Principals' Management of Library Resources and Teachers' Lesson Preparation Practices in Secondary Schools: A Predictive Evaluation

Valentine Joseph Owan
University of Calabar, Nigeria, owanvalentine@gmail.com

Rosemary O. Osim Ph.D.
University of Calabar, Nigeria

Emanghe E. Emanghe Ph.D.
University of Calabar, Nigeria

Eyiene Ameh Ph.D.
University of Calabar, Nigeria

John Asuquo Ekpenyong
University of Calabar, Nigeria

Principals' Management of Library Resources and Teachers' Lesson Preparation Practices in Secondary Schools: A Predictive Evaluation

Valentine Joseph Owan[1*]
Rosemary O. Osim[1]
Emmanuel E. Emanghe[1]
Eyiene Ameh[1]
John Asuquo Ekpenyong[1]

[1]Department of Educational Management, University of Calabar, Calabar – Nigeria.
*Corresponding author
Email: owanvalenetine@gmail.com

ABSTRACT

The literature is predominated by studies seeking to clarify the extent of the availability, functionality, accessibility and/or utilisation of library materials in schools at various levels. The extent of principals' management of library resources and their contribution to the lesson preparation activities of teachers seems to have been under-researched. In bridging the gap, the current study was designed to assess the extent and contribution of principals' management of library resources to teachers' lesson preparation practices. Six specific objectives were of interest to the researchers. The quantitative research method, following the ex-post facto research design, was adopted. The stratified proportional random sampling technique was used to choose a sample of 743 respondents from a population of 1,857 secondary school teachers in Ikom Education Zone, Cross River State, Nigeria. An instrument named "Management of Library Resources and Teachers' Lesson Preparation Questionnaire" (MLRTLPQ) was used to gather data. The quantitative content validity method was used to assess the degree to which the items in the instrument were clear, relevant, and represented a wide range of the anticipated content based on the views of domain experts. One sample t-test and hierarchical regression analyses were used for data analyses. Four stepwise hierarchical linear models were specified and fitted accordingly. It was found that teachers' lesson preparation practice is significantly low generally; there is a significantly low extent in principals' management of textual, auditory, visual and audio-visual library resources; there is a significant composite contribution of principals' management of library resources on teachers' lesson preparation practices in public secondary schools in model 3 and model 4. Based on these findings, practical implications are discussed, with recommendations made for a better library management practice in secondary schools for quality lesson preparation practices.

Keywords: Audio-visual, auditory, lesson preparation, principals, school libraries, textual resources

INTRODUCTION

In every secondary school, library resources constitute one of the most crucial materials needed for quality teaching and learning. Libraries have long been a source of information for students, journals, maps, storing books, and other resources (Jamil et al., 2013). A library has been defined as an organized collection of published and unpublished books and audio-visual materials, as well as people who can provide and interpret such material as may be required

(Ogbebor, 2011). Electronic resources such as CD-ROMs, computers, fax machines, internet, lighting, local area network, microform readers, microforms, photocopiers, radio messages, telephone, and computer workstations are part of the school library (Adeoye & Popoola, 2011). These resources must be managed periodically by librarians and principals through inspection to ensure that library materials and services are up-to-date for quality education. This is because school librarians have a significant impact on student reading ability, studying and academic attainment (Sibomana, 2020). School principals, on the other hand, have to manage library resources to ensure that available textual and non-textual materials in school libraries are utilised. If principals can effectively manage the library resources, a lot of benefits may be accredited to the schools. One of which is the avenue for teachers to source materials for lesson preparation.

Lesson preparation is the process where teachers plan what lesson contents and learning experiences to offer to students based on a scheduled time and following a guiding scheme of work. It involves attempts by teachers in deciding what to teach, who to teach, when, where and how to teach planned contents to the learners to improve their cognitive, affective and psychomotor attributes. Lesson preparation is essential since it allows the teacher to carefully examine and internalize what to teach, as well as allocate lesson time, collect and prepare teaching materials and instruments. To successfully design a formal teaching and learning process, it is important to choose what kind of teaching and learning resources to use and then organize them properly. According to Ng'entu (2019), lesson preparation determines the outcome of every lesson. Time and effort spent researching, internalizing, comparing, connecting and criticizing information to deliver to students tend to affect instructional goals. Teachers' preparation of lesson plans is useful in defining the teaching objective, evaluating the available resources, and creating the learning activities (Lee & Yatahashi, 2011).

Effective lesson preparation practices include sourcing for standard instructional materials for a given lesson; developing or improvising instructional materials where standard materials are not readily available; considering the age of the learners while designing lesson plans, contents and learning experiences; taking into consideration the diverse needs and individual differences of learners; considering the suitability of the lesson content/teaching methods to special learners; developing/writing of lesson plans/notes; sourcing for relevant textbooks and other educational materials to develop lesson contents; deciding on the teaching method(s) to employ in delivering the lesson to either a small or large audience, deciding the

lesson evaluation strategy or techniques to adopt; studying ahead of the lesson for full subject mastery and so on. All of these constitutes, what we refer to in this study, as "lesson preparation practices", which vary from person to person. For effective lesson preparation practices, the principals, as institutional managers are at the forefront. Thus, they must procure, manage and operate functional libraries in public secondary schools at all times.

Given the importance of library and lesson preparation, in addition to the role they play in promoting school effectiveness (Owan & Agunwa, 2019), it is expected of teachers and students to effectively utilise the library for teaching and learning. Despite this expectation, it has been observed in Ikom Education Zone of Cross River State that most teachers tend to pay little or no attention to the planning and development of lesson notes before engaging in teaching activities in the classroom. Most teachers appear to have failed also in their responsibilities of developing lesson plans that were expected to guide their weekly operations. Consequently, some are often seen teaching with textbooks against the use of already prepared notes of lesson. The use of instructional materials in the actual teaching of students also seems to be an area that most secondary school teachers in Ikom Education Zone have faulted. It seems to the researchers that the poor preparation practices of teachers could the reason for the teaching ineffectiveness reported by some recent studies (Bassey et al., 2019; Odigwe et al., 2020; Owan & Ekpe, 2019). As a result of their teaching ineffectiveness, there have been cases of serious failures in the Senior Secondary Certificate Examination and the Unified Tertiary Matriculation Examinations (Bassey et al., 2020). Thus, it makes sense to reason that the lesson preparation practices of teachers could have had an indirect connection to students' academic performance, with teachers' effectiveness mediating the association.

