



## UTILIZATION OF EDUCATION MANAGEMENT INFORMATION SYSTEM (EMIS) AND PRINCIPALS' ADMINISTRATIVE EFFECTIVENESS IN SECONDARY SCHOOLS IN IKOM EDUCATION ZONE, CROSS RIVER STATE, NIGERIA.

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### **Abstract**

*At the secondary level of education, the administrative role of a principal is crucial in ensuring the uninterrupted operation of the entire school system. The adoption of a digitalized approach such as Management information system (MIS) becomes more necessary when all administrative efforts does not yield expected educational outcomes. Premised on this, a study on Utilization of Education Management Information System and Principals' Administrative Effectiveness in Secondary Schools in Ikom Education Zone, Cross River State, Nigeria, was conducted. The Education Zone was made up of 6 local government areas, namely; Abi, Boki, Etung, Obubra, Ikom and Yakurr. Correlational survey design was adopted. The study population comprised all the 112 principals in public secondary schools in Ikom Education Zone. There was no sampling as all the 112 principals were used for the study. An instrument titled "Education Management Information System and Principals' Administrative Effectiveness Questionnaire (EMISPAEQ)" was used for data collection. It was structured on a four point rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) weighted 4, 3, 2 and 1 respectively. Its validity was determined by three experts, two from the Department of Educational Management and one from the Department of Educational Foundations (Measurement and Evaluation Unit), faculty of Educational Foundations Studies, University of Calabar. The Cronbach alpha was used to determine the reliability of the instrument which yielded the coefficient values of 0.81 and 0.87 respectively. Data analysis was done using Pearson Product Moment Correlation with the help of Statistical Package for Social Science (SPSS) version 26. The result of the study showed that there was a statistically significant relationship between student personnel management, financial management and principals' administrative effectiveness. Based on this, it was concluded that Education Management Information System (EMIS) have a statistically significant relationship with principals' administrative effectiveness in secondary schools in Ikom Education zone, Cross River State, Nigeria. The study recommended among others that training sessions such seminars and workshop should be organized for secondary school administrators on the utilization of Management Information System to enhance their administrative effectiveness.*



**Keyword:** Education, Information, Management Information System; Administrative Effectiveness; Secondary Schools.

## Introduction

Schools as educational institutions are established to implement educational policies to actualize the goals of education which includes among other things, providing students with the knowledge, skills, and values necessary for personal development, responsible citizenship, and lifelong learning. The school cannot achieve any of its goals without effective administration. This is because administration is essential for coordinating resources, implementing policies, ensuring quality teaching, maintaining discipline, and fostering a positive learning environment, all of which are critical for the holistic development and success of students.

Principals' administrative effectiveness in the context of this study is their ability to lead their schools efficiently, foster a productive and positive educational environment. This involves setting of clear vision, making informed decisions, efficiently managing resources, communicating effectively with all stakeholders, overseeing curriculum implementation, creating a safe and inclusive school climate, supporting the professional growth of staff, and ensuring compliance with educational policies and standards. Through these actions, principals contribute to achieving the school's educational goals and improving overall school performance. According to Thompson, and Anachuna (2019) administrative effectiveness is about steady accomplishment of administrative duties and timely realization of set objectives. Akinwale (2017) see it as involving efforts and technical skills directed towards organizational tasks leading to goals achievement. Similarly, Akomolafe (2012) as cited in Thompson, and Anachuna (2019) defined administrative effectiveness as the positive response to administrative efforts and actions with the intention to accomplish stated goal. Akinola (2013) asserted that it is the extent to which the set goals or objectives of a school programme are accomplished. Some indices of school administrators effectiveness includes; extent of accountability, school performance improvement, curriculum improvement, monitoring, appropriate delegation of tasks, timely discharge of duties and constant meeting of targets (Akinfolarin, 2017).

School Principal's ability to improve school facilities, enhance teachers' instructional effectiveness, and manage human resources effectively are key indicators of their administrative effectiveness. Effective principals ensure that the physical environment is safe, conducive to learning, and well-equipped with the necessary resources. This includes overseeing maintenance, advocating for funding, and implementing upgrades. Improved facilities enhance student engagement, reduce distractions, and support various educational activities. This supports the views of Obona et al. (2021) that maintenance of school facilities will allow the buildings and equipment to remain in their original, useful state and makes teaching and learning interesting. When existing educational facilities are well utilized and maintained as often as the need arises, it will boost the morale of staff and students' who are key players in sustaining the secondary school system (Obona et al., 2021).

