Principals' Collaborative Leadership, Teachers' Professional Development, And Students' Academic Performance in Senior Secondary Schools, Education District V, Lagos State, Nigeria

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Abstract

In Senior Secondary Schools Educational District V, Lagos, Nigeria, this research looked into Principals' collaborative Leadership practice, Teachers' Development, and Students' Academic Performance. Two null hypotheses were developed to direct the investigation. The survey design used in the research was descriptive. A sample comprised 402 respondents, that is 385 teachers and 17 principals from 72 senior secondary schools from Lagos State's Educational District V. To address the study issues, the obtained data were analysed using Pearson Product Moment Correlation analysis, and the hypotheses were tested at the P<0.05 level of significance. The study showed that principals' collaborative leadership has a major impact on teachers' professional growth. The research also shows that professional development for teachers has a significant impact on students' academic performance. It is recommended however that principals of public secondary schools should adopt and enhance collaborative leadership practices in light of the results.

Keywords: Collaborative leadership, Teachers' development, Students' academic performance, Teacher collaboration

Introduction

In public schools, the collaborative leadership style of school heads is widely regarded as an important mediating factor to support institutionalised innovations, progress, and capacity building in teaching and learning practices, as well as teachers' teaching performance and students' academic outcomes. The collaborative leadership style of school heads is inextricably linked to the daily operations of schools as the strategic catalyst for educational achievement and transformation.

In today's ever-changing world, where everyone has been entrusted with a high level of responsibility and accountability to achieve excellence in all walks of life, the principal who serves as the head of every school board in Nigeria bears ultimate responsibility for everything that happens within the school is no exception Fubara (2017). To improve students' academic performance, many studies have indicated that the primary role of the school principal is to achieve positive outcomes for the school through their contribution to the climate and organisation of the school, which impacts teaching and learning to

reach students (Rodrigues & Ávila de Lima, 2021). According to Halliger *et al.* (2011), as cited by Parlar *et al.* (2021), the critical functions of school principals, among other responsibilities, are to encourage student learning, enhance teachers' professional development activities, and maintain classroom time. According to Ndyali (2013; p8), student academic performance defines as "how well or poorly a student performs in his/her studies". Mugambi (2015) discovered that high-performing schools' principals' provision of sufficient teaching and learning resources is the reason for their students' strong academic accomplishment (Parlar *et al.,* 2021).

Sahlin (2022) narrated that "researchers, practitioners, and political representatives have emphasized that school leadership and school improvement are essential if schools are to meet future requirements and fulfil their mission to enable all students the possibility to develop and achieve their educational goals" (p;2). According to Leithwood *et al.* (2019) as cited by Parlar *et al.* (2021) found that school leaders contribute to school performance. Bektaş *et al.* (2022) claimed that school leadership positively impacts students' academic outcomes by indirectly fostering teachers' skills and practice, and creating an atmosphere conducive to the learning of every member of the school community. Scott (2018) stated that "school leadership is found to have one of the greatest influences on students' [academic] outcomes" (p;2). Scott further asserted that "principals, through their actions, can be powerful multipliers of effective teaching and leadership practices in schools. And those practices can contribute much to the success of the nation's students" (P.2). He highlighted the following essential roles for competent school leaders and other school leaders in creating a learning environment and enabling a strong working atmosphere for teachers' professional development and their students' academic achievement that:

1. School leaders should exemplify a vision that fosters students' academic success

2. Revised instructional manuals

3. Creates a friendly climate for educational efforts

4. Oversees staff data, and school structures and processes

5. Cultivates school improvements, and

6. Prepares others to assume leadership roles.

Collaborative leadership is leadership that focuses on the school-wide approach that aims to improve school structures and processes that are shared by the school leader, teachers, administrator, and others (Hallinger & Heck, 2011; Schlebusch, 2020). It is a leadership style where everyone can participate in decision-making to improve the school. Hallinger & Heck (2011) defined collaborative leadership as "the use of governance structures and organisational processes [by the principal] that empowered staff and students, encouraged broad participation in decision-making, and fostered shared accountability for students

learning" (p:20). Straubhaar and Wang (2022) enumerated four main features of collaborative leadership as a model that has been proposed by different scholars. Fullan (2012) concluded that all members of the school community should own and participate in decision-making rather than being placed in the hands of school administrators.

