CASE REPORT

Case report: Curriculum management practices by head of schools: empirical evidence from secondary schools in the Nnewi Education Zone

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The curriculum management strategies of highly experienced and less experienced secondary school principals were compared in this study. The study was guided by a single research topic, and a null hypothesis was tested at the 0.05 level of significance. The study was conducted using a descriptive survey research approach. The participants in this study were 106 secondary school principals and vice principals from 44 public secondary schools in the Nnewi Education Zone. Because the research population was manageable, no sampling was done. As a result, the study's population size was made up of 106 secondary school principals and vice principals. Data was collected using a questionnaire produced by a researcher called the Curriculum Management Practice Scale. Two professionals independently verified the tool. Cronbach alpha was employed to examine the instrument's internal consistency, and reliability values of 0.75 were obtained. The researcher and five research assistants used direct administration to collect data for the study. There was a 100% return rate. The study question was answered using arithmetic mean and standard deviation scores, and the null hypothesis was tested using a *t*-test at the 0.05 level of significance. The study's findings indicated that there is no discernible difference in the curriculum management techniques of highly experienced and less experienced secondary school principals. Most school heads do a review of all course curricula and hold meetings to establish what type of extra-curricular activities are required. The study's implications and findings were drawn.

Keywords: curriculum management practices, heads of secondary schools, highly experienced, less experienced

Introduction

The organization is the school, and the administrators are the managers. The principals are entrusted with the responsibility of managing efficiently and effectively to achieve the school's objectives. Previous research has found that competent management and leadership are the most important aspects in determining an organization's success (1–3). Leadership is the science of management. It refers to a collection of ideas and techniques that, when understood and applied, may help most leaders improve their effectiveness. Even exceptional leadership is diminished in scale without management because aspects of that leadership pattern are not repeatable by successive organizational generations.

It's tough to learn from mistakes if you don't have the opportunity to replicate them. As a result, educational leaders are prone to repeating the same mistake each time a comparable situation arises. While leadership changes, management practices stay consistent. Long-term school system improvement is thus a process of influencing the organization's core management practices (4).

The curriculum of a school system specifies the expected outcomes (student learning) as well as the content that will be taught. As a result, the curriculum works in a similar way to a budget when it comes to limited resources (5). The curriculum is a reaction to the limited amount of formal education time available for learning and the almost infinite amount of material or content that might be included in

any school program. Furthermore, the curriculum is an organizational reaction to lower the degree of material and time variance, both laterally (within the same grade levels) and horizontally (among other grade levels) (across grades). A curriculum is a collection of planned, standards-based activities in which students put their knowledge and skills into practice (6). In terms of what is necessary for effective teaching and learning, the curriculum acts as a unifying guide for all instructors, ensuring that all students have access to rigorous academic experiences. The organization, structure, and goals of a curriculum are intended to enhance student learning and simplify education (7). The fundamental objectives, strategies, tools, and evaluations must be included in the curriculum if it is to effectively support instruction and learning.

The why, what, and how of education are all addressed by the curriculum. In other words, it is concerned with the instructional goals and objectives as well as the content, structure, and assessment (8). The creation and execution of entrepreneurship education is shaped by these curricular aspects. According to Pepin et al. (9), the most important part of curricular practice is implementation, which they define as the actual hatching of the intended curriculum. Curriculum management is the most prevalent issue in the education industry. Curriculum management entails the creation of methods and technologies that improve the efficiency and capability of educational management (10). It demonstrates a number of approaches aimed at increasing a school's efficacy in completing tasks that must be completed. Curriculum management has an impact on school productivity; hence, it is vital for any school organization's success to manage it successfully. Curriculum management is a collection of actions that entails organizing the content of educational programs, distributing instructional resources, and monitoring and directing learning processes to accomplish certain outcomes (11). The educational programs at the school level are created in response to the requirements of the students. The curriculum managers are the school administrators who are responsible for assuring excellent instructional delivery through different strategies (12). Subject heads are involved in the provision of teaching materials, such as textbooks, curriculum implementation guidelines, and other instructional materials that shape curriculum activities. Principals manage the school's curriculum by involving subject heads in the provision of teaching materials, such as textbooks, curriculum implementation guidelines, and other instructional materials that shape curriculum activities.