Teachers' instructional effectiveness is another critical indicator. Principals play a key role in supporting and developing teachers through professional development opportunities, regular feedback, and performance evaluations. This will result in improved student understanding, retention, and academic achievement, reflecting positively on the principal's administrative capabilities. Effective human resources management is essential for maintaining a motivated and capable staff. Principals who excel in human resources management create a positive work environment, reduce turnover, and enhance job satisfaction. This positive morale among staff contribute to a more effective educational environment.

Administrative ineffectiveness has been a major issue that many parents and stakeholders worry about generally. Akinwale (2017) laments that the state of administrative activities in secondary schools in Enugu education zone is worrisome. The research report about cases of delay in processing students' results, poor students attendance monitoring, misplacement of vital financial records among others.



Obona et al. (2023) asserted that this is one issue in education that has attracted the attention of many stakeholders and researchers over the years. The principal as the chief administrator of the secondary level of education is expected to supervise the teachers under them and ensure overall effective administration. However, Thompson, and Anachuna (2019) noted that most school administrators face difficulties in meeting deadlines and curriculum targets. Obona et al. (2023) laments that several teachers in Cross River State display poor attitude to work.

The situation is the same in public secondary schools in Ikom Education Zone, Cross River State. The researcher observed that many principals do not care much about the physical environment. Thus, they become unsafe for meaningful learning. Also, some of the school libraries and laboratories are not well-equipped with the necessary resources to facilitate teaching and learning. Many school leaders are found wanting in term of creating a positive work environment that enhance job satisfaction and reduces teachers attrition tendencies. Some principals do not support the professional development of their teachers. Others do not provide regular feedback on teachers' performances. These practices have continued to weaken the morale of teachers and students in these schools. Immediate action is needed to create a safe, conducive learning environment, improve educational outcomes, and boost teacher and student morale.

The complexity of school administration requires a modernized system approach to ease the process of implementing educational policies to actualize educational goals. Leveraging a Management Information System (MIS) can further enhance the smooth and continuous flow of administrative activities. Education Management Information System (EMIS) is a comprehensive system designed to collect, store, manage, and analyze data related to the educational sector. According to Ako (2022), it is the application of modern technologies and computerized methods imputing, processing, storing and retrieving organizational information for effective administration.

The primary goals of an Education Management Information System (EMIS) are to support decision-making, policy formulation, planning, monitoring and the efficient management of education systems. School administrators can use MIS in the financial and student management of their institution (Thompson et al., 2019). Management Information System has changed school management in the areas of leadership, decision-making, workload, human resource management, communication, responsibility, and planning. MIS help organizations in making operational, tactical and strategic decisions (Ako, 2022). According to Madiha (2013) it is being used by schools to support a range of administrative activities including attendance monitoring, assessment records, reporting, financial management, and resource and staff allocation. However, the aspects of school administration that this study focuses on are students' personnel administration and financial management.

### **Students' personnel management and administrative effectiveness**

Student personnel management refers to the support services provided to students within an educational institutions, primarily focusing on enhancing their academic and personal development. According to Akpan and Onabe (2016) it refers to all the activities and services that are rendered to students for the achievement of the educational objectives. MIS is used by school administrators for various administrative duties pertaining to student personnel administration such as student admission processing, school attendance monitoring, computation of students results, transmitting information to students, parents and stakeholder through electronic mail among other channels.

As a relevant management tool, Management Information Systems (MIS) can be utilized by school administrators for storing and updating students' information such as personal records, parents' addresses, phone numbers, email addresses, continuous assessment data, among other details. Thompson and Anachuna (2019) opined that through the utilization of management information system, school fees payments are easily made and track online by the school management and financial fraud or default in payment is averted, hence, promoting accountability and effective financial management in the school. Edut et al. (2023) asserted that the success of any organization including the



school system depends largely on the availability and efficient management of both human and material resources.

Empirically, Chidobi (2015) investigated ways of enhancing management of student personnel services, for sustainability of quality of human resources. Data was collected using 24 – item questionnaire responded to by all the principals in the zone, one Guidance and Counselor from each secondary school and all the Senior Prefects giving a sample size of 105. Data from the 3 research questions were analyzed using mean and standard deviation. Results revealed that proper management of student personnel services at the secondary level has positive influence on realization of sustainable future.

