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PRINCIPALS' MANAGERIAL SKILLS FOR EFFECTIVE EDUCATIONAL ADMINISTRATION IN PUBLIC JUNIOR SECONDARY SCHOOLS IN RIVERS STATE

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ABSTRACT

The study investigated enhancing principal's managerial skills for effective educational administration in public junior secondary schools in Rivers State. Three research questions and three hypotheses guided the study. The study adopted a descriptive research design. The population comprised 365 principals in public junior secondary schools in Rivers State. A sample size of 164 principals were drawn using simple random sample techniques. The instrument used for data collection was a well- structured questionnaire titled: Enhancing Principal's Managerial Skills for Effective Educational Administration in Public Junior Secondary Schools Questionnaire (PMSEEAPJSSQ) developed by the researcher. Scoring was done on a modified 4 point likert type scale of Strongly Agreed (SA) = 4 points, Agreed (A) = 3 points, Disagreed (D) = 2 points and Strongly Disagreed (SD) = 1 point. The face and content validities of the instrument was validated by three experts in the Faculty of Education and Cronbach statistics method was used to determine the internal consistency of the instrument, which yielded a general coefficient of .87. The research questions were answered using Mean scores and standard deviation, while z- test was used to test the hypotheses at .05 level of significance. The findings of the study revealed that enhancing principals' managerial skills through targeted training, continuous professional development, and government support is crucial to improving school effectiveness. It concluded that principal managerial skill is essential for effective school administration, this because principal play a critical role in determining the quality of education and the overall performance of the school. The study recommended that policy makers, school boards, and educational administrators to prioritize capacity building and ICT integration training for principals and for sustainable educational development.

Keywords: Principals, Managerial Skills, Educational Administration, Public Junior Secondary Schools, Rivers State.

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INTRODUCTION

Education is an instrument par excellence, the cornerstone for a successful society, and a veritable tool for nation building. In today's rapidly evolving educational landscape, strengthening principals' managerial skills have become crucial for ensuring effective administration in Nigerian secondary schools.

Effective educational administration is the systematic process of ensuring that teachers teach well, students learn better and available resources are well managed for attainment of organizational goals. Principals occupy a central role in shaping school organization, directing instructional improvement, managing resources, and cultivating a positive learning climate. In Nigeria, the effectiveness of public secondary schools is frequently linked to the capacity of principals to execute managerial and instructional leadership tasks under often constrained conditions.

Apparently, for school to thrive and provide quality education delivery, the principal must possess and demonstrate a range of specific qualities that go beyond traditional administrative roles. The need for strong leadership skills to improve students outcomes and overall school performance today is no longer an afterthought, but a necessity and a critical part of enhancing educational provision and improve overall management practices within the school system. This is because organizational success is built in the room of quality leadership. In the word of Adewumi (2016), the role of the school principal in shaping the educational landscape of a nation cannot be overstated. In Nigeria, as in many other countries, the principal serves as the linchpin of school. Owolabi (2014) maintained that while the role of the principal is multifaceted, many Nigerian principals lack the necessary leadership skills and competencies to effectively address the challenges they face. This is often due to a lack of adequate training and development opportunities. To enhance the leadership capacity of principals, it is essential to:

- **Provide Comprehensive Leadership Training:** Offer training programs that address a range of leadership skills, such as strategic planning, decision-making, problem-solving, communication, and conflict resolution.
- **Promote a Culture of Continuous Learning:** Encourage principals to engage in ongoing professional development activities, such as attending conferences, workshops, and seminars. **Implement Mentoring Programs:** Pair experienced principals with emerging leaders to provide guidance, support, and mentorship.

Owan (2019) stated that an effective school system is one that has motivated teachers, positive students' academic performance, good relationship with the community, good leadership and one that attains set goals. It is also characterized by strong administrative leadership, high expectations, an orderly atmosphere, basic skill acquisition (the schools primary and secondary purpose), and frequent monitoring of students' progress. With the fast-paced nature of education developing leadership qualities has become an essential ways for effective school management and demonstrably important for both personal and societal reasons. The benefits range from enhanced career prospects and individual growth to organizational success and positive social change. Numerous scholarly references reinforce these points, highlighting the crucial role of leadership in a thriving society.