In other instances, many teachers who even attempt to plan/develop lesson notes, often do not seem to take into consideration, the criteria or factors that must be met for quality lessons to be developed. For example, some teachers do not consider the age, individual differences nor learning needs of the students they are to teach. This often makes them appear in the classroom with advanced lessons that are not suitable for young learners or vice versa. Some teachers in the zone do not prepare lesson notes at all only reading directly from textbooks. The most annoying is that some teachers tend to have very rigid lesson notes since they appear to develop lesson plans/notes without following the current curriculum recommended for use. Furthermore, some teachers also seem to rely on the notes given to them during their secondary school days for instructional delivery in a modern era where a lot of dynamics have occurred.

Consequently, most teachers communicate outdated information that misalign with current realities or trending issues of society, resulting in poor school products supplied to tertiary institutions. This had made the researchers wonder, could the poor management of library resources practices be associate with teachers' lack of access/utilisation of library resources?

Teachers can have access to library materials if they are procured, accessible and well managed. The management of school libraries is one of the duties of school principals and librarians. The school librarians are under the supervision of the school principals and should report directly to them. This means that the overall management of library materials is the primary duty of school leaders who should manage both the human and material resources in the library. Thus, the way school leaders play their roles in monitoring, supervising, and budgeting for the school library may determine the extent to which teachers can have access to the resources needed for proper lesson planning and preparation. This study was undertaken to determine whether principals' management of library resources has any substantial contribution to the lesson preparation practices of teachers in public secondary schools in Ikom Education Zone, Cross River State, Nigeria.

Literature review

Previous studies on principals have focused more on their administrative strategies (Ajuna, 2019; Gbotosho & Adejumo, 2019; Madukwe et al., 2019; Owan & Agunwa, 2019; Sanchez, et al., 2019), leadership styles (Owan et al., 2020; Özdemir, 2019; Sebastian & Allensworth, 2012), school supervision techniqiues (Amini et al., 2021; Darmawanti & Usman, 2019; Hansen & Johnson, 2013), provision of infrastructure (Centerwall & Nolin, 2019; Jamil et al., 2018), management of teachers' teaching competence (Boakye & Ampiah, 2017), demographics characteristics (Ibegbulem, 2021), management of Parent Teachers Association (Iremeka et al., 2021), curriculum (Madondo, 2021; Reynolds, 2018), quality of educational dialogue (Muhonen et al., 2018), and their behaviour (Liebowitz & Porter, 2019). These studies did not assess the extent to which principals manage the school libraries.

Studies on school libraries have also attended to the assessment of the extent of the availability of school library facilities (Eni, 2018; Igwebuike, & Agbo, 2017; Jean, 2021), reading habits of students (Adebayo et al., 2020), understaffing (Mangendi, 2019) and other similar variables. A study in Oyo State reported that teachers get satisfied when teaching materials are provided stating that funding was required to acquire necessary materials for

school libraries (Abubakar, et al., 2021). Similarly, Daniel (2020) shows that when a school has a professional librarian, it makes it easier for teachers to use the library, and its collection, improves their ability to design curriculum, and opens up the possibilities for collaborative work and the development of information literacy skills. In Kenya, it was reported by a study that the involvement of principals in school library management activities helps improve their schools (Sabwami et al., 2020). Again, Izuchukwu and Furfuri (2021) reported there are insufficiently trained personnel to properly catalogue school library resources, insufficient spaces/accommodation for classification, too many resources to be catalogued, limited funds for the cataloguing of daily expenses, and governmental policies are less favourable to school libraries.

With this, it is believed that the engagement of principals in the management of library resources would help reduce the problem associated with it. Although Arum et al., (2021) found that the implementation of traditional libraries poses obstacles to administrators, teachers and students. Suggesting that library resources should always be updated for quality materials sourcing. From the foregoing, past studies have not been able to mitigate the ugly situation of teachers' poor attitudes towards the planning and development of lesson notes for teaching. Past studies have not made efforts also to link the management of library resources by principals to the lesson preparation practices of teachers. It is in line with these gaps that the present study was undertaken to relate principals' management of library resources to teachers' lesson preparation practices in public secondary schools in Ikom Education Zone.

The researchers had considered the management of library resources as a presumed cause of poor teachers' lesson presentation owing to the fact that the materials needed to organised an effective lesson can be found in the school library. The researchers hypothesised that if the libraries are effectively managed by the principals, then the avenue for teachers to easily access relevant textbooks would have been be provided. This study is anticipated to promote the quality of education, particularly at the secondary school level through quality lesson preparation practices of teachers. This may help in uplifting the prestige of secondary schools, since the quality of future graduating students may be improved, providing a sense of relief to parents and students that may decide to climb the education ladder. The study may be relevant to school principals if findings and recommendations are made that would enable them to understand the kind of strategies required to effectively manage school libraries and their resources for quality teaching and learning. The study is also anticipated to reveal the

weaknesses of teachers in their lesson preparation processes/procedures which can be used for diagnoses and corrections. Furthermore, the present study would serve as a literature guide for future studies.

Objectives of the study

The central aim of this study was to examine principals' management of library resources and teachers' lesson preparation practices in secondary schools. Specifically, the objectives of the study were to:

i. determine the level of teachers' lesson preparation practices;

ii. estimate the extent of principals' management of textual library resources;

iii. determine the extent of principals' management of auditory library resources;

iv. investigate the degree of principals' management of visual library resources;

v. quantify the extent of principals' management of audio-visual library resources;

vi. estimate the joint and partial contribution of principals' management of library resources (textual, auditory, visual and audio-visuals) on teachers' lesson preparation practices in public secondary schools

Research questions

The following research questions were posed to guide the study

i. what is the extent of teachers' lesson preparation practices in public secondary schools?

ii. To what extent are principals managing textual library resources in public secondary schools?

iii. What is the extent of principals' management of auditory library resources in public secondary schools?

iv. What is the extent of principals' management of visual library resources in public secondary schools?

v. What is the extent of principals' management of audio-visual library resources in public secondary schools?

vi. What is the joint and partial contribution of principals' management of library resources (textual, auditory, visual and audio-visuals) to teachers' lesson preparation practices?