Similarly, Nzokurum and Iremeka (2017) in their study showed that three student personnel services: student records, admission exercise, and students' disciplinary measures, are adequate and of quality. In another study, Owan and Ekaette (2019) assessed students' personnel management and academic effectiveness in terms of punctuality to classes, time management, study habits, record keeping, attitudes during classes, note taking, attitudes towards assignment, examination results and attitudes towards co-curricular activities in Calabar Education Zone of Cross River State. It was concluded generally from the findings that, there is a moderate positive relationship which is statistically significant between students' personnel management and their academic effectiveness. Omenyi and Bosco-Duru (2021) in a study determine how teachers' perception of principals' effective students personnel administration correlate with teachers' job involvement in public secondary schools in Imo State. The study was guided by one research question and one null hypothesis. The co-relational research design was adopted. The population of the study was made up of 5,047 teachers while the sample of the study was made up of 2,523 teachers selected using proportionate random sampling technique. It was found among others that there is a low positive relationship existing between teachers' perception of principals' effective students' personnel administration and teachers' job involvement in public secondary schools in Imo State.

### **Financial management and administrative effectiveness**

Effective financial management is essential for the sustainability and growth of any organization. As used in this context, financial management is the process of planning and ensuring the rational utilization of the financial resources of educational institutions to achieve set educational goals. Egwu (2016) concludes that managing funds is one of the major tasks of principals. Alia and Iwuoha (2014) agree that principals and administrators are responsible for preparation of the school budget and ensure effective financial management in order to achieve the objectives of the school.

Management Information System (MIS) plays a crucial role in aiding schools to make informed financial decisions for school improvement. It is utilized by school administrators in various aspects of school management, including: managing school fees payment by student, procuring equipment, tracking unremitted funds and estimating the school fund inflow and outflow. With the use of computers and the internet, students can conveniently pay for educational services such as hostel fees, tuition fees, and transportation fees, perform transactions without physically going to the school. **Utilizing a management information system allows for easy online payment and tracking of school fees by the administration, preventing financial fraud and non-payment. This promotes accountability and effective financial management within the school.**

In a study, Amirizei and Nwachukwu (2018) investigated fund management strategies for effective administration of public secondary schools in Rivers State. The study adopted a descriptive survey research, which sampled the opinion of principals of secondary schools in Rivers State on the role of fund management strategies, accountability, factors that hinder fund management strategies and factors that strengthen effective administration of secondary schools. The sample of this study comprised all the principals (36) of senior secondary schools in Obio-Akpor and Port Harcourt city local government areas of Rivers state. Purposive sampling was used because they are principals that would



give answers to the questions raised based on their positions as principals in the chosen local government areas. The instrument consisted of 26 items questionnaire titled —Fund Management Strategies for Effective Administration of Public Secondary Schools Questionnaire (FMSEAPSSQ). Cronbach Alpha was used to test the reliability of the instrument and a reliability estimate of .773 was obtained for the 26 items in section B of the questionnaire. Mean scores, standard deviation and percentages were used to answer the research questions while chi-square analysis was used to test the hypotheses at 0.05 alpha level of significance. The study found that there are significant relationships between principals fund management strategies, accountability, factors that hinder, and factors that strengthens and effective administration of secondary schools in Rivers State.

Thompson and Anachuna (2019) asserted that the utilization of financial management information system enables school managers to accurately plan and forecast school cash inflow and outflow for the next fiscal year. Financial management is essential for the efficient and effective operation of secondary schools. Key aspects include acquiring funds, implementing financial controls, allocating resources wisely, and ensuring accountability. These practices are crucial for achieving educational goals (Allis, 2014). Khominich et al. (2016) describe financial management as the strategic and tactical handling of resources, emphasizing its importance in schools. In another study, Ezeh and Ogara (2020) assessed the impact of financial management on effective school administration in Enugu Education Zone. The study used the survey approach. The primary source was administration of questionnaire to the teachers and principals of the selected schools. Out of a population of one thousand eight hundred seventy-one (1871), 319 staff was sampled. The sample size of 319 was chosen after applying the Freund and William's formula for the determination of adequate sample size. Out of teachers and principals sampled, 304 returned the questionnaire and accurately filled. The hypotheses were tested using z-test. Findings revealed that Principals fund management had positive effect on the coordination of schools in Enugu Education Zone.