Avolio (2004) affirmed that developing leadership skills fosters a sense of confidence and self-belief, individuals learn to take initiative navigate challenges and make decisions effectively

in line with global best practices. Acquiring leadership qualities is not a one-time event but rather an ongoing process of learning and development. For an advantageous positioning, ongoing professional development opportunities, mentorship programs, and peer coloration can all play a crucial role in refining and enhancing leadership skills throughout an educator's career. It is a well-known fact that the success of any organization, be it schools, hospitals, political party, churches, and so on solemnly rest upon to a large extent the strong leadership skill exhibited by the school administrator in term of exploring ways to better and manage the school inputs in order to improve performance and production for organizational wellbeing. They provide the framework for human services and interaction. Individual and group interests, needs, ideas and motivation became their major interest. Thus they place emphasizes on how to meet individual and group needs. This therefore makes it imperative for school leaders to develop leadership culture, for advantageous manner. History had it that no organization can make any meaningful strides in its development when a leader gives a casual approach in the course of managing, and handling issues that affects the organization he belong therein. Organization like school is said to be effective when the school principal is proactive and has the capacity to harness and inspire timeless creativity to better the organization the way they met it before.

A leader is a bridge builder, role model, decision maker, and a towering figure in the field of his discipline, whose impact and presence bring a ray of hope to many. This is because an organization whose leadership position is weak will definitely rupture. This is because quality content is at the heart of every successful school system. The right tool applied by the school principal make it easier for school member to develop their skills and abilities that can lead to an increase in job satisfaction and a sense of professional growth. Public junior secondary schools in the state face numerous challenges. This ranges from limited resources, inadequate infrastructure and a complex socio-economic environment. Applied insight of cultivating a strong leadership culture by the school principal can be a powerful tool for overcoming these challenges and improving educational outcomes.

Apparently, a formal setting like the school that must achieve set objectives and even go beyond set targets must be led by effective leaders. Leadership is adjudged to be effective if it has achieve objectives in its daily goal achievement effort. Balogun (1980) in Bassey (2011) believed that effectiveness in administration can be judged by the congruence between expected administrative behavior of an executive in relation to his administrative task. For secondary schools leadership to pilot the affairs and to be effective amidst myriads of demand from students, parents/guardians and society, it becomes imperative that they acquire appropriate skills in form of capacity building to be able to cope with challenges of their office. The acquisition of administrative skills is crucial and seems indispensable if school principal must surmount leadership position challenges faced in school in this information age. They need professional skills to perform creditably with task associated with their office. However, Abraham (2003, p. 2) observed that the success or failure of the school as an organization rest on the administration, among other factor. He went on to say that "with all qualified personnel, all the equipment and facilities but without proper co-ordinations of these, it is equal to naught".

Management of education requires possession of strong leadership skills encompassing a diverse range of abilities needed to navigate the complex and dynamic environment of education. Effective school leadership enhances student outcomes, improved academic achievement, and is widely acknowledge as a cornerstone of learners success and overall school improvement. Leithwood et al (2006). Found that school administrators with strong leadership skills, particularly in instructional leadership, contributed significantly to higher student academic

performance. However, Glickman, (2014) affirmed that effective school management helps to promote strategic planning and decision making in school. he stressed further that strong leadership skills enable planning for future directions, allocating resources effectively, and sound decisions based on data and stakeholder input for advantageous manner.

The term Managerial skills in this context refer to the ability of school principals to plan, organize, coordinate, direct, and evaluate school activities for effective functioning. Managerial skills can also be described as the capacity to apply knowledge, experience, and judgment in directing organizational activities effectively and efficiently. In the school setting, managerial skills encompass planning, organizing, communication, decision-making, delegation, and supervision (Akinwumi, 2019). A principal who is well-grounded in these skills is better positioned to maintain discipline, ensure effective staff performance, and promote a positive school climate for conducive to teaching and learning.

According to Eze and Odu (2020), effective management practices by school principals contribute significantly to teacher motivation, student performance, and school productivity. Principals equipped with sound managerial skills can design workable school plans, allocate resources judiciously, and supervise instruction effectively. However, to enhance managerial competencies among school leaders, continuous professional development is essential. Workshops, leadership training programs, mentoring, and exposure to modern management practices help principals stay updated with global trends. Education industry today attract a large number of people with wild range of background hence, the leadership at secondary school level, must display a reasonable measure of knowledge to pilot the affairs of the school. Leaders build relationships with their followers, fostering trust respect and a shared commitment to the group goals (Avoseh, 2013).