METHODOLOGY

Research design and participants

The study used the quantitative research method, with a focus on the ex-post facto research design. Ex-post facto research was selected for the study because the researchers wanted to examine the variables based on their past occurrences in the population. As a consequence, the researchers are not able to alter any factors, but to gather respondents' views on the various areas of investigation using questionnaires. The study's population comprised 1,644 secondary school teachers from 101 public secondary schools in Cross River State's Ikom Education Zone. The stratified proportional random sampling method was used by the researchers to choose a sample of 743 teachers, accounting for 45.2% of the entire population (See Table 1).

Table 1: Population and sample distribution of the study

LGAS	No of Schools	No of Teachers	sample (45.2%)
Abi	12	178	80
Boki	30	252	114
Etung	12	134	61
Ikom	19	408	184
Obubra	19	203	92
Yakurr	17	469	212
Total	109	1644	743

Instrument and measures

The researchers designed a questionnaire named "Management of Library Resources and Teachers' Lesson Preparation Questionnaire" (MLRTLPQ) to gather data. The instrument was developed using items derived from a thorough literature review and was divided into three parts. Section A was intended to gather respondents' personal information. Section B had four clusters targeted at evaluating principals' management of textual, auditory, visual, and audio-visual library resources. The first cluster in section B consisted of 15 textual items from which respondents were asked to evaluate the degree of their management by principals. Cluster 2 of Section B included a list of 11 auditory items for which respondents were asked to rate the degree to which principals managed them. Cluster 3 of Section B included a list of 15 visual elements for respondents to indicate the extent to which they believe principals manage them. Cluster 4 included a list of 11 audio-visual resources for respondents to rank the level of management by principals. The questionnaire's section B items were all organized on a modified four-point Likert scale. Section B response choices were Very Highly Managed

(VHM), Highly Managed (HM), Poorly Managed (PM), and Very Poorly Managed (VPM). Section C of the questionnaire has ten questions aimed at measuring teachers' lesson preparation practices. The questions were arranged on a four-point Likert scale, with answer choices including Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD).

Validity and Reliability

The quantitative content validity method was used to assess the degree to which the items created were clear, relevant, and represented a wide range of the anticipated content. To accomplish this, five Library and Information Science professionals and four additional Educational Management experts were contacted to evaluate the degree to which specific items were clear and useful in measuring the desired areas. The process was carried out following the recommendations of quantitative content validity studies (e.g., Haynes et al., 1995; Lawshe, 1975; Sr et al., 2021; Wynd et al., 2003). The Scale Content Validity Indices of the questionnaire's five sub-scales varied from .90 to .97. The face validity of the instrument was used to assess the instrument and to detect and eliminate items that are confusing, imprecise, and double-barrelled, with the help of two psychometric specialists. The psychometrists also verified that the scale structure and answer set selected corresponded to the items on the test. The final draft of the instrument was tested on 60 secondary school leaders who were drawn at random from 30 public schools in the Calabar Education Zone and were not among the respondents in the main research. The trial test data was subjected to a reliability analysis using the Cronbach alpha method. Principals' management of textual, auditory, visual, audio-visual resources, and teachers' lesson preparation methods all received reliability coefficients of .89, .90, .81, .79, and .94 respectively. With these values, the items in the questionnaire's different clusters were deemed internally consistent for data collection.

Data collection/analysis procedure

The researchers obtained permission to conduct the study from the Department of Educational Management at the University of Calabar in Calabar. Because the research involved human subjects, the University of Calabar's Research Ethics Committee at the Directorate of Academic Planning gave ethical permission. Following receipt of these permissions, the researchers made photocopies and attached them to a letter of intent, which was prepared and sent to the principals of the selected universities, informing them about the study and the expected date of the exercise. Next, the researcher delivered copies of the instrument to the

targeted respondents with the help of six research assistants. Afterwards, the collected data was processed and statistically analysed using both descriptive and inferential methods.

Model specifications

The models of this study were built using a general hierarchical linear regression model presented as equations 1 – 4.

$y = a + b(X)$ …………………………………...………………………..1 (Model 1)

$y = a + b_1(X_1) + b_2(X_2)$ …………………….……………………………… 2 (Model 2)

$y = a + b_1(X_1) + b_2(X_2) + b_3(X_3)$ …………………………………………3 (Model 3)

$y = a + b_1(X_1) + b_2(X_2) + b_3(X_3) + . . . \ b_n(X_n)$ ………………………..….4 (Model n)

Where:

y = the dependent or response variable

a = intercept of the regression analysis

$b_1 – b_n$ = the unstandardised regression coefficients of the predictors in the models

$X_1 – X_n$ = The predictors variables in the models.

Based on equation 1 to 4, we generate the specified models of this study from the general forms as shown below.

$TLPP = a + b(PMTLR)$ …………………………………...……………….…5 (Model 1)

$TLPP = a + b_1(PMTLR) + b_2(PMALR)$ ………..…………………………..….6 (Model 2)

$TLPP = a + b_1(PMTLR) + b_2(PMALR) + b_3(PMVLR)$ ……………..……......7 (Model 3)

$TLPP = a + b_1(PMTLR) + b_2(PMALR) + b_3(PMVLR) + b_4(PMAVLR)$ ………..8 (Model 4)

Where:

TLPP = Teachers' Lesson Preparation Practices

PMTLR = Principals' management of textual library facilities

PMALR = Principals' management of auditory library facilities

PMVLR = Principals' management of visual library facilities

PMAVLR = Principals' management of audio-visual library facilities

RESULTS

The extent of teachers' lesson preparation practices

The researchers hypothesised that the extent of teachers' lesson preparation practices in public secondary schools is not significantly low. A one-sample t-test analysis was performed to test

the hypothesis at the .05 alpha level. The result obtained from the analysis of data and presented in Table 2 reveals, on a general note, that teachers lesson preparation practices in public secondary schools in Ikom Education Zone are significantly low. Based on the result, the hypothesis earlier formulated was discarded. The extent of teachers' specific lesson preparation can be seen using the summarised comment made in the remark column.

