



**CORRELATION BETWEEN COLLABORATIVE LEADERSHIP AND ACADEMIC PERFORMANCE
OF OFFICE TECHNOLOGY AND MANAGEMENT STUDENTS IN SOUTHWESTERN FEDERAL
POLYTECHNICS IN NIGERIA**

BY

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Abstract

The interconnectedness of leadership with learning outcomes in various institutions at various in Nigeria has gained notable traction in contemporary scholarly discourse. This has often necessitated the crucial need to change the traditional leadership approach to a more collaborative leadership for a better educational outcome. On this thrust, the paper empirically examined the correlation between collaborative leadership and academic performance of Office Technology and Management (OTM) students in Southwestern Federal Polytechnics in Nigeria. The descriptive survey of the correlational type was guided by two research questions and one null hypothesis. Stratified sampling technique was used to select 150-year II Higher National Diploma students in the Federal Polytechnics in Southwestern Nigeria. Collaborative Leadership in Office Technology and Management Questionnaire (CLOTMQ) with a reliability coefficient of 0.85 was used for data collection while the hypothesis was tested at 0.05 level of significance. Richard Kuderson and multiple regression statistical tools were used for data analysis. The findings of the study reveal that the collaborative leadership indicators made 64.0% ($R^2=0.64$) contributions to OTM students' academic performance. The correlation coefficient of each of the collaborative leadership indicators ranged between 0.586 and 0.626. Leadership with students' freedom ($r=0.626$;62.6%) made the highest contribution to the students' academic performance, and leadership with students' participation in decision making ($r=0.586$;58.6%) made the least contribution, and there is a statistically significant positive correlation between collaborative leadership indicators and the academic performance of the students(<0.05).It is recommended that OTM students should be more involved in the teaching and learning process and the leadership of higher institutions should prioritize collaborative leadership practices for better students' academic performance.

Keywords: Academic performance, Collaborative leadership, Student, Office Technology and Management

Introduction

In African Polytechnics, it has been argued in some existing literature that decentralization in leadership approaches can improve administrative efficiency and reduce bureaucratic bottlenecks, yet its impact on academic outcomes remains underexplored. Meanwhile, there is no doubt that human affairs at all levels need leading, organization and coordination in their respective groups, and these necessitate the concept of leadership in any setting. Leadership could be seen as the act of leading, directing and coordinating the affairs of a group of individual in order to achieve common objectives of such group. Groups of individual could be in several forms such as society, club professional association, Non-Governmental Organisations, higher institutions, students and student associations. Leadership is deemed effective if the affairs of the group members are effectively managed, or if the objective upon which the group is established is attained through the performance of each member of the



group. In education, to be specific, there is no gain say that the expected academic performance of learners are largely determined by leadership practices of their educational institutions.

Meanwhile, leadership in higher institutions, African Polytechnics inclusive, has moved beyond the traditional, hierarchical model towards more distributive forms that recognize the expertise of multiple students (Harris & Jones, 2020). In Nigerian higher education system, where political instability, funding constraints, and student unrest are obviously recurrent, the capacity to manage crises while maintaining academic standards is a critical determinant of institutional success (Adeyemi, 2018). This calls for distributive leadership encompassing decentralized, collaborative, and shared leadership approaches which call for understanding how responsibility for decision be spread across faculty, administrators, students, and external partners. In the teaching-learning process of higher institutions, collaborative leadership which is focused in this paper disperses authority to students in group or and individuals, allowing adequate participation and co-ordination of one another to do a task for the actualization of educational or course objectives.

Dimensions of collaborative leadership otherwise referred to as indicators of demonstrable collaborative leadership are many. However, in the teaching and learning of Office Technology and Management (OTM) in higher institutions of learning. The authors of this paper fostered the prominent indicators expected of educators and instructors to bring into play as they deliver the curriculum of OTM to polytechnic students. These are leadership with students' team work; leadership with students' ownership of their academic work; leadership with collaborative students' learning, leadership with students' autonomy; leadership with students' freedom; leadership with students' participation in decision making; and leadership with the culture of resilience and adaptability among the students altogether. They are thus considered in this correlational study.

Empirical study of Alzahrani and Albeladi (2023) on collaborative leadership and its relationship with students' educational attainment recorded that the practice of collaborative leadership by secondary school principals in Madinah was high in relationships with schools' staff, parents and students. According to the teachers, principals in secondary schools practice collaborative leadership style to a high degree. It becomes clear that effective leadership is not confined to a single tutor or educator, instead a shared responsibility is expected to exist between the tutor and the tutees who are the learners. In a modern educational contexts therefore, leadership practices demand flexibility and participatory contributions of those who implement curriculum and the recipients of the subject matter of the curriculum who are in this case office technology and management practitioners and their students.