Yukl (2013) stated that leadership involves influencing others to achieve a common goal or vision, this influence can occur through various methods including charisma, authority expertise, or inspiration. This implies that leadership is a major factor in the success or failure of any organization, the school inclusive. It is a management role saddle with the responsibility of planning, directing and coordinating of the organizational work force as well as financial and material resources towards realizing the aim and objectives of the organization. Studies reviewed affirmed that the development of leadership skills in principal and teachers is not merely beneficial but a critical necessity for the survival and improvement of secondary education in the foreseeable future. Effective school principal are not just managers; they are transformational and instructional leaders who shape the entire school culture. Interestingly, the fact that principal's role is critical, a single leader can not drive an entire school forward.

Managerial skills are commonly grouped into technical, human, conceptual, decision-making and team-management skills are consistently associated with administrative effectiveness, teacher performance, and improved learning outcomes. Enhancing principals' managerial skills is therefore a strategic lever for improving outcomes and ensuring sustainable school operations. Recent research in multiple Nigerian contexts confirms strong associations between principals' managerial competencies and school-level effectiveness, but also highlights persistent capacity gaps and uneven implementation of professional development programs.

Principals are role model, and serve as instructional leaders, financial managers, and mediator between school and external stakeholders. As the chief executive officer of the school, they are expected to motivate and supervise teachers both in content and methodology in curriculum delivery and ensure effective discipline. Their managerial expertise directly impacts school performance.

However, Mulford (2008) observed that when we talk about school leadership, we are actually concerned with leadership practices, which is how leadership is exercised and transacted. School leaders take on their roles because they want to make a difference in the children and young persons' lives and learning outcome. He further said that school leadership exists not as an end in itself; rather it is a means to enabling children and young people to learn, achieve and develop, to become valuable asset not just to themselves but to the nation and society at large.

Admittedly, leadership in school organization is a very difficult task and requires commitment at all time. The society in which the schools operate is a dynamic one. Abraham (2003) observes that some of the secondary school challenges of our time are traceable to poor application of administrative skills by school principals. He further said that our educational administrators are as a matter of fact ill-equipped for their job hence; they cannot perform as expected of them. Ineffectiveness among school leadership as one of the challenges is traceable to inadequate professional training, and capacity building. He lamented that present method of ascending to leadership position in secondary school (principalship) that is by apprenticeship should be abolish, and does not help the situation. By implication he condemned the idea of appointing school leadership rising through the rules to a senior tutor and after that to the position of a "vice principal" and a few years of apprenticeship, he/she is appointed as a principal to administer a school. The authority under review referred to this method as the "in breeding" method. School leaders who emerge through this process lack basic professional training in educational administration (Abraham, 2003).

This is one of the banes in our secondary schools where square pegs are put in round holes, hence, the system's productivity fall shorts of societal expectation. The government, ministries of education, education managers, and stakeholders must rise up to the occasion and say no to this ugly trend. Consequently, strong leadership in school is indispensable for fostering a positive learning environment, enhancing learner's outcomes, and promoting overall school success for competitive pedestal. Developing effective leadership qualities in school management is more important than ever. In support of this Olele (1995) agreed that school leaders need skills for making right decisions that will benefit the school needs, staff and student in generally. This is the subject matter.

Statement of the Problem

It is clear and glaring that effective managerial skills' of principals constitute a significant input of any educational system because they are the critical instrument in effective and efficient school administration. Studies abound has shown that many principals in public junior secondary school in Rivers State are often plagued by administrative inefficiencies, poor instructional supervision, inadequate resource management, and declining student outcomes. Studies (e.g., Oyetunji, 2020; Okeke, 2021) indicated that principals often struggle with decision-making, staff motivation, conflict resolution, and curriculum supervision due to inadequate training and exposure. However, if these managerial gaps are not properly addressed, the overall quality of education in junior secondary schools will continue to decline, undermining Nigeria's quest for sustainable educational development. In the light of the above this study investigated enhancing principal's managerial skills' for effective educational administration in public junior secondary school in Rivers State.

Aim and Objectives of the Study

The aim of this study was to examine principal's managerial skill for effective school administration in public junior secondary school in Rivers State. Specifically, the study had the following objectives:

- To investigate the various ways of enhancing Principal's Managerial Skills for effective school administration in public junior secondary school in Rivers State.
- To find out how professional development can enhance principals managerial skills for effective school administration in public junior secondary school in Rivers State.
- To examine how ICT integration and the need for principals training can enhance principals managerial skills for effective school administration in public junior secondary school in Rivers State.