Table 2: One sample t-test result summary of the extent of teachers' lesson preparation practices in Ikom Education Zone

Lesson Preparation Practices	$\overline{X} \pm SD$	MD	t	p	Remark
1. Sourcing for standard instructional materials for a given lesson	2.12 ± 1.16	0.38	8.82	.00	SL
2. Developing or improvising instructional materials where standard materials cannot be found	2.25 ± 1.20	0.25	5.68	.00	SL
3. Considering the age of the learners while designing a learning plan	2.21 ± 1.15	0.29	6.87	.00	SL
4. Taking the individual differences of the learners	2.22 ± 1.17	0.29	6.65	.00	SL
5. Considering the learning needs of students with respect to special learners	2.05 ± 1.12	0.45	10.88	.00	SL
6. Developing/writing of lesson plans/notes ahead of each lesson	2.42 ± 1.13	0.08	1.96	.05	NSL
7. Sourcing for relevant textbooks or other educational materials to develop lesson content	2.57 ± 1.12	0.07	1.65	.10	NSH
8. Deciding on the teaching method(s) to employ in delivering the lesson or instructional delivery	2.36 ± 1.15	0.14	3.33	.00	SL
9. Deciding the lesson evaluation strategies or technique	2.25 ± 1.18	0.25	5.68	.00	SL
10. Studying ahead of the lesson for subject mastery	2.14 ± 1.17	0.36	8.36	.00	SL
Overall lesson preparation practices	22.59 ± 4.37	2.41	15.01	.00	SL

N = 743; df = 742
Test Value at item level = 2.50
Test Value at cluster level = 25.00
Key
SL = Significantly Low
NSL = Not Significantly Low
NSH = Not Significantly High

The extent of principals' management of textual library resources

In this section, the researchers hypothesised that the extent of principals' management of textual library resources in public secondary schools is not significantly low. Based on the result of the one-sample t-test analysis presented in Table 3, it was found generally that principals' management of textual library resources in public secondary schools is significantly low. Following this evidence, the hypothesis was rejected. The extent of principals' management of specific textual materials can be seen in Table 3.

Table 3: One sample t-test result summary of the extent of principals' management of textual library resources in public secondary schools in Ikom Education Zone

Textual Library Resources	$\overline{X} \pm SD$	MD	t	P	Remark
1. Dissertations and theses	1.92 ± 1.10	0.59	14.51	.00	SL
2. Drawing books	2.5 ± 1.14	0.00	0.05	.96	NSH
3. Electronic blogs	1.87 ± 1.06	0.63	16.26	.00	SL
4. Electronic books (e-books)	2.5 ± 1.11	0.01	0.12	.91	NSH
5. Electronic conference proceedings	1.85 ± 1.12	0.65	15.76	.00	SL
6. Electronic journals (e-journal)	1.88 ± 1.12	0.62	15.01	.00	SL
7. Newspapers	2.14 ± 1.14	0.36	8.52	.00	SL
8. Novels	2.47 ± 1.13	0.03	0.66	.51	NSL
9. Pamphlets	1.91 ± 1.12	0.59	14.47	.00	SL
10. Periodicals	2.46 ± 1.13	0.04	0.95	.34	NSL
11. Printed Journals	2.51 ± 1.12	0.01	0.28	.78	NSH
12. Reference books	2.55 ± 1.13	0.05	1.15	.25	NSH
13. Reports	2.5 ± 1.12	0.01	0.12	.91	NSH
14. Textbooks	2.69 ± 1.06	0.19	4.82	.00	SH
15. Workbooks	2.47 ± 1.10	0.03	0.82	.41	NSL
Overall	34.22 ± 4.38	3.28	20.44	.00	SL

N = 743; df = 742

Test value at item level = 2.50

Test value at cluster level = 37.50

Key

SL = Significantly Low

NSH = Not Significantly High

NSL = Not Significantly Low

SH = Significantly High

The extent of principals' management of auditory library resources

The researchers hypothesised in this section, that principals' management of auditory library resources in public secondary schools is not significantly low. A one-sample test analysis was performed to test the hypothesis at the .05 level of significance. The result of the analysis presented in Table 4 shows that the extent of principals' management of auditory library resources is significantly low. Against the speculation earlier made, the null hypothesis was rejected. Using the remark column, the extent of principals' management of specific auditory library resources can be seen.

Table 4: One sample t-test result summary of the extent of principals' management of auditory library resources in public secondary schools in Ikom Education Zone

Auditory Library Resources	$\overline{\text{X}} \pm \text{SD}$	MD	t	p	Remark
1. Audio cards	2.36 ± 1.16	0.14	3.36	.00	SL
2. Audio cartridges	2.12 ± 1.14	0.38	9.15	.00	SL
3. Audio discs	2.47 ± 1.12	0.03	0.64	.52	NSL
4. Audio reels	1.89 ± 1.12	0.61	14.78	.00	SL
5. Audiocassettes	2.04 ± 1.17	0.46	10.80	.00	SL
6. Radio	2.03 ± 1.11	0.47	11.51	.00	SL
7. Recordings	1.83 ± 1.08	0.67	16.96	.00	SL
8. Sound Films	2.51 ± 1.11	0.01	0.35	.73	NSH
9. Talking books	2.44 ± 1.14	0.06	1.34	.18	NSL
10. Tele-lecture	2.51 ± 1.15	0.01	0.14	.89	NSH
11. Telephone	1.88 ± 1.12	0.62	14.99	.00	SL
Overall	24.08 ± 3.86	3.42	24.13	.00	SL

N = 743; df = 742
Test value at the item level = 2.50
Test item at the cluster level = 27.50
Key
SL = Significantly Low
NSL = Not Significantly Low
NSH = Not Significantly High

The extent of principals' management of visual library resources

In this hypothesis, we hypothesised that the extent of principals' management of visual library resources in public secondary schools is not significantly low. To test this hypothesis, the one-sample t-test analysis was performed at the .05 level of significance. Based on the evidence presented in Table 5, it was discovered that principals' management of visual library resources in public secondary schools in Ikom Education Zone is to a significantly low extent. Based on this result, the null hypothesis is debunked in favour of the alternative hypothesis that principals' management of visual library resources is significantly low. The extent of principals' management specific visual library resources can be seen quantifiably in Table 5.