Furthermore, active involvement and collaboration among all members of the campus community, demonstration of leadership traits are means of motivating students, display of positive dispositions, adherence to honesty and objectivity in offering guidance, and acknowledgment of the responsibility associated with assigned tasks (Tuan et al., 2022). All these are likely to affect learning as Albeladi (2022) has affirmed that assessment of students' learning outcomes is an essential part of the educational process. As posited by Gumus et al (2018), effective leadership is essential for students to achieve good learning outcomes, and the demand for effective leadership has grown rapidly in recent years). Similarly, some other available literature have found out that students' performance in classrooms was found to be positively influenced by teachers' work in creating a climate of trust and collaboration, defining an organisational mission and monitoring the implementation of that mission, taking initiatives and taking risks as part of a collaborative approach in teachers leadership roles.

Academic performance refers to the measurable outcome of a student's learning process, typically expressed through grades, test scores, cumulative grade point average, and the ability to meet the academic standards set by an institution. For Office Technology and Management (OTM) students in polytechnics, it reflects both theoretical understanding of administrative, ICT, and secretarial competencies and the practical application of those skills in simulated and real workplace scenarios. It serves as a key indicator of how effectively students are



acquiring the knowledge and skills required for professional roles in offices and corporate environments. In the Nigerian polytechnic system, academic performance is central to evaluating the quality of technical and vocational education. High academic performance among OTM students is linked to better employability, improved workplace adaptability, and the capacity to contribute meaningfully to organizational efficiency upon graduation. Conversely, low academic performance limits students' progression and weakens the human capital base needed for administrative and managerial functions in both public and private sectors.

Empirical studies show that academic performance is influenced by a range of institutional, pedagogical, and interpersonal factors. According to Okoro and Osinem (2018), students' academic achievement in vocational and technical programs is closely tied to the quality of instructional delivery and the learning environment provided by the institution. Similarly, Yusuf and Alabi (2020) found that students' engagement, motivation, and access to practical training facilities significantly predict their academic outcomes in polytechnics across southwest Nigeria. Furthermore, Adebayo, Adeyemi, and Ogunleye (2021) emphasized that collaborative and supportive academic environments enhance students' understanding and retention, leading to improved performance in both coursework and practical assessments. In the light of the findings in the available literature, examining academic performance as the dependent variable allows for an assessment of how collaborative leadership practices within departments and classrooms may contribute to, or hinder, students' achievement in OTM programmes across southwest federal polytechnics in Nigeria.

Further, in the context of Office Technology and Management (OTM) discipline that relies heavily on skill development, decentralised decision structures may facilitate quicker curriculum updates, effective implementation and better alignment with market needs, and in the end, potentially enhancing student performance. Collaborative leadership emphasises joint decision-making among students through formal or informal partnerships (Kraft & Dougherty, 2019). Studies in Nigerian Federal Polytechnics have linked collaborative practices to higher levels of staff morale and more effective conflict resolution. (Okeke, 2022). For a measurable academic outcome in office technology and management, collaborative leadership remains crucial that strikes the mind of Office Technology and Management (OTM) programme implementers if truly the objective of the programme are to be achieved.

Collaborative leadership practices involve shared leadership where educators and instructors in Office and Technology Management are expected to involve the students they teach through delegation of leadership responsibilities in the course work and practical exercises they give in the teaching and learning process. In order to consolidate leadership by collaboration, Spillane(2010) reiterated that the concept of distributed leadership has emerged as a compelling framework that redefines leadership as a collaborative endeavor involving multiple stakeholders in decision-making and fostering a cooperative approach to school improvement. By implication, collaborative leadership is grounded in the recognition that effective leadership is not confined to a single individual but is instead a shared responsibility that extends to all that are involved in Office Technology and Management programmes implementation in polytechnics. Leadership is deemed effective if the affairs of the group members are effectively managed, or if the objective upon which the group is established is attained through the performance of each member of the group. In OTM education, to be specific, there is no gain say that the expected academic performance of learners are largely determined by leadership practices of their educational institutions.