In a conducted study, Ironkwe et al. (2024) examined financial management practices and administrative effectiveness of secondary school principals in Anambra State, Nigeria. It had three specific purposes, research questions, and hypotheses, using a correlational research design. All 266 principals from public secondary schools in the state were included in the sample. Data were collected using two structured questionnaires, which were validated by experts and tested for reliability. Data analysis involved Pearson Product Moment Correlation Coefficient, and significance was determined at the 0.05 level. The findings showed a significant relationship between principals' financial management strategies and their administrative effectiveness.

The review of literature showed some significant relationship between the independent sub-variables (students' personnel management, and financial management) and the dependent variable (administrative effectiveness). However, several gaps resulting from variables, location, scope, still existed which the present study filled. For instance, majority of the reviewed studies even though related to the present study were not conducted in Cross River State, and Ikom Education Zone in particular. Moreover, the methodology, instruments, and procedures used are not the same as those of the present study. Therefore, this study on Education Management Information System (EMIS) and principals' administrative effectiveness in secondary schools in Ikom Education Zone, Cross River State, Nigeria, is conducted to fill the knowledge gap. This is because no such study was seen to have been conducted on the same topic and using the same variables thus far.

### **Statement of the Problem**

In secondary schools, the principal is the administrator, the manager, and the chief executive of the institution. Principals' who are administratively effective set a clear vision and inspire the school community to work towards it. They make informed and timely decisions, efficiently manage financial, human, and physical resources at their disposal, and communicate effectively with teachers, students, parents, and other stakeholders. They also oversee curriculum implementation and ensure high-quality



instruction, create a safe and inclusive school climate, support the professional development of teachers and staff, and ensure compliance with educational policies, regulations, and standards. These indices collectively contribute to a well-managed and effective school environment.

However, the state of administrative activities in secondary schools in Ikom education zone is worrisome. Personal observation of the researchers revealed cases of delay in processing students' results, poor students attendance monitoring and admission of new students, inability to identify students who default payment, misplacement of vital financial records among others in secondary schools in the zone. So much has been put in place to address this menace of administrative ineffectiveness in the education zone and in Cross River State at large. The government has improved the structures of many schools through renovation projects and procurement of learning resources.

Several studies have also identified different factors that influence poor administrative effectiveness with several recommendations also made. Sadly, this issue still persists. This raised the curiosity of the researcher towards solving this problem. In doing this, the researchers wonder whether these challenges are as a result of the inability of principals' to utilize education management information system to enhance smooth administrative activities in their respective schools. It is against this premise that this study aimed at ascertaining whether school administrators' utilization of education management information system relates to administrative effectiveness in secondary schools in Ikom Education Zone.

### **Purpose of the Study**

The main purpose of this study is to investigate utilization of Education Management Information System and principals' administrative effectiveness in secondary schools in Ikom Education Zone, Cross River State, Nigeria. Specifically, the study sought to ascertain the relationship between:

1. Students' personnel management and principals' administrative effectiveness in secondary schools in Ikom Education Zone.
2. Financial management and principals' administrative effectiveness in secondary schools in Ikom Education Zone.

### **Research hypotheses**

The study was guided by the following research hypotheses

1. Students' personnel management does not significantly relate to principals' administrative effectiveness in secondary schools in Ikom Education Zone.
2. Financial management does not significantly relate to principals' administrative effectiveness in secondary schools in Ikom Education Zone.

### **Research methodology**

**Research design:** The study adopted correlational survey research design to ascertain the relationship between Education Management Information System and principals' administrative effectiveness. It was carried out in Ikom Education Zone of Cross River State. Ikom is one of the Education Zones in Cross River States, made up of 6 local government areas, namely; Abi, Boki, Etung, Obubra, Ikom and Yakurr.

**Population of the Study:** The study population comprised all the 112 principals in public secondary schools in Ikom Education Zone of Cross River State (Secondary Education Board, Cross River State, 2024). No sampling was employed in this study owing to the relatively small size of the population of the study. Hence, all the 112 principals in public secondary schools in Ikom Education Zone were used



for the study. However, the researchers selected a total of 60 teachers (10 teachers from each school) to access principals' administrative effectiveness in the respective schools without bias.