Table 5: One sample t-test result summary of the extent of principals' management of visual library resources in public secondary schools in Ikom Education Zone

Visual Library Resources	X̄ ± SD	MD	T	P	Remark
1. Black and whiteboard	2.54 ± 1.13	0.04	1.02	0.31	NSH
2. Film	2.35 ± 1.16	0.15	3.47	0.00	SL
3. Film projector	2.63 ± 1.10	0.13	3.25	0.00	SH
4. Film-strips	2.45 ± 1.11	0.05	1.31	0.19	NSH
5. Flash-cards	2.21 ± 1.11	0.29	7.14	0.00	SL
6. Globes	2.54 ± 1.14	0.04	0.85	0.39	NSH
7. Models	2.27 ± 1.14	0.23	5.48	0.00	SL
8. Posters	2.47 ± 1.11	0.03	0.71	0.48	NSL
9. Atlas	2.02 ± 1.15	0.48	11.29	0.00	SL
10. Cartoons	2.21 ± 1.18	0.29	6.68	0.00	SL
11. Chart	2.14 ± 1.14	0.36	8.52	0.00	SL
12. Drownings	2.36 ± 1.17	0.14	3.21	0.00	SL
13. Illustrated books	2.45 ± 1.16	0.05	1.18	0.24	NSL
14. Maps	2.51 ± 1.12	0.01	0.28	0.78	NSH
15. Pictures	2.45 ± 1.12	0.05	1.17	0.24	NSL
Overall	33.26 ± 4.29	1.74	11.07	0.00	SL

N = 743; df = 742
Test Value at the item level = 2.50
Test Value at the cluster level = 35.00
Key
SL = Significantly Low
SH = Significantly High
NSL = Not Significantly Low
NSH = Not Significantly High

The extent of principals' management of audio-visual library resources

In this section, we speculated that the extent of principals' management of audio-visual library resources in public secondary schools is significantly low. To test this hypothesis, a one-sample test analysis was performed at the .05 alpha level. The result of the analysis presented in Table 6 shows that overall, principals' management of audio-visual library resources in public secondary schools in Ikom Education Zone, is significantly low. This supports our hypothesis, which was consequently retained. The extent of principals' management specific audio-visual library resources can be seen in Table 6.

Table 6: One sample t-test result summary of the extent of principals' management of Audio-Visual library Resources in public secondary schools in Ikom Education Zone

Audio-Visual Library Resources	$\bar{X} \pm SD$	MD	t	p	Remark
1. Computer	2.32 ± 1.16	0.18	4.14	.00	SL
2. Demonstration	2.00 ± 1.12	0.50	12.19	.00	SL
3. Film	2.01 ± 1.13	0.49	11.67	.00	SL
4. LCD/LED projectors	2.05 ± 1.16	0.45	10.65	.00	SL
5. Motion Picture	2.18 ± 1.20	0.32	7.25	.00	SL
6. Online videos	2.57 ± 1.11	0.07	1.80	.07	NSH
7. Printed materials with recorded sound	2.23 ± 1.17	0.27	6.34	.00	SL
8. Television	2.41 ± 1.09	0.09	2.35	.02	SL
9. VCD player	2.36 ± 1.15	0.14	3.32	.00	SL
10. Videotapes	2.11 ± 1.15	0.39	9.15	.00	SL
11. Virtual Classroom	2.21 ± 1.16	0.29	6.79	.00	SL
Overall	33.26 ± 4.29	1.74	11.07	.00	SL

N = 743; df = 742
Test value at the item level = 2.50
Test value at the cluster level = 35.00
Key
SL = Significantly Low
NSH = Not Significantly High

Contribution of the management of library resources to teachers' lesson preparation practices

The joint and partial contribution of principals' management of library resources (textual, auditory, visuals and audio-visuals) to teachers' lesson preparation practices is not statistically significant. A hierarchical regression analysis involving four linear models was performed to assess the composite and partial contributions of principals' management of textual, auditory, visual and audio-visual library resources to teachers' lesson preparation practices. The result of the analysis in Table 7, shows in the first model that principals' management of textual library resources contributed zero to the total variance in the lesson preparation practices of teachers. In the second model, where another predictor was added, it was found that principals management of textual and auditory library resources jointly accounted for 1% of the total variance in teachers' lesson preparation practices, with an R square change of 1%; although the change was not considered as being statistically significant. In step 3, another variable was added in model 3.

The result of the analysis showed that principals' management of textual, auditory and visual library resources jointly contributed 1% to teachers' lesson preparation practices, with no significant alteration to the adjusted R squared value in model 2. In the last model (model

4), all the independent variables were included in the model to determine their composite contribution to the dependent variable. The result of the analysis presented in Table 7 showed that principals' management of textual, auditory, visual and audio-visual library resources jointly accounts for 63% of the total variance in teachers' lesson preparation practices, with the remaining 37% unexplained variance due to other predictor variables not included in the model. This implies that the introduction of the last predictor (principals' management of audio-visual) library resources caused a significant change of 62% to the previous model (model 3).

Table 7: Summary of hierarchical linear regression analysis of the contributions of principals' management of library resources to teachers' lesson preparation practices

Model	R	R^2	Adj. R^2	SE	Change Statistics				
					R^2 Change	F Change	df1	df2	Sig. F Change
1	.040[a]	0.00	0.00	4.37	0.00	1.16	1	741	0.28
2	.079[b]	0.01	0.01	4.36	0.01	3.45	1	740	0.06
3	.109[c]	0.01	0.01	4.35	0.01	4.21	1	739	0.04
4	.796[d]	0.63	0.63	2.66	0.62	1249.90	1	738	0.00

a Predictors: (Constant), Textual Library Resources
b Predictors: (Constant), Textual, Auditory Library Resources
c Predictors: (Constant), Textual, Auditory, Visuals Library Resources
d Predictors: (Constant), Textual, Auditory, Visuals, Audio-Visuals Library Resources

The further analysis presented in Table 8 reveals that in Model 1, principals' management of textual library materials has no significant contribution to teachers' lesson preparation practices in public secondary schools, $F_{[1, 741]} = 1.16$, $p > .05$. In model two, principals' management of textual and auditory library resources have no significant joint contribution to teachers' lesson preparation practices in public secondary schools, $F_{[2, 740]} = 2.31$, $p > .05$. In model three, the results in Table 8 shows that principals' management of textual, auditory and visual library resources have a significant joint contribution to teachers' lesson preparation practices in public secondary schools, $F_{[3, 739]} = 2.95$, $p < .05$. In model four, the result of the analysis in Table 4 shows a significant joint contribution of principals' management of textual, auditory, visual and audio-visual library resources to teachers' lesson preparation practices in public secondary schools, $F_{[4, 738]} = 2.95$, $p < .05$.