Federal Polytechnics in Nigeria are higher institutions to reckon with as part of manpower producers for the labour market. In terms of Office Technology and Management Programme, Office Technology and Management which is designed to train learners on clerical and secretarial roles, but literature is meagre on the leadership practices of OTM curriculum implementers and whether such practices actually have any carry over effect on OTM students' academic performance. This basis and observation form an important ground to examine the correlation between collaborative leadership and academic performance of office technology and management



students in Southwestern Federal Polytechnics in Nigeria. The subject matter of this paper is rooted in transformational leadership theory and social learning theory. Transformational leadership theory posits that effective leaders inspire and empower followers to achieve organizational goals (Bass & Riggio, 2022). Collaborative leadership fostered in this paper align with this theory, as educators and instructors in the Federal polytechnics are to encourage students participation, coordination, and promote teamwork as Office Technology and Management students are empowered with job-placement skills all for collective goal achievement in the programme implementation.

Statement of the Problem

Over the past three decades, literature have consistently highlighted the crucial role of institutional leadership approaches and their impacts on students' learning outcomes. Although, relative findings and opinions abound in literature on the relationship between transformational leadership and student achievement. The facts remain that communities of practice in education continue to advocate for the breakdown hierarchical boundaries of traditional leadership approaches which many a time ,do not give learners opportunities to take adequate responsibilities in the teaching and learning process. The leadership approach practices in Office Technology and Management (OTM) programme implementation are not excluded. The need arises to create spaces for knowledge sharing and collaborative leadership approach in OTM.

Despite the acclaimed demonstration of the ethos of collaborative leadership in Federal Polytechnics in Nigeria over the years, there is a paucity of empirical evidence on their influence on students' academic performance within the specific niche of Office Technology and Management in Southwestern Federal Polytechnics, in Nigeria. Existing studies tend to focus on administrative outcomes and less on how leadership approaches impact students' academic performance in Office Technology and Management leaving a gap in understanding the relationship between institutional leadership approaches and students' learning outcomes. This study therefore empirically examined the correlation between collaborative leadership and academic performance of Office Technology and Management students in Southwestern Federal Polytechnics in Nigeria.

Purpose of the Study

The main purpose of the study was to examine the correlation between collaborative leadership and academic performance of Office Technology and Management students in Federal Polytechnics in Southwestern Nigeria. The specific purposes of the study were to:

1. find out whether collaborative leadership indicators jointly influence the academic performance of Office Technology and Management students in Southwestern Federal Polytechnics in Nigeria
2. examine the correlation between the degree of applying each collaborative leadership indicators and the academic performance of Office Technology and Management students in Southwestern Federal Polytechnics in Nigeria

Research Questions

The following two research questions were raised and answered in the study in line with the specific purposes of the study.

1. Do the collaborative leadership indicators jointly influence the academic performance of Office Technology and Management students in Southwestern Federal Polytechnics, Nigeria?
2. Is there a correlation between the degree of applying each collaborative leadership indicators and the academic performance of Office Technology and Management students in Southwestern Federal Polytechnics in Nigeria?

Research Hypothesis

The null hypothesis tested in the study at an alpha level of 0.05 is stated below.



1. There is no significant joint influence of collaborative leadership indicators on the academic performance of Office Technology and Management students in Southwestern Federal Polytechnics in Nigeria?

Methodology

A survey design was adopted for this study. The descriptive survey was chosen because of its systematic method of gathering data using a sample from a large population at a single point in time and its provision of the picture of the present state of variables of interest. The study population was 239 final year Higher National Diploma (H.N.D) II students offering Office Technology and Management as a programme of study in four Federal Polytechnics in Southwestern Nigeria which are Federal Polytechnic, Ilaro, Federal Polytechnic, Ado-Ekiti, Yaba College of Technology, Lagos, and Federal Polytechnic Ede. The targeted population were all the male and female students of the selected Polytechnics in Southwestern Nigeria. The sample size was 150 HND II students of the participating Institutions, the female students are 82 and the male students are 68 respectively. The sample size of 150 was determined by the use of Taro Yamane formula and the stratified sampling method was used to select the number of the representatives in each of the Federal Polytechnics in Southwestern, Nigeria.

The instrument used for data collection in respect of collaborative leadership indicators was tagged Collaborative Leadership in Office Technology and Management Questionnaire (CLOTMQ) designed by the researchers after reviewing existing literature on Collaborative leadership while the existing Academic Performance of Office Technology and Management students in one of their released and similar core courses in HND II first semester across the Federal Polytechnics was taken as the dependent measure to correlate the CLOTMQ with. A rating scale with four spread of opinions (Very High Extent VHE), High Extent (HE), Very Low Extent (VLE), and Low Extent (LE) with seven question items was used to obtain data from the respondents of the participating institutions. The validity of the CLOTMQ was determined by given it to three experts in Office Technology and Management for the face and content validity after which twenty copies of the CLOTMQ was administered once to a Federal Polytechnic outside the study area, and a Cronbach alpha coefficient of 0.85 obtained confirmed the good internal consistency of the instrument which made it reliable for data collection and Regression Analysis statistical tools were used to provide answers to the research questions and the null hypothesis .