The school leader creates an environment where teachers can work together on their professional development and increase the students' achievement. They make these thriving collaborative communities by considering the following six characteristics of collaboration, as stated by (Mora-Ruano et al., 2019): cooperation should be voluntary; People who work together should share their resources; they should also share responsibility for the results; there should be shared responsibility for participation and decision-making; it requires parity among participants; it should be based on common goals.

Saleem *et al.* (2020) found that the behaviours and collaborative leadership styles of school heads have always been scientifically linked to the teaching effectiveness of instructors. Additionally, it was shown that there is a significant correlation between teachers' teaching effectiveness and the collaborative leadership style of school heads. In addition to routinely supervising classes to give feedback on teachers' methods and how they affect students, school heads' collaborative leadership practices also involve facilitating strategic planning that involves all stakeholders, including parents, teachers, and administrative and support staff. As a result, school heads' collaborative leadership abilities act as a mediator between teachers' performance and students' academic results, encouraging them to enhance their performance and demonstrate creativity and innovation in the classroom to enhance students' learning and academic results.

According to Cook (2021), opportunities for increased teacher cooperation result in better professional growth and improved student academic success. Teachers who grow into leaders provide their colleagues with efficient, school-based professional development by directing communities of practise that continuously reflect on and improve teaching methods. Professional development is the activities, workshops and professional maturity that make teachers better teachers and exceptional (Singer, 2011; Krasniqi, 2021) asserted that since "teaching is a collaborative, competitive, and complex profession," that teaching requires constant "refinements for teachers to master the skills, knowledge, and methods needed for completing their tasks professionally, accountably, and successfully" (P.2). In Knight and Hassel (2015) the professional development of teachers is done on daily bases in the sense that they consult each other when preparing lesson plans, formative and summative assessment, class activities and knowledge about individual performance in the absence of a professional developer. Teachers learn faster from one another than from formal learning settings as learning appears to be spontaneous; as assignments completed in "a cooperative spirit strengthen collegial relations, which lead to greater trust, collaborative climate, and more personal and professional support".

Many teachers work in isolation; they do not work as professionals because a true professional does not work in isolation but in teams that focus on effectiveness in their practice, take responsibility for continued growth and development, and take an active role in determining the path to professional growth (Greiner, 2015).

Research Hypotheses

The following hypotheses were formulated at 0.05 level of significance was used in this study:

H_{o1}: There is no significant relationship between principals' collaborative leadership and teachers' professional development.

H_{o2}: There is no significant relationship between collaborative leadership and students' academic performance.

Literature Review

Concept of Collaborative Leadership

Despite being relatively nascent in the field of education, collaborative leadership has been widely accepted. According to recent research in the area of global education reform, student learning, school development, and educational quality are all positively impacted by school leadership. Scholars worldwide have laboured to formulate the hypothesis that a school's academic success is stimulated by the leadership of the principal. They went on to say that as a consequence of a wave of worldwide developments, school leaders' roles and responsibilities are always evolving, which means that they must always overcome challenges in their line of work. Managers may collaborate or operate alone to accomplish their objectives, depending on the circumstances at the school and their own traits. Heroic leadership focuses primarily on the leader acting alone and does not make use of the abilities and traits of other leaders. School leadership has now moved from heroic leadership styles to distributed, shared, or collaborative leadership styles to expand the sources of school leadership. To encourage collaboration and participation among the participants of the organisation in a way that leads to purposeful actions that are more likely to achieve the organisation's goals, collaborative leadership is comprehensive and can incorporate a variety of other leadership concepts, including transactional/management, transformation, and instruction management (Black & Edgecombe, 2022).

Principal Leadership and Teacher Collaboration

According to DuFour *et al.* (2016) in Marshall (2021), the duties and responsibilities of school leaders have changed in the 21st century; recent educational changes have altered the role of the school principal. It is observed that in the new normal of education, the role of the school leader expands to include much more than just the face of the school (Marshall, 2021). According to Marshall (2021), school leaders must encourage teacher

collaboration by providing professional development and support for professional learning communities. This will help teachers develop their abilities and build relationships with their peers. According to Sebastian *et al.* (2017) in Marshall (2021), teachers become increasingly isolated when there are no opportunities for cooperation. Teachers are therefore forced to work in isolation in their classrooms to complete long to-do lists; this type of work environment stifles creativity and hampers personal and professional development (Marshall, 2021). Collaboration creates significant professional growth for administrators and teachers. Principals are educational leaders who need to foster collaborative environments in schools. A school's success is reflected in its culture; The shift from an autonomous to a collaborative culture affects the educational environment (Marshall, 2021).