Since the first two models are not significant, the relative coefficients of the two models are ignored; however, in the third and four models, they are considered. In the third model, the result in Table 8 shows that only the management of visual library resources significantly contributed to teachers' lesson preparation practices at the .05 level of significance. It was predicted that a unit increase in the standard deviation of principals' management of visual

library resources, other things being equal, will lead to a .08 increase in the standard deviation of teachers' lesson preparation practices. In model four, principals' management of textual, auditory and audio-visual library resources significantly contributed to teachers' lesson preparation practices in public secondary schools. It was estimated that if other variables are controlled, a unit increase in the standard deviation of principals' management of textual, auditory and audio-visual library resources will lead to a .09, .05 and .80 increase in the standard deviation of teachers' lesson preparation practices in public secondary schools respectively. Based on these results, the following unstandardised hierarchical linear models (equations) were estimated and fitted.

TLPP = 21.24 + 0.04 (PMTLR) …………………………...……………………………...…9 (Model 1)

TLPP = 20.90 + 0.03 (PMTLR) + 0.11(PMALR) ……………………………………………...…10 (Model 2)

TLPP = 18.00 + 0.06 (PMTLR) + 0.11 (PMALR) + 0.05 (PMVLR) …….. 11 (Model 3)

TLPP = 5.43 + 0.09 (PMTLR) + 0.07 (PMALR) + 0.00 (PMVLR) + 0.84 (PMAVLR)…………...…12 (Model 4)

Table 8: Relative and composite contributions of principals' management of library resources to the lesson preparation practices of teachers based on hierarchical linear models

Model 1[b]	Model 2[c]	Model 3[d]	Model 4[e]
F = 1.16	F = 2.31	F = 2.95	F = 318.43
df = 1, 741	df = 2, 740	df = 3, 739	df = 4, 738
p > .05	p > .05	p < .05	p < .05

Models	Relative contributions	B	SE	β	t	P
1	(Constant)	21.24	1.27		16.80	.00
	Textual materials	0.04	0.04	0.04	1.08	.28
2	(Constant)	20.90	1.28		16.38	.00
	Textual resources	0.03	0.05	0.03	0.51	.61
	Auditory resources	0.11	0.06	0.09	1.86	.06
3	(Constant)	18.00	1.90		9.46	.00
	Textual resources	0.06	0.05	0.06	1.05	.29
	Auditory resources	0.11	0.06	0.10	1.87	.06
	Visual resources	0.05	0.02	0.08	2.05	.04
4	(Constant)	5.43	1.21		4.47	.00
	Textual resources	0.09	0.03	0.09	2.75	.01
	Auditory resources	0.07	0.04	0.06	1.96	.05
	Visual resources	0.00	0.01	0.01	0.25	.80
	Audio-visuals	0.84	0.02	0.80	35.35	.00

a Dependent Variable: Lesson preparation practices
b Predictors: (Constant), Textual resources
c Predictors: (Constant), Textual, Auditory resources
d Predictors: (Constant), Textual, Auditory, Visual resources
e Predictors: (Constant), Textual, Auditory, Visuals, Audio-Visuals resources

DISCUSSION

It was established in this study that principals of public secondary schools in Ikom Education Zone, manage textual, auditory, visual and audio-visual library resources to a significantly very low extent. This finding suggests that available library resources in secondary schools' libraries are not adequately maintained to serve intended purposes. This study backs the researchers' earlier subjective claims by quantifying the extent to which principals are managing some specific library resources in secondary schools. This finding is attributed to the unavailability of some library materials that were assessed because it is impossible to manage what is not available. This supports the result of Izuchukwu and Furfuri (2021) that there are insufficiently trained personnel to properly catalogue school library resources, insufficient spaces/accommodation for classification, too many resources to be catalogued, limited funds for the cataloguing of daily expenses, and governmental policies are less favourable to school libraries. By implication, the principals have not played their roles well in ensuring that library materials are readily available, in adequate quantities to promote access and utilisation of library resources for improved study culture and lesson preparation practices by both students and teachers.

This study also established that principals' management of school library resources by school principals has a positive and significant contribution to teachers' lesson preparation practices in secondary schools. Although the management of some specific library resources did not contribute significantly, their joint contribution did. This implies that acceptable lesson preparation practices of teachers would be recorded the more principals devote their time to managing library resources. An explanation for this finding is anchored on the finding that both teachers' lesson preparation practices and library resource management were generally poor; however, higher rates of teachers' lesson preparation practices were associated with a higher rate of library resource management and vice versa. The finding is not surprising because the principals of schools are saddled with the responsibility to manage both human and material resources in schools. In addition to what the school librarian does, principals are expected to regulate the activities of the librarians, make efforts to procure obsolete or unavailable resources, apportion internally generated revenues for the upkeep and maintenance of the school library. The principals also include making contacts with key education agencies, philanthropists, the wider community and other stakeholders to assist in the supply of quality materials to the library.

This finding supports the result of Abubakar et al. (2021) which reported that teachers get satisfied when teaching materials are provided stating that funding was required to acquire necessary materials for school libraries. The result also corroborates the position of Daniel (2020) that when a school has a professional librarian on staff, it makes it easier for teachers to use the library, enhances teachers' ability to use the library's collection, improves their ability to design curriculum, and opens up the possibilities for collaborative work and the development of information literacy skills. Building on the cited study, a professional librarian can be made available if the school leaders are aware of their roles. This is because, where there is no professional librarian, it is the principals' managerial duty to make a report for the supply of one or to attempt recruiting one from other channels. Similarly, Sabwami et al. (2020) reported that the involvement of principals in school library management activities helps improve their schools.