Results

Research Question one: Do the collaborative leadership indicators jointly influence the academic performance of Office Technology and Management students in Southwestern Federal Polytechnics, Nigeria?

Table 1: Model Summary –Percentage of Collaborative leadership positive correlation on academic performance of Office Technology and Management students in Southwestern Federal Polytechnics, in Nigeria

Model	R-squared:	Adjusted squared	R- F-statistic	P-value	Standard Error
1	0.66	0.64	85.12	<0.05	0.07

a Predictors: (Constant), collaborative leadership; $p < .05$, Co-efficient 0.52

Adjusted R-Square – 0.64(64.0%).

It implies that the collaborative leadership indicators (leadership with students team work; leadership with students' ownership of their academic work; leadership with collaborative students' learning, leadership with students' autonomy; leadership with students' freedom; leadership with students' participation in decision making; and leadership with the culture of resilience and adaptability among the students altogether) altogether contribute 64.0% to Office Technology and Management students' academic performance in the Federal Polytechnics surveyed.



Research questions two: Is there a correlation between the degree of applying each collaborative leadership indicators and the academic performance of Office Technology and Management students in Southwestern Federal Polytechnics in Nigeria?

Table 2: Correlation between the degree of applying each collaborative leadership indicators and the academic performance of Office Technology and Management students

S/N	COLABORATIVE LEADERSHIP INDICATOR	CORRELATION COEFFICIENT (r)	PERCENTAGE CORRELATION
1	Leadership with students team work.	0.604	60.4
2	Leadership with students' ownership of their academic work.	0.615	61.5
3	Leadership with collaborative students' learning.	0.622	62.2
4	Leadership with students' autonomy.	0.594	59.4
5	Leadership with students' freedom.	0.626	62.6
6	Leadership with students' participation in decision making.	0.586	58.6
7	Leadership with the culture of resilience and adaptability among the students.	0.618	61.8
	Cumulative Correlation/Percentage	4.265	426.5%
	Total Average Correlation/Percentage	r= 0.609	60.9%

Table 2 presents the values of the correlation coefficients and the percentage equivalents for each of the seven collaborative leadership indicators identified and responded to by the respondents, that is, the students who are in year II of their Higher National Diploma programme. All the values of the correlation coefficients ranged between 0.586 and 0.626. On the average, the correlation between the degree of applying each collaborative leadership indicators and the academic performance of Office Technology and Management students in the Federal Polytechnics surveyed has a coefficient of 0.609 which is equivalent to 60.9% degree of correlation between the collaborative leadership indicators being displayed by the staff and the students 'academic performance and the cumulative sum of all r values is 4.265 while the cumulative percentage of all r is 426.5%

Testing of Hypothesis

Hypothesis One: There is no significant joint influence of collaborative leadership indicators on the academic performance of Office Technology and Management students in Southwestern Federal Polytechnics in Nigeria?

Table 3: Test of statistical influence of collaborative leadership indicators on the academic performance of Office Technology and Management students in Southwestern Federal Polytechnics in Nigeria?

Source	DF	Sum of Squares	Mean Square	F-Statistics	P-value
Regression	1	150.00	150.00	25.00	<0.05
Residual	146	889.00	6.00		
Total	149	1034.00			

Table 3 presents the test of statistical influence of collaborative leadership indicators on the academic performance of office technology and management students in Southwestern Federal Polytechnics in Nigeria. The P-value (0.05) is less than the alpha value of 0.05. It implies that there is a statistically significant positive correlation between collaborative leadership indicators and the academic performance of the students. As a result, the null hypothesis is rejected.