Principal and Teachers' Professional Development

According to a growing body of research, school leadership is the most important factor in accomplishing an organisation's objectives and has the most influence on teachers in the classroom. Since teacher quality is the most important element related to student accomplishment, administrators' ability to properly support teachers' professional development is another crucial indication of their effectiveness as leaders (Somprach *et al.,* 2017).The principle plays a crucial role in improving teacher performance by providing guidance and inspiration to teachers to accomplish the set educational objectives via competent and acceptable leadership (Agustin *et al.,* 2022).In addition to doing informal ability evaluations of teachers, the principal runs training programmes, seminars, and workshops (Chalikias *et al.,* 2021). The impact on the professional development of teachers and school leaders was the focus of a study by Hilton *et al.* (2015) on school leaders as participants. The study also found that school leaders and teachers interact during workshops and in the classroom, as well as through their reflection and implementation of changes in a variety of areas related to teachers' professional development. Abari *et al.,* (2022) and Chalikias *et al.,* (2021) contend that school administrators need to do the following in order to support teacher professional development:

    i.   Establishing connections with parents, students, and educational personnel.

    ii.   Forming and communicating shared objectives and visions.

    iii.   Encouraging leadership by delegating tasks and sharing authority.

    iv.   A feeling of group identity.

    v.   Cooperation, comprehension, and professional growth for educators.

Professional development for teachers is linked to the role of the school administrator, who must demonstrate attributes such as accountability, impartiality, and open communication while maintaining a relationship with teachers (Chalikias *et al.,* 2021).

According to Chalikias *et al.* (2021), teacher development is the process by which educators acquire new information, enhance their capacity for learning, and use that information to the best interests of their pupils.

The Principal's Contribution to Collaborative Leadership: Enhancing the Quality of Education

1. The principal as an instructor: As a teacher, the principal must always work to improve the quality of instruction provided to teachers. In this instance, the principal's professionalism will be significantly impacted by experience, particularly when it comes to assisting the education staff in developing a comprehension of how to carry out their responsibilities. The principal's capacity to perform his duties is significantly influenced by his training and upgrades, as well as his experience as a teacher, vice principal, or member of a community organisation. The following is a description of the steps that school administrators may take to enhance their own performance as teachers, particularly in enhancing the performance of teaching staff and student learning outcomes:

   a. Including instructors in the upgrading process to increase their expertise. Principals must also provide educators the chance to further their education in order to enhance their knowledge and abilities. Giving instructors who haven't earned their bachelor's degree the chance to attend lectures that do not conflict with instructional activities is one example. Through collaboration with the community, business community, or other non-binding partnerships, principals should look for scholarships for teachers who pursue further study.

   b. Principals need to make an effort to encourage the learner evaluation team to put in more effort, and the findings ought to be made public and posted on the bulletin board. Students may benefit from this by being inspired to work more in class and obtain better results.

   c. Make good use of class time by motivating instructors to begin and conclude instruction at the appointed times and to use the time effectively and efficiently for learning objectives.

2. The Motivating Principal: In order to inspire education staff to perform their many duties and responsibilities, the principal must have the appropriate plan in place. The physical environment, the work environment, discipline, encouragement, effective incentives, and the provision of a variety of learning materials via the establishment of a learning resource centre (PSB) may all help to increase this drive.

3. The Principal as a Teacher: As an educator, the principal must be able to inculcate, encourage, and enhance a minimum of four types of values, which are as follows:

    a. Mental, including issues pertaining to character traits and interior attitudes.

    b. Moral issues, which are characterised as morality, character, and decency, and which deal with the teachings of right and wrong in relation to behaviours, attitudes, and duties.

    c. Physical, including issues pertaining to one's body, health, and external appearance.

    d. Artistic, including issues pertaining to how sensitive people are to beauty and art.