**Instrumentation:** An instrument titled "Education Management Information System and Principals' Administrative Effectiveness Questionnaire (EMISPAEQ)" was used for data collection. It was structured on a four rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) weighted 4, 3, 2 and 1 respectively. A questionnaire letter that explained the need for the study preceded the main questionnaire. The instrument was divided into two sections – Section A, B and C. Section A was designed to gather information on respondents' demographic data such as sex, age, marital and educational status. Section "B" was designed to elicit information based on the independent sub variables. While section "C" measures principals' administrative effectiveness, respectively.

**Validation of the instrument:** The validation of the instrument was established by three experts, two from the Department of Educational Management and one from the Department of Educational Foundations (Measurement and Evaluation Unit), faculty of Educational Foundations Studies, University of Calabar. The suggestions and inputs of the experts were reflected on the final draft of the instrument. The Cronbach alpha was used to determine the reliability of the instrument which yielded the coefficient values of 0.81 and 0.87 were obtained. The overall coefficient value of 0.82 was considered high enough for the instrument.

**Procedure for data collection:** The questionnaire was the instrument used for data collection. The researchers recruited two research assistants to assist in the exercise. They were guided on how to conduct the exercise. Next, permission was obtained from each school authority and afterward, the researchers with the assistants administers the questionnaire on the respondents. After some times, the researchers went round and retrieved all the questionnaire copies from the respondents.

**Procedure for data preparation:** First, the researcher carefully sorted out the collected questionnaire to ensure that all the items have been well responded to by the respondents. Out of 118 questionnaire copies given out, only 112 copies were correctly responded to by the respondent, and were used for the analysis. This is approximately 94.92 % return rate. Thereafter, the questionnaire was then organized in the order of the variables they were designed to measure. Positively worded items was scored as follows: Strongly Agree (SA) = 4point, Agree (A) = 3points, Disagree (D) = 2points and Strongly Disagree (SD) =1point. But for all the negatively worded items, the pattern was reversed. The scores of respondents on the respective sub-scales were summed and transferred to appropriate statistical packages for analysis.

**Procedure for data analysis:** Data analysis was done base on the null hypotheses that guided the study. The data was analysed using Pearson Product Moment Correlation with the help of Statistical Package for Social Science (SPSS) version 26.

## Presentation of results

### Hypothesis one

Students' personnel management does not significantly relate to principals' administrative effectiveness in secondary schools in Ikom Education Zone. The two variables in this hypothesis are students' personnel management and principals' administrative effectiveness. The result of the data analysis is presented in table 1. Table 1 showed the correlation coefficients between students' personnel management and principals' administrative effectiveness. The correlation coefficients was statistically



significant for principals' administrative effectiveness ( $r = .62, p < .05$ ). Since  $p(.000)$  is less than  $p(.05)$ , hypothesis one is rejected in terms of principals' administrative effectiveness. The result of the analysis implied that there was a statistical positive significant relationship between students' personnel management and principals' administrative effectiveness in Ikom Education, Cross River State, Nigeria.

**TABLE 1**

Pearson product moment correlation analysis of the relationship between students' personnel management and principals' administrative effectiveness (N = 112)

Variables	$\bar{X}$	S.D	r	Sig.
Students' personnel management	18.87	3.61		
Principals' administrative effectiveness	19.46	3.00	.62*	.000

\*Significant at  $p < .05$   $df = 110$

### Hypothesis two

Financial management does not significantly relate to principals' administrative effectiveness in secondary schools in Ikom Education Zone. The two variables in this hypothesis are financial management and principals' administrative effectiveness. The result of the data analysis is presented in table 2. Table 2 showed the correlation coefficients between financial management and principals' administrative effectiveness. The correlation coefficients was statistically significant for principals' administrative effectiveness ( $r = .76, p < .05$ ). Since  $p(.000)$  is less than  $p(.05)$ , hypothesis one is rejected in terms of principals' administrative effectiveness. The result of the analysis implied that there was a statistical positive significant relationship between financial management and principals' administrative effectiveness in Ikom Education, Cross River State, Nigeria.