CONCLUSION

This study was designed to examine the extent of principals' management of library and teachers' lesson preparation practices in public secondary schools in Ikom Education. The study was also designed to connect principals' management library resources to the lesson preparation practices of teachers in public secondary schools. The Quantitative research method was adopted in reaching the broad and specific objectives of the study. Through the analysis of data using population t-test, this study established that extent of principals' management of library resources in public secondary schools is significantly low. This result is due to the significantly low extents in principals' management of textual, auditory, visual and audio-visual library resources. Hierarchical linear regression analysis proved that principals' management of library resources generally contribute positively to teachers' lesson preparation practices in secondary schools. This study implies that teachers lesson preparation practices would witness a dramatic change if principals are capable of maintaining or managing library resources in secondary schools, other things being equal. Based on this conclusion, the following recommendations were made.

i.   Teachers should devote enough time to plan their lessons by taking into consideration, the duration of the lesson, students learning needs, learners' differences, classroom management and lesson evaluation strategies;

ii.   Secondary school principals should make plans for the procurement of myriad textual, auditory, visual and audio-visual library resources. This would bridge the gap of library resource unavailability in school libraries.

iii.   Where there is none, a professional librarian should be employed using internally generated funds or PTA levies rather than wait on the government for recruitment. This will in the effective maintenance of library resources following professional practices.

iv.   Teachers should always ensure that they consult a wide range of books and instructional materials from the school library before or while planning a lesson.

v.   There should be staff development opportunities for teachers to update their lesson preparation skills for quality service delivery in secondary schools.

References

Abubakar, H. O., Jemilat, I. A., & Oluranti, S. A. (2021). Availability and use of audio-visual materials for teaching mathematics at the senior secondary school in Ibadan, Southwest Local Government, Oyo State. *Library Philosophy and Practice (e-journal)*, *2021*, Article 4778. https://digitalcommons.unl.edu/libphilprac/5265

Adebayo, I. A., Ogunjimi, T. T., & Akintonde, S. S. (2020). Reading habit and use of library among public secondary schools' students in Ibadan North Local Government, Oyo State, Nigeria. *Nigerian School Library Journal, 19*(1), 107-123. https://www.ajol.info/index.php/nslj/article/view/208669

Adeoye, M. O., & Popoola, S. O. (2011). Teaching effectiveness, availability, accessibility and use of library and information resources among teaching staff of schools of nursing in Osun and Oyo State, Nigeria. *Library Philosophy and Practices (e-journal)*, *2011*, Article 525. https://digitalcommons.unl.edu/libphilprac/525

Ajuna, R. (2019). *Administrative practices of headteachers and teacher performance in Buhimba sub-county secondary schools Hoima district, Uganda.* Ph.D. Dissertation, (Kyambogo University), Uganda. https://kyuir.kyu.ac.ug/handle/20.500.12504/385

Amini, Z., Pirani, Z., & Taghvaei, D. (2021). The effectiveness of educational supervision and guidance (supervision) of principals on the sense of efficiency, collective efficiency and job motivation of primary school teachers. *Journal of School Psychology*, *10*(2). https://doi.org/10.22098/jsp.2021.1186

Arum, W. S. A., Karnati, N., & Sari, E. (2021). ICT-based school library management in secondary school: A case study. *Psychology and Education Journal*, *58*(3), 1135-1140. https://bit.ly/37Myhfs

Bassey, B. A., Owan, V. J., & Eze, E. A. (2019). Nexus between students', teachers' and school system effectiveness: Construction and factorial validity of a measuring instrument. *British Journal of Education*, *7*(7), 62–75. https://tinyurl.com/y3hr7jd3

Bassey, B. A., Ubi, I. O., Anagbougu, G. E., & Owan, V. J. (2020). Permutation of UTME

multiple-choice test items on performance in use of English and mathematics among prospective higher education students. *The Journal of Social Sciences Research*, *6*(4), 483–493. https://doi.org/10.32861/jssr.64.483.493

Boakye, C., & Ampiah, J. G. (2017). Challenges and solutions: The experiences of newly qualified science teachers. *Sage Open, 2017*, 1-10. https://doi.org/10.1177/2158244017706710

Centerwall, U., & Nolin, J. (2019). Using an infrastructure perspective to conceptualise the visibility of school libraries in Sweden. *Information Research, 24(*3), 831. http://InformationR.net/ir/24-3/paper831.html

Darmawanti, S., & Usman, H. (2019). *The effectiveness of academic supervision by school principals.* In: Innovative Teaching and Learning Methods in Educational Systems (pp. 12-17). Routledge. https://doi.org/10.1201/9780429289897-2

Eni, N. N. (2018). Use of library resources by secondary schools in Oshodi Local Government Area of Lagos State, Nigeria. *Sustainable Human Development Review, 10*, 1-4. https://bit.ly/3yK5eFj

Gbotosho, A. S., & Adejumo, A. A. (2019). Strategies for the effective utilisation of the school library resources by junior secondary schools in Ilesa west local government education authority, Ilesa in Osun State, Nigeria. *Journal of Library and Information Sciences, 7*(2), 24-33. https://bit.ly/3iPifbi

Hansen, D. A., & Johnson, V. A. (2013). *Classroom lesson strategies and orientations toward work*. In Adolescence and work (pp. 81-106). Routledge.

Haynes, S. N., Richard, D., & Kubany, E. S. (1995). Content validity in psychological assessment: A functional approach to concepts and methods. *Psychological assessment*, *7*(3), 238. https://doi.org/10.1037/1040-3590.7.3.238

Ibegbulem, K. (2021). Influence of gender on hours of supervised library use on students' performance in senior secondary schools in Imo State. *Library Philosophy and Practice (e-journal)*, *2021*, Article 5829. https://digitalcommons.unl.edu/libphilprac/5829

Igwebuike, E. U., & Agbo, A. D. (2017). Strategies for effective utilization of library resources and services by distance education students in National Teachers Institute in Enugu State, Nigeria. *Journal of Applied Information Science and Technology, 10*(2), 110-116.

