. *Educational Management Administration & Leadership*. <https://journals.sagepub.com/doi/full/10.1177/17411432241282488>