**TABLE 2**

Pearson product moment correlation analysis of the relationship between financial management and principals' administrative effectiveness (N = 112)

Variables	$\bar{X}$	S.D	r	Sig.
Financial management	18.64	4.54		
Principals' administrative effectiveness	19.46	3.00	.76*	.000

\*Significant at  $p < .05$   $df = 110$

### Discussion of findings

The finding of research hypothesis one reveals that students' personnel management significantly relate to principals' administrative effectiveness. The study finding is in line with the findings of Omenyi and Bosco-Duru (2021) who in a study determine how teachers' perception of principals' effective students personnel administration correlate with teachers' job involvement in public secondary schools in Imo State. The study found that there is a low positive relationship existing between teachers' perception of principals' effective students' personnel administration and teachers' job involvement in public secondary schools in Imo State. It is also in tandem with the conclusion of Thompson and Anachuna (2019) that through the utilization of management information system, school fees payments are easily made and track online by the school management and financial fraud or default in payment is averted, hence, promoting accountability and effective financial management in the school. The finding corroborates the position of Edut et al. (2023) that the success of any organization including the school system depends largely on the availability and efficient management of both human and material resources. The finding also supports that of Chidobi (2015) who found that proper



management of student personnel services at the secondary level has positive influence on realization of sustainable future.

The finding that there is a significant relationship between students' personnel management and principals' administrative job effectiveness can be attributed to several key factors. Firstly, when students needs and interest are taken care of by the school administration, they will be encouraged to concentrate more on their studies. This will result in better academic performance and will promote the image of the school. Secondly, as a relevant management tool, Management Information Systems (MIS) can be utilized by school administrators for storing and updating students' information such as personal records, parents' addresses, phone numbers, email addresses, continuous assessment data, among other electronically. The implication is that effective student personnel management is key in enhancing administrative effectiveness and vice versa.

The finding of research hypothesis two reveals that financial management significantly relate to principals' administrative effectiveness. The study finding is in line with the findings of Ironkwe et al. (2024) who conducted a study to examine financial management practices and administrative effectiveness of secondary school principals in Anambra State, Nigeria. The findings showed a significant relationship between principals' financial management strategies and their administrative effectiveness. The finding is in agreement with that of Ezeh and Ogara (2020) who accessed the impact of financial management on effective school administration in Enugu Education Zone. The study used the survey approach. The primary source was administration of questionnaire to the teachers and principals of the selected schools. The hypotheses were tested using z-test. Findings revealed that Principals fund management had positive effect on the coordination of schools in Enugu Education Zone. Alia and Iwuoha (2014) agree that principals and administrators are responsible for preparation of the school budget and ensure effective financial management in order to achieve the objectives of the school.

The finding is in agreement with that of Amirizei and Nwachukwu (2018) who investigated fund management strategies for effective administration of public secondary schools in Rivers State. The study adopted a descriptive survey research. Purposive sampling was used. The study found that there are significant relationships between principals fund management strategies, accountability, factors that hinder, and factors that strengthens and effective administration of secondary schools in Rivers State. The finding also supports the assertion of Thompson and Anachuna (2019) that the utilization of financial management information system enables school managers to accurately plan and forecast school cash inflow and outflow for the next fiscal year. Financial management is essential for the efficient and effective operation of secondary schools. Key aspects include acquiring funds, implementing financial controls, allocating resources wisely, and ensuring accountability. These practices are crucial for achieving educational goals (Allis, 2014).

The finding may be as a result of the fact that Management Information System (MIS) plays a crucial role in aiding schools to make informed financial decisions for school improvement. It is utilized by school administrators in various aspects of school management, including: managing school fees payment by student, procuring equipment, tracking unremitted funds and estimating the school fund inflow and outflow. With the use of computers and the internet, students can conveniently pay for educational services such as hostel fees, tuition fees, and transportation fees, perform transactions without physically going to the school. **Utilizing a management information system allows for easy online payment and tracking of school fees by the administration, preventing financial fraud and non-payment. This promotes accountability and effective financial management within the school.** The implication is that efficient financial management is crucial in enhancing administrative effectiveness in the school system and vice versa.



## Conclusion

Premised on the findings of the study, it was concluded that there was a statistically significant relationship between student personnel management, financial management and principals' administrative effectiveness. Therefore, Education Management Information System (EMIS) have a statistically significant relationship with principals' administrative effectiveness in secondary schools in Ikom Education Zone, Cross River State, Nigeria.

## Recommendations

The following recommendations were made based on the findings of the study:

1. The Cross River State Government through the State Ministry of Education should organize training sessions such seminars and workshop to train and retrain secondary school administrators on the utilization of Management Information System to enhance their administrative effectiveness.
2. Secondary school administrators should seek opportunities to learn the use of specific MIS software applications designed for financial transaction to help them curb constant financial loss, enhance financial accuracy and accountability in the administration of their schools.