Methodology

In this research, a descriptive survey approach was used. This research tries to anticipate the relationship between teacher development, student academic achievement, and collaborative leadership practises used by principals. The study's participants included principals and teachers working in public senior secondary schools in Lagos State's Education District V, which is made up of four zones: Ajeromi Ifelodun, Amuwo Odofin, Badagry, and Ojo, and it did not include any private or federal schools in the State. In Lagos State, Education District V has 72 public senior secondary schools and 1,511 teachers (Lagos State Education District V Office, 2023).

The respondent was chosen from among the principals and teachers employed in every public senior secondary school in District V of Lagos State using a stratified sampling technique. The sample size was chosen using a simple random sampling technique. Since the target population is homogeneous, this approach was chosen. This sample was chosen to be representative of the whole population. The objective of this research is to include a minimum of 385 teachers, representing 24% of the teacher population, and 17 principals, representing 24% of the principal's population. The following procedure was used to calculate the sample size for this investigation. The sample size needed for a population using the margin of error and confidence level:

$$n = \frac{z^2 pq}{e^2}$$

where:

n = sample size needed z = z-score for the desired confidence level (e.g. 1.96 for 95% confidence level) p = proportion of the population estimated to have a certain characteristic or behaviour q = 1 - p

e = margin of error as a proportion

To use this formula for a population of 1614 with a desired margin of error of 5% and a confidence level of 95%, we would need to estimate the value of p, which represents the proportion of the population that exhibits a certain characteristic or behaviour of interest. Let us assume that one does not have an estimate for p, so one will use a conservative value of 0.5, which maximizes the sample size needed for a given margin of error.

Substituting the values into the formula, we get:

$$n = \frac{1.96^2 \, 0.5 \times 0.5}{0.05^2}$$

n = 384.16

Therefore, we would need a sample size of at least 385 individuals from the population of 1511 to achieve a margin of error of 5% with a 95% confidence level, assuming a conservative value of p = 0.5. The main instrument adopted for the collection of data was a structured questionnaire captioned "Principals' collaborative leadership, teachers' development, and students' academic performance in Lagos state educational district V." Part A of the questionnaire provides information on demographic data of the respondents while part B centred on the request for the respondents to complete the questionnaire meant to answer the research questions posed for the study. A Likert type four-point scale was used to obtain the responses of the participants and represented as follows:

SA	Strongly Agree	4 points
A	Agree	3 points
D	Disagree	2 points
SD	Strongly Disagree	1 point

To ascertain the reliability of the instrument, the questionnaire went through a pilot-test similar but smaller sample group from the neighbouring school. On a two weeks interval the two scores were correlated using Pearson product moment correlation coefficient and reliability (r = 0.95).

The researcher personally visited all the public senior secondary schools in District V of Lagos State and administered the questionnaire to both principals and teachers. The questionnaire was collected two days after administering.

For clarification and easy understanding of the information collected, the data were analyzed by using Pearson's Product moment correlation analysis and the formula is given below:

$$r_p = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{N \sum X^2 - (\sum X)^2 \, (N \sum Y^2 - (\sum Y^2)}}$$

Results

Table 1: Correlation Showing Relationship between Principals' Collaborative Leadership and Teachers' Professional Development

		Collaborative Leadership	Teachers' Professional Development
Collaborative Leadership	Pearson Correlation	1	0.538**
	Sig. (2-tailed)		0.000
	N	407	407
Teachers' Professional Development	Pearson Correlation	0.538**	1
	Sig. (2-tailed)	0.000	
	N	407	407

From the result presented on Table 1, it could be observed that a significant Person Correlation of 0.538 was obtained at 0.05 level of significance, hence the null hypothesis which states that there is no significant relationship between principals' collaborative leadership and teachers' professional development was rejected. This implies principals' collaborative leadership has an impact on the teachers' professional development.

Table 2: Correlation Showing Relationship between Collaborative Leadership and Students' Academic Performance

		Collaborative Leadership	Students' Academic Performance
Collaborative Leadership	Pearson Correlation	1	0.266*
	Sig. (2-tailed)		0.000
	N	407	407
Students' Academic Performance	Pearson Correlation	0.266*	1
	Sig. (2-tailed)	0.000	
	N	407	407

From the result presented on Table 2, it could be observed that a significant correlation of 0.266 was obtained at 0.05 level of significance, hence the null hypothesis which states that there is no significant relationship between collaborative leadership and students' academic performance was rejected This implies teachers' collaborative leadership has an influence on the students' academic performance.