Research Questions

The following research questions guided the study:

- What are the various ways of enhancing Principal's Managerial Skills for effective school administration in public junior secondary school in Rivers State?
- How can professional development enhance principal's managerial skills for effective school administration in public junior secondary schools in Rivers State?
- How does ICT integration and the need for principals training enhance principals managerial skills for effective school administration in public junior secondary school in Rivers State?

Hypotheses

The following hypotheses further guided the study and were tested at .05 level of significance:

- There is no significant difference between the mean ratings of male and female principals on the various ways of enhancing Principal's managerial skills for effective school administration in public junior secondary schools in Rivers State.
- There is no significant difference between the mean rating of male and female principals on how professional development can enhance principals managerial skills in public junior secondary schools in Rivers State.
- There is no significant relationship between the means rating of male and female principals on how ICT integration and the need for principals training can enhance principals managerial skills for effective school administration in public junior secondary schools in Rivers State.

THEORETICAL REVIEW

This study was anchored on skills theory propounded by Rober Katz in 1955. In his studies of "skills of an effective administrator" he identified three core skills crucial for successful leadership:

- Technical skill: Expertise in specific tasks and process related to the job such as curriculum development, instructional method, and assessment.
- Human skills: The ability to build relationships, motivate other, and effectively communicate with staff, students, and parents.
- Conceptual skills: The capacity to think strategically, analyze complex situations and make sound decisions for the future of the school.

Katz argued that effective leadership depends on combination of these skills, with the relative importance of each varying and depending on the leadership position and the context. For example a first-year teacher, might need stronger technical skills, while a school principal might prioritize conceptual skills for strategic planning.

Professional Development

Professional development programme is an indispensable tool that can provide school principal the opportunities to sharpen and enhance managerial skills. Professional development is a programme that is geared towards acquisition of skills, competence, and methodology development. Professional Development is a continuous learning opportunity (workshops, seminars, conferences, coaching, mentoring) that help principals upgrade both leadership and managerial competencies. These programs have the capacity to position school leaders to fit in adequately to the world of work. These programs can cover topic like instructional leadership, effective communication, conflict resolution and change management for optimum productivity. Professional development does not only keep the leader abreast with changing situation within the school setting, but rather it builds school with standard or level especially of knowledge of recent development. This is because as the society changes, so does the school and its curriculum changes also with new expectation, hence, it become imperative for school leaders to acquire broad based knowledge in line with global best practices.

This fact came to fore as Afe (1995) asserted that professional development is that element of educational system that deals with training of school leaders to develop the necessary capability for the improvement of instructional service delivery in the school system. In the same vein, Quint (2011) stated that professional development is a formal in-service training aimed at improving the content knowledge and pedagogical skills of schools leaders that is widely viewed as an important means of improving school instructional service delivery for maximum productivity. The premise of school system is to enable students and other staff member to excel. However, the school cannot achieve this target with adequate trained school leaders.

Professional development equips principal with prerequisite skills for dialogue in conflict situations. In support of this, Abraham (2003) posited that it is imperative for school managers to emerge, not from outdated apprenticeship method of ascending to the leadership position in secondary school but through professional training in educational administration. Their success will be determined by the extent of management skills they are equipped with in getting things done through people for the advantage of the school.

ICT Integration and the Need for Principals' Training

ICT Integration and the need for principals training helps principals to use modern digital tools (computers, data management systems, virtual meetings, online record-keeping) in school administration. In the 21st-century knowledge economy, the need for school principals to be technologically compliant is no longer an afterthought or optional but a fundamental necessity for effective school administration. The world is undergoing a rapid digital transformation, where information and communication technologies (ICTs) have become the backbone of educational planning, management, and instructional delivery (UNESCO, 2021). Educational leadership is increasingly defined by a principal's capacity to integrate digital tools for communication, data management, and performance monitoring (Ng & Ho, 2022). Consequently, principals who lack technical competence risk becoming ineffective in managing the complex dynamics of modern schooling.

According to OECD (2020), digital leadership involves more than using technology—it requires principals to strategically leverage ICT to enhance organizational productivity, transparency, and accountability. As the global economy transitions from resource-based to knowledge-based systems, school leaders must adopt innovative digital strategies that align with global best practices and local educational realities (World Bank, 2020). This implies that principals must possess technical skills in areas such as digital communication, virtual collaboration, data analytics, and educational software management to remain relevant and efficient.