## Contribution to knowledge

The utilization of Educational Management Information System (EMIS) contributes to administrative effectiveness in terms of student personnel management, and financial management. This study contributed to knowledge by providing an insight on the contributions of Educational Management Information System to administrative effectiveness of secondary schools in Ogoja Education Zone, Cross River State specifically, and Nigeria in general.

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## Declaration of conflicting interests

No potential conflict of interest was reported by the authors.

## References

- Alia, C.O. &Iwuoha, N.S. (2014). New challenges facing Imo State secondary school principals in a decentralized system: the way forward. *Journal of Educational Research*, 2(3), 179- 187.
- Allis, R. P. M. (2014). *Financial management: Ratio analysis zero to one million*. McGraw-Hill.
- Akpan, C. P. &Onabe, D. B (2016). Management of students' personnel services and sustainable secondary education in calabar education zone of Cross River State, Nigeria. *Global Journal of Human Resource Management* 4, (3) 16-26.
- Akinola, O.B. (2013). Principals' leadership skills and school effectiveness: The case of south western, Nigeria. *World Journal of Education*, 3(5), 26-33.
- Akinwale, V. A. (2017). Time management strategies as a panacea for principals' administrative effectiveness in secondary schools in Enugu State, Nigeria. *Journal for Studies in Management and Planning*, 3(9), 22. Available at <http://edupediapublications.org/journals/index.php/JSMaP/>
- Ako, N. E. (2022). *The contribution of Education Management Information System on administrative effectiveness of secondary schools in Yaoundé municipality* (Master's dissertation). Management of Information System of Schools and Universities (GSISU).



- Amirizei, M. & Nwachukwu, P. O. (2018). Principals Fund Management Strategies for Effective Administration of Public Secondary Schools. *International Journal of Scientific Research in Education*. 11(3), 545-576.
- Edut, E. O. Udang, J. A. & Egwu, U. E. (2023). Human Resource Management Techniques And Job Performance Of Teachers' In Special Need Schools In Calabar Municipality Of Cross River State, Nigeria. *EPRJ International Journal of Environmental Economics, Commerce and Educational Management*. Available at <https://eprajournals.com/IJCM/archives/2023-april>
- Egwu, S.O. (2016). Management strategies for conflict resolution in secondary schools in Ebonyi state, Nigeria. *UNIZIK Journal of Educational Management and Policy*, 1(1), 88-94.
- Ezeh, C. R., & Ogara, P. I. (2020). Impact of financial management on effective school administration in Enugu Education Zone. *British International Journal of Education and Social Sciences*, 7(6), 1.
- Ironkwe, A. C., Okechukwu, J. N., & Joseph, A. A. (2024). Financial management practices and administrative effectiveness of secondary school principals in Anambra State, Nigeria. *Unizik Journal of Educational Research and Policy Studies*, 17(2).
- Khominich, I. P., Rybyantseva, M. S., Borodacheva, L. V., Dik, E. V., & Afanasev, E. V. (2016). Financial management as a system of relations of the enterprise for highly efficient management of its finances. *International Journal of Economics and Financial Issues*, 6(8), 96-101.
- Madiha, S. (2013). Impact of management information system on school administration: What the literature says. *Procedia-Social and Behavioural Sciences*, 116(2014), 2799-2804
- Nzokurum, J. N., & Iremeka, F. U. (2017). Students' discipline management, personnel services and teachers' productivity in public secondary schools in Enugu State, Nigeria. *International Journal of Academic Research and Reflection*, 5 (1), 109-116.
- Obona, Sampson & Ekeuwei (2021). Physical Facilities Maintenance Strategies and Secondary School System Sustainability in a Post covid-19 era in Calabar Education Zone, Cross River State, Nigeria. (A conference Paper) *Education For Today, Vol. 17(1). October, 2021*.
- Owan, V. J., & Ekaette, S. O. (2019). Students' personnel management and academic effectiveness of secondary school students in Calabar Education Zone of Cross River State, Nigeria. *International Journal of Psychological and Brain Sciences*, 4(2), 13-19. <https://doi.org/10.11648/j.ijpbs.20190402.12>
- Thompson, C. & Anachuna, O. (2019). School Administrators' Utilization Of Management Information System For Administrative Effectiveness In Secondary Schools In Enugu Education Zone." *International Journal of Research - Granthaalayah*, 7(9), 102-109. <https://doi.org/10.29121/granthaalayah.v7.i9.2019.565>.