Discussion of Findings

Hypothesis One

Findings from empirical studies have shown that principals' collaborative leadership impacts teachers' individual and collective (self-)efficacy on the one hand and their collaborative behaviour on the other (Alik *et al.,* 2012). Collaborative leadership applied by principals plays an important role in helping teachers identify needs for professional development and find and distribute resources to support teaching and learning (Schlebusch, 2020). The results of Hsieh and Liou's research (2018) show that the dimensions of collaborative leadership consisting of activating resource assistance, framing the work environment and synthesizing collaborative processes can affect organisational performance. The same results are also shown by Maalouf's research (2019) that collaborative leadership can encourage organisational performance in order to remain competitive and survive and have an impact on the entire organisation. Likewise, Sulaiman's research (2020) concluded that collaborative leadership contributes positively to organisational cohesiveness.

This implies that collaborative leadership practices facilitate teachers' development by creating a supportive and collaborative environment. When principals involve teachers in decision-making, encourage peer observation and feedback, and provide opportunities for professional learning communities, teachers feel valued and empowered. This, in turn, enhances their teaching skills, pedagogical knowledge, and instructional strategies.

This result is in line with that of Krasiqi (2021), who noted that administrators play a critical role in this process and that teacher collaborative learning is an essential part of ongoing professional development for teachers.

Hypothesis Two

Research related to collaborative leadership in schools has been conducted by Samriangjit *et al.* (2016) and concluded that collaborative leadership is beneficial in improving student learning and achievement, creating a culture of good working relationships, caring for students more strongly, exchanging information, knowledge and insights.

The findings of this study agreed with the results of an investigation carried out by Watson, Partington, Gray and Mack (n.d). In the study, they argued that students' academic achievement in Aboriginal and minority communities in Western Australia depended on focused collaborative leadership of the school principals. A collaborative principal is the one who harnesses school community values and also involves teachers and students effectively. In agreement with Leithwood, Louis, Anderson and Wahlstrom (n.d). Watson *et al.,* (n.d) argued that the greatest contribution of principals to the performance of their teachers and students is their ability to create meaningful and collaborative cultures in their schools. They however emphasized that principals should be able to redesign their school organization through collaborative cultures and structures. Creation of collaborative structures should be done both internally and externally in the institutions. Such structures enhance effective connections with guardians and the surrounding community. Collaborative cultures and structures also

ensure that effectiveness of the school is strengthened and this leads to improvement in the learners' achievement.

The results of Parlar *et al.* (2021) claimed that, in terms of the school staff's shared vision and teamwork for kids' development, the instructional leadership severs are a crucial component that improves the collaborative culture in schools. This means that principals' collaborative leadership practices have been found to have a direct impact on students' academic performance. When principals prioritize collaboration and create a supportive environment for teachers, it improves instructional practices and increases student engagement. Collaborative leadership practices also promote a culture of continuous improvement, where teachers and principals work together to identify and address students' needs. This leads to enhanced teaching and learning experiences, ultimately resulting in improved academic performance.

Conclusion and Recommendations

Based on the findings of this study, the researcher concludes that: There is no significant relationship between principals' collaborative leadership and students' academic performance of public senior school. There is a significant relationship between principals' collaborative leadership and teachers' professional development of public senior secondary school. There is a significant relationship between teachers' professional development and students' academic performance of public senior secondary school.

From the results of the study, the following recommendations are made:

1. Strengthen Collaborative Leadership Practices: Principals should foster a collaborative environment that values the input and expertise of all stakeholders, promoting a sense of ownership and shared responsibility for student success.

2. Foster Professional Development Opportunities: To enhance teachers' development, it is crucial to provide ongoing professional development opportunities. School leaders should design and implement comprehensive programs that address the specific needs of teachers in public secondary schools.

3. Encourage Teacher Collaboration and Mentoring: Promote a culture of collaboration among teachers within public secondary schools. Encourage teachers to work together, share best practices, and engage in peer observation and feedback.

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