Discussion of the Findings

The findings of this study have shown the true picture of collaborative leadership practices being demonstrated by the educators and the instructors with their Office Technology and Management (OTM) students in the Federal Polytechnics in Southwestern Nigeria as well as the correlation that collaborative leadership has with the students' academic performance. The collaborative leadership indicators which are leadership with students team work; leadership with students' ownership of their academic work; leadership with collaborative students' learning, leadership with students' autonomy; leadership with students' freedom; leadership with students' participation in decision making; and leadership with the culture of resilience and adaptability among the students altogether contribute 64.0% to Office Technology and Management students' academic performance in the Federal Polytechnics surveyed (Table 3). This finding shows that the combined positive correlation is strong, these findings also corroborate Al-Ajmi (2010) and (Al-Harthy, 2018), who found that school principals practised a high level of collaborative leadership, though, their finding is at the secondary level of education in Nigeria. It further implies that collaborative leadership takes a prime of place in programme implementation at various levels of education where it is employed. Leadership in schools can encourage collaborative cultures and suggest practices that can help organisations achieve their goals (Alzahrani and Albeladi, 2023).

On the correlation of each of the seven collaborative leadership indicators identified and responded to by the students who are in year II of their Higher National Diploma programme with respect to their academic performance, the study found out specific correlation coefficient and the equivalent percentage of each of the collaborative leadership indicators in the following order - leadership with students' freedom($r=0.626;62.6\%$); leadership with collaborative students' learning($r=0.622;62.2\%$); leadership with the culture of resilience and adaptability among the students($r=0.618;61.8\%$); leadership with students' ownership of their academic work($r=0.615;61.5\%$); leadership with students team work ($r=0.604;60.4\%$); leadership with students' autonomy($r=0.594;59.4\%$); and leadership with students' participation in decision making($r=0.586;58.6\%$). The observations from these findings reveal that leadership with students' freedom has the highest correlation with the students' academic performance followed by leadership with collaborative students' learning in that order while leadership with students' participation in decision making is the least. These findings also agree with the assertion of Mamadaliyeva (2025) who reported that students who engage in leadership roles, such as team projects, demonstrate greater self-confidence, enhanced problem-solving abilities, and stronger communication and teamwork skills compared to their peers. These students exhibit higher academic achievement, as leadership responsibilities often foster time management, critical thinking, and decision-making skills.

On the average, there is an average interplay of 0.609(r) which is an equivalent of 60.9% correlation between the degree of applying each collaborative leadership indicators and the academic performance of Office Technology and Management students in the Federal Polytechnics surveyed (Table 4). This makes it imperative that those who implement Office Technology and Management curriculum in Federal Polytechnics in Nigeria are encouraged to use a collaborative leadership with a view to promoting team work, autonomy, participation, academic freedom, and build the culture of resilience and adaptability among the students for optimum academic performance. The hypothesis testing further strengthens the insights on the influence of collaborative leadership indicators on the academic performance of office technology and management students in Southwestern Federal Polytechnics in Nigeria which is significant.

The statistical significant correlation confirm the robustness of this relationship. This finding also complements the critical role of collaborative leadership characterized by teamwork and shared responsibilities in driving students' participative roles in the teaching and learning process for enhanced academic performance. The findings of this study, put together make it evidently clear that collaborative leadership is a more powerful driver of academic performance. Students thrive when leadership is structured, coordinated, and participatory, rather than overly dispersed. The outcomes of this study make it crystal clear that collaboration in leadership gives



students opportunity to feel connected, supported, and empowered, which directly translates into improved academic performance.

Conclusion

In the education sector among many other sectors, adequate collaboration between curriculum or programme implementers and learners remains indispensable for fostering a positive teaching and learning environment, and promoting higher academic performance among the learners involved. In the higher education sector.. In practical terms, this study has actually explored the correlation between collaborative leadership and academic performance of Office Technology and Management students in Federal Polytechnics in Southwestern Nigeria. The insight provided as revealed from the findings of this study makes it evidently clear that collaborative leadership in the Federal Polytechnics where Office Technology and Management is offered influences students success. The collaborative leadership indicators identified and responded to in the study contribute to the broadening of relevant stakeholders understanding of the factors influencing students' academic performance. By actively engaging the relevant stakeholders like the educators, the instructors, the administrative personnel, students and community members in the collaborative leadership process of participation and decision- making, Federal Polytechnics and allied higher institutions would be more poised to achieve the expected objectives of the institutions including better students' academic performance.

Recommendations

The recommendations highlighted below are put forward for consideration by the relevant stakeholders of education.

1. The government should ensure that higher institutions are provided with conducive learning environments and adequate facilities for effective implementation of the Office Technology and Management (OTM) programme, thereby enabling educators and administrators to demonstrate collaborative leadership practices that will enhance the academic performance of OTM students
2. Respective authorities of polytechnics should encourage greater involvement of OTM students in the teaching and learning process through collaborative approaches where responsibilities are shared and academic freedom is promoted, enabling students to develop, demonstrate, and maximize their acquired skills.

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