In the Nigerian context, Eze and Olusola (2020) observed that many school administrators still depend on manual administrative procedures, which often result in inefficiency, record mismanagement, and poor information dissemination. The authors emphasize that training principals in digital literacy and management systems such as Education Management Information Systems (EMIS) can significantly improve decision-making and policy implementation. Similarly, Ojo and Adu (2021) assert that principals' ICT competence is central to the success of educational reforms aimed at achieving the Sustainable Development Goal 4 (SDG 4), which promotes quality education through innovation and technology-driven management.

Furthermore, Adu and Galloway (2019) maintained that digital transformation has redefined leadership roles, making it imperative for principals to cultivate new digital mindsets. This involves not only learning to use digital tools but also understanding how technology influences organizational culture, teacher motivation, and student engagement. As such, principals are expected to act as digital change agents who model technology use and foster an environment conducive for innovation and continuous improvement (Babalola, 2020).

The movement toward a knowledge economy further reinforces the importance of principals' technical compliance. Knowledge has become the most valuable resource, and educational leaders must ensure that schools function as hubs of innovation and digital learning (Drucker, 2019). Nigerian principals who are digitally competent can effectively coordinate school operations, manage resources, enhance communication with stakeholders, and ensure data-driven decision-making, which are all essential for sustainable educational growth (Komba & Mwakabenga, 2019).

Therefore, in today's interconnected digital world, principals' technical compliance is not merely desirable but essential. Building their capacity in ICT use is vital for achieving efficient, transparent, and responsive school administration in Nigeria. It aligns with both national

educational goals and the global agenda for digital literacy, innovation, and sustainable development.

According, to Amadi et al. (2024) the journey to acquire 21st century academic skills and knowledge economy begins with embracing and cultivating the culture of digital technology. However, we live in technology driven era where the application of internet technology has great potential in management of school for competitive advantage. School technologies competences are essential skill required of school leaders to create new possibilities for effective and efficient school service delivery.

Management of education with network of technologies by school leaders is essential, especially in this jet generation of learners. When education incorporates technology, it engenders deeper learning, understanding and as well boost school leader problem solving skills which help facilitate principal management skills. This is because innovation is a paradigm shift in management of educational system. Buttressing this claim Okolocha and Ike (2017), stated that knowledge of technology has opened a new world of learning which drastically increase output. This signifies that technology integration in management of education will make life more easier for both school leaders and students rather than using pen and paper, school leaders and students can use various digital devices to create presentation in line with global best practices.

METHODOLOGY

The study adopted a descriptive survey design. The population of the study comprised of 365 principals (202 female, 163 male) in public junior secondary schools in Rivers State. The sample size for the study was 164 principals who were drawn as the sample respondent using simple random sampling techniques which represents 45% of the population. The instrument used for data collection was a self-structured questionnaire titled “Principals Managerial Skills for Effective School Administration in Public Junior Secondary Schools Questionnaire (PMSESAPSSQ). The instruments were validated by two experts in Measurement and Evaluation. The internal consistency of the instruments was established through the application of Cronbach Method. The reliability coefficients of both were .86 and .87 respectively.

The instrument’s scale was modified four points likert scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD), the instrument has two sections; section A was designed to elicit bio data of respondents while section B included 15 questionnaire items structured to obtain responses from the respondents. Data generated were analyzed with the aid of SPSS version 22. Research questions were answered using mean and standard deviation. The criterion for acceptance was 2.50, any mean below the 2.50: was disagreed. Whereas z-test statistics was used to test the hypotheses at 0.05 alpha level.

RESULTS

Research Questions 1: What are the ways of enhancing principal’s managerial skills for effective school administration in public junior secondary schools in Rivers State?

Table 1: mean and standard deviation on the ways of enhancing principal's managerial skills for effective school administration in public junior secondary school in Rivers State

s/n	Items	73 male principals		91 female principals		Mean set	Decision
		\bar{x}	SD	\bar{x}	SD.		
1	Professional development	3.07	.51	2.85	.61	2.96	Agreed
2	Capacity building	3.06	.59	3.09	.51	3.08	Agreed
3	Networking and collaboration	3.26	.50	2.99	.44	3.13	Agreed
4	Effective communication	3.16	.51	3.13	.67	3.15	Agreed
5	Innovation and adaptability	3.12	.41	3.08	.37	3.10	Agreed
Cluster mean		3.13	0.50	3.03	0.52	3.08	Agreed

Data on table 1 shows that items with serial numbers 1 to 5 have their various mean values of 2.96, 3.08, 3.13, 3.15 and 3.10 above the criterion mean value of 2.50 and were agreed by the male and female principals as the ways of developing leadership qualities for enhanced management. The ways of developing leadership qualities for enhanced management are through professional development, capacity building, networking and collaboration, effective communication, innovation and adaptability.