Iremeka, F. U., Ezenwaji, I. O., & Ezenwaji, C. O. (2021). Roles of Parent-Teacher Association in the Management of School Library. *Library Philosophy and Practice (e-journal)*, 2021, Article 5693. https://digitalcommons.unl.edu/libphilprac/5693/

Izuchukwu, A. C., & Furfuri, I. M. (2021). Organization of school library resources using in-house classification scheme in Nsukka Education Zone, Enugu State, Nigeria. *Library Philosophy and Practice (e-journal)*, 2021, Article 4906. https://digitalcommons.unl.edu/libphilprac/4906/

Jamil, M., Mustafa, G., & Ilyas, M. (2018). Impact of school infrastructure and pedagogical materials on its academic performance: Evidence from Khyber Pakhtunkhwa. *FWU Journal of Social Sciences, 12*(1), 42-55. https://bit.ly/3g7imNz

Jamil, M., Tariq, R. U. H., & Jamil, S. (2013). Library resources: Utilization by teachers and students. *Bulletin of Education and Research, 35*(2), 19-35. https://bit.ly/3AHuHQk

Jean, B. (2021). School library facilities and students' academic performance in secondary schools in Nyamasheke District-Rwanda. *Journal of Education, 4*(1), 112-126. https://stratfordjournals.org/journals/index.php/journal-of-education/article/view/734

Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, *28*(4), 563-575. https://doi.org/10.1111/j.1744-6570.1975.tb01393.x

Lee, Y. A., & Takahashi, A. (2011). Lesson plans and the contingency of classroom interactions. *Human Studies, 34*, 209-227. https://doi.org/10.1007/s10746-011-9181-1

Liebowitz, D. D., & Porter, L. (2019). The effect of principal behaviours on student, teacher, and school outcomes: A systematic review and meta-analysis of the empirical literature. *Review of Educational Research, 89*(5), 785-827. https://doi.org/10.3102/0034654319866133

Loh, C. E. (2020). A nationwide study of principals, school media library coordinators and teachers' perspectives of their school libraries (School Library Perspective study). Office of Education Research, National Institute of Education, Singapore.

Madondo, F. (2021). Perceptions on curriculum implementation: A Case for rural Zimbabwean early childhood development teachers as agents of change. *Journal of Research in Childhood Education, 35*(3), 399-416. https://doi.org/10.1080/02568543.2020.1731024

Madukwe, E. C., Owan, V. J., & Nwannnunu, B. I. (2019). Administrative networking strategies and principals' supervisory effectiveness in secondary schools in Cross River State, Nigeria. *British Journal of Education*, *7*(4), 39–48. https://doi.org/10.5281/zenodo.4458671

Mangendi, D. (2019). Influence of understaffing of teachers on teaching and learning in public primary schools in Makueni Sub-County, Makueni County, Kenya. PhD Dissertation, (University of Nairobi), Kenya. https://bit.ly/3sk1AzA

Muhonen, H., Pakarinen, E., Poikkeus, A. M., Lerkkanen, M. K., & Rasku-Puttonen, H. (2018). Quality of educational dialogue and association with students' academic performance. *Learning and Instruction, 55*, 67-79. https://doi.org/10.1016/j.learninstruc.2017.09.007

Ng'entu, S. (2019). Tutors' lesson preparation in the implementation of integrated literature at public primary teacher training colleges in Kenya. *International Journal of Linguistics, Literature and Translation, 2*(5), 359-365. https://doi.org/10.32996/ijllt.2019.2.5.41

Odigwe, F. N., Bassey, B. A., & Owan, V. J. (2020). Data management practices and educational research effectiveness of university lecturers in South-South Nigeria. *Journal of Educational and Social Research*, *10*(3), 24–34. https://doi.org/10.36941/jesr-2020-0042

Ogbebor, O. (2011). Library resources and their role in education. https://cutt.ly/wn8gPfn

Owan, V. J., & Agunwa, J. N. (2019). Principals' administrative competence and teachers' work performance in secondary schools in Calabar Education Zone of Cross River State,

Nigeria. *Humanities and Social Sciences Letters*, *7*(1), 20–28. https://doi.org/10.18488/journal.73.2019.71.20.28

Owan, V. J., & Ekpe, M. B. (2019). Disciplinary management in public primary schools and teachers' job effectiveness in Yakurr Local Government Area, Cross River State, Nigeria. *World Journal of Vocational Education and Training*, *1*(1), 1–10. https://doi.org/10.18488/journal.119.2019.11.1.10

Owan, V. J., Duruamaku-dim, J. U., Ekpe, M. B., Owan, T. J., & Agurokpon, D. C. (2019). School characteristics and secondary school teachers' work effectiveness in Abi Local Government Area of Cross River State. *American Journal of Education and Information Technology*, *3*(1), 25–31. https://doi.org/10.11648/j.ajeit.20190301.15

Owan, V. J., Egbula, E. O., Mbon, U. F., Arop, F. O., Asuquo, M. E., Nwannunu, B. I., & Okon, J. E. (2020). Principals' leadership variables and undergraduates attitudes towards practicum exercise in secondary schools. *The Journal of Social Sciences Research*, *6*(6), 659–669. https://doi.org/10.32861/jssr.66.659.669

Özdemir, N. (2019). Principal leadership and students' achievement: Mediated pathways of professional community and teachers' instructional practices. *KEDI Journal of Educational Policy, 16*(1), 81-104.

Reynolds, D. (2018). *Using school effectiveness knowledge for children with special needs– the problems and possibilities*. In: towards inclusive schools? (pp. 109-126). Routledge. https://doi.org/10.4324/9780429469084-9

Sabwami, K. M., Areba, G. N., & Abenga, E. (2020). Effect of principals' practices of transformational leadership on the management of school financial resources in public secondary schools of Trans-Nzoia County, Kenya. *International Journal of Education and Research*, *8*(7), 145-160. https://bit.ly/3jX1c6j

Sanchez, J. E., Usinger, J., & Thornton, B. (2019). Perceptions and strategies of a middle school principal: A single case study of school change. *Middle School Journal, 50*(1), 24-32. https://doi.org/10.1080/00940771.2018.1550374

Sebastian, J., & Allensworth, E. (2012). The influence of principal leadership on classroom instruction and student learning: A study of mediated pathways to learning. *Educational administration quarterly, 48*(4), 626-663. https://doi.org/10.1177/0013161X11436273

Sibomana, I. (2020). Perceptions of teachers on the instructional leadership behaviours of secondary school principals in Rwanda. *Educational Management Administration & Leadership,* Article 174114322093836. https://doi.org/10.1177/1741143220938365

Sr, N., Norshahira, O., & Lukman, Z. M. (2021). Content Validity of Drug Addiction Recovery Test Instruments Using Content Validity Ratio (CVR) Method. *Journal of Drug Delivery and Therapeutics*, *11*(4), 24-29. https://doi.org/10.22270/jddt.v11i4.4949

Wynd, C. A., Schmidt, B., & Schaefer, M. A. (2003). Two quantitative approaches for estimating content validity. *Western journal of nursing research*, *25*(5), 508-518. https://doi.org/10.1177/0193945903252998