Research Questions 2: How can professional development improve principals' managerial skills for effective school administration in public junior secondary schools in Rivers State?

Table 2: mean and standard deviation on how professional development can improve principals' managerial skills for effective school administration in public junior secondary school in Rivers State

s/n	Items	73 male principals		91 female principals		Mean set	Decision
		\bar{x}	SD.	\bar{x}	SD.		
6	Enhanced strategic thinking and decision making	3.02	.53	2.90	.45	2.96	Agreed
7	Building of communication skills	3.15	.72	2.78	.65	2.97	Agreed
8	Fosters innovation	3.16	.75	3.43	.49	3.29	Agreed
9	Develop self-awareness and emotional intelligence	3.29	.61	3.29	.45	3.29	Agreed
10	Builds a learning culture	3.05	.62	3.45	.49	3.25	Agreed
Cluster mean		3.13	0.65	3.17	0.51	3.15	Agreed

Data on table 2 show that items with serial numbers 6 to 10 have their various mean values of 2.96, 2.97, 3.29, 3.29 and 3.25 above the criterion mean value of 2.50 and were agreed by the male and female principals as the ways professional development can improve leadership qualities for enhanced management. The various ways professional development improve leadership qualities for enhanced management are through enhanced strategic thinking and decision making, building effective communication skills, innovation, development of self-awareness and emotional intelligence and building a learning culture.

Research Questions 3: How ICT integration and the need for Principal's training enhance principals' managerial skills for enhanced management of public junior secondary schools in Rivers State?

Table 3: mean and standard deviation on how ICT integration and the needs for Principal's training enhance principals' managerial skills for effective school administration in public junior secondary school in Rivers State

s/n	Items	73 male principals		91 female principals		Mean set	Decision
		\bar{x}	SD.	\bar{x}	SD.		
11	Enhance student engagement	2.82	.54	3.57	.49	3.19	Agreed
12	Collaboration and communication	2.52	.62	3.29	.45	2.91	Agreed
13	Boost innovation and creativity	2.65	.85	3.43	.49	3.04	Agreed
14	Development of 21 st Century skills	2.93	.38	3.29	.45	3.11	Agreed
15	Strengthening leadership skills	3.25	.64	3.43	.49	3.34	Agreed
Cluster mean		2.83	0.61	3.40	0.47	3.12	Agreed

Data on table 3 shows that the cluster mean score for male and female principals is 3.12. It was agreed that ICT integration and the need for principals training enhances principals' managerial skills for effective school administration in public junior secondary schools in Rivers State.

Hypothesis 1: There is no significant difference between the mean ratings of male and female principals on the ways of enhancing principals' managerial skills for effective school administration in public junior secondary schools in Rivers State.

Table 4: z-test analysis of the mean difference between male and female principals on the various ways of enhancing principals managerial skills for effective school administration in public junior secondary school in Rivers State

Gender	n	\bar{x}	SD.	df	z-cal.	Sig.	Alpha value	Decision
Male Principals	73	15.59	1.69	162	1.92	.06	.05	Not significant
Female Principals	91	15.13	1.35					

Data on table 4 revealed that male principals have mean and standard deviation scores of 15.59 and 1.69 while female principals have mean and standard deviation scores of 15.13 and 1.35 respectively. With a degree of freedom of 162 and z-value of 1.92, the hypothesis is failed to be rejected because the significant value of .06 is greater than the alpha value of .05. Therefore there is no significant difference between the mean ratings of male and female principals on the various ways of enhancing principals' managerial skills for effective school administration in public junior secondary school in Rivers State.

Hypothesis 2: There is no significant difference between the mean rating of male and female principals on how professional development enhances principals managerial skills for effective school administration in public junior secondary school in Rivers State.

Table 5: z-test analysis of the mean difference between male and female principals on how professional development enhances principals' managerial skills for effective school administration in public junior secondary school in Rivers State

Gender	n	\bar{x}	SD.	df	z-cal.	Sig.	Alpha value	Decision
Male Principals	73	15.78	2.14	162	0.15	.88	.05	Not significant
Female Principals	91	15.82	1.45					

Data on table 5 revealed that male principals have mean and standard deviation scores of 15.78 and 2.14 while female principals have mean and standard deviation scores of 15.82 and 1.45 respectively. With a degree of freedom of 162 and z-value of 0.15, the hypothesis failed to be rejected because the significant value of .88 is greater than the alpha value of .05. Therefore there is no significant difference between the mean rating of male and female principals on how professional development enhances principals managerial skills for effective school administration in public junior secondary schools in Rivers State.

This finding is in line with Afe (1995) when he found that professional development is that element of educational system that deals with training of school leaders to develop the necessary capability for the improvement of instructional service delivery in the school system. In the same vein, Quint (2011) stated that professional development is a formal in-service training aimed at improving the content knowledge and pedagogical skills of schools leaders that is widely viewed as an important means of improving school instructional service delivery for maximum productivity. The premise of school system is to enable students and other staff member to excel. However, the school cannot achieve this target with adequate trained school leaders.

Equally, Abraham (2003) found that it is imperative for school managers to emerge, not from outdated apprenticeship method of ascending to the leadership position in secondary school but through professional training in educational administration. Their success will be determined by the extent of management skills they are equipped with in getting things done through people for the advantage of the school.

Hypothesis 3: There is no significant difference between the means rating of male and female principals on how ICT integration and the need for principals training enhance principals managerial skills for effective school administration in public junior secondary schools in Rivers State.

Table 6: z-test analysis of the mean difference between male and female principals on how ICT integration and the need for principals training enhance principals managerial skills for effective school administration in public junior secondary school in Rivers State

Gender	N	\bar{x}	Std	df	z-cal.	Sig.	Alpha value	Decision
Male Principals	73	13.44	1.59	162	12.96	.00	.05	Significant
Female Principals	91	17.00	1.86					

Data on table 6 revealed that male principals have mean and standard deviation scores of 13.44 and 1.59 while female principals have mean and standard deviation scores of 17.00 and 1.86 respectively. With a degree of freedom of 162 and z-value of 12.96, the hypothesis failed to be

rejected because the significant value of .00 is less than the alpha value of .05. Therefore, there is a difference between the means rating of male and female principal on the extent ICT integration and the need for principals training enhance principals' managerial skills for effective school administration in public junior secondary school in Rivers State.

This finding is in line with UNESCO (2021). They found that the world is undergoing a rapid digital transformation, where information and communication technologies (ICTs) have become the backbone of educational planning, management, and instructional delivery. The same is true of Ng and Ho (2022) who found that educational leadership is increasingly defined by a principal's capacity to integrate digital tools for communication, data management, and performance monitoring. Consequently, principals who lack technical competence risk becoming ineffective in managing the complex dynamics of modern schooling.

OECD (2020) found that digital leadership involves more than using technology, it requires principals to strategically leverage ICT to enhance organizational productivity, transparency, and accountability. In the same vein, World Bank (2020) found that as the global economy transitions from resource-based to knowledge-based systems, school leaders must adopt innovative digital strategies that align with global best practices and local educational realities. This implies that principals must possess technical skills in areas such as digital communication, virtual collaboration, data analytics, and educational software management to remain relevant and efficient.

CONCLUSION

From the proceedings of pages, it was established that enhancing principals' managerial skills is essential for effective school administration in Rivers State secondary schools. Principals play a critical role in determining the quality of education and the overall performance of their school, enhancing their managerial competencies with the help of continuous professional development, ICT integration, and effective and supportive policies will drive efficiency, promote accountability, and enhance students' learning outcomes. Given the rising demands of modern education and continuous innovation, only highly trained and skilled principals can effectively lead schools toward achieving both national and global educational goals.

Recommendations

Based on the findings of the study, the following recommendation were made;

- The ministry of education should design and integrate programmes that will address the deficiencies of school leaders.
- Government and ministry of education as a matter of urgency should engage and educate school leaders on how to use ICT facilities for global best practices.
- The Ministry of Education should design programs that foster a culture of continuous learning, where principals would be encouraged to engage in ongoing professional development activities, such as attending workshops, conferences, and seminars to enhance their skill.

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