Curriculum management comprises putting the officially prescribed/designed curriculum, which takes the shape of courses of study, syllabuses, and topics, into practice. Curriculum management entails assisting the student in gaining information or experience (13). It is critical to understand that curriculum management is impossible without the participation of students and instructors. As

a result, the learner is at the center of the curriculum implementation process. As the major role-players in promoting excellent education, school leaders' ability is critical for successful administration and implementation of any curriculum reform. Inadequate curriculum implementation training, a lack of expertise, and standards for curriculum administration have been a problem for most school heads, particularly in the Nnewi Education Zone. Against this background, the following research question was formulated to guide the study: What are the curriculum management practices adopted by highly experienced (HE) and less experienced (LE) heads of secondary schools in the Nnewi Education Zone?

Research hypotheses

The following hypothesis was formulated to guide the study:

> H_1: There is no significant difference between the curriculum management practices of HE and LE heads of secondary schools in the Nnewi Education Zone.

Methodology

The research strategy was descriptive, and the method employed was the survey method, based on the specific goal of the study. The survey technique was used to collect data at a certain point in time with the goal of explaining the nature of current situations, setting standards against which current conditions may be compared, or finding the linkages between specific occurrences. This research was conducted in Anambra State's Nnewi Education Zone. Ekwusigo, Ihiala, Nnewi North, and Nnewi South Local Government Areas make up the zone. The population of this study was comprised of 106 secondary school principals and vice principals in the 44 public secondary schools in the Nnewi Education Zone of Anambra State (PPSSC, Anambra State, 2022). No sampling was done because of the manageable size of the study population. Hence, 106 secondary school principals and vice principals constituted the sample size for the study.

A self-structured questionnaire was utilized as the study's instrument. There were two components to the instrument. Section A comprises demographic information on respondents, which is organized by employment experience as a school principal/vice principal, and Section B has a questionnaire with responses to the study topic. To examine the impact of principal/vice principal experience on perceived curriculum management methods, individuals with fewer than 5 years as a school head were defined as LE, while those with 5 years or more were classed as HE. School heads who have worked for 5 years and above were

considered HE because they are expected to have completed some relevant school-related task during this time. The format adopted was a four-point scale of strongly agree (SA = 4 points), agree (A = 3 points), disagree (D = 2 points), and strongly disagree (SD = 1 point). The four-point Likert scale was considered most ideal in the present study due to the researchers' need for the specific opinion of heads of secondary schools. Additionally, the answers can be simply quantified and are calculable with simple mathematical analysis. The overall theme of the questions was curriculum management practices by Nnewi Education Zone principals.

The instrument was validated by two specialists, one from Educational Psychology at Nwafor Orizu College of Education Nsugbe, and the other from Curriculum and Instructional Technology at Nwafor Orizu College of Education Nsugbe. The changes were implemented, and the instrument was deemed suitable for the research. The tool was trial-tested with 10 instructors who were not involved in the main study. They were given copies of the questionnaire to complete, and these were collected right away. The questionnaire's components were reshuffled and rearranged before being given to the same teachers 2 weeks later. The Cronbach's Alpha Estimation Technique was used to gather and test them, yielding a score of 0.75. This shows that the gadget is trustworthy. The data for the study was collected by the researcher with the support of five research assistants who are secondary school teachers in Anambra State. A total of 106 questionnaires were distributed, with a 100% response rate. The study questions were answered using mean and standard deviation, and the hypotheses were tested using the t-test. The study questions were chosen based on the idea of real limits of the mean, which accepts values of 2.5 and higher. When testing the null hypotheses, the null hypothesis was rejected if t-calculated was equal to or higher than t-critical at the 0.05 level of significance, but not if it was not.

Results

The aim of this study was to evaluate the curriculum management practices adopted by high heads of secondary schools in the Nnewi Education Zone. The researcher presents and discusses the study's findings in this part.

> Research Question 1: What are the curriculum management practices adopted by heads of secondary schools in the Nnewi Education Zone?

Table 1 shows the curriculum management practices adopted by HE and LE heads of secondary schools; the results showed that school heads organize the instructional materials and resource providers and developers in their schools (HE = 3.70, LE = 3.43). The school heads also examine the curriculum for every course and hold meetings to ascertain what kinds of extracurricular activities are

required (HE = 3.56, LE = 3.64); the respondents disagreed in terms of producing cautionary ideas and communication of observational findings with team leader instructors and other teachers (HE = 1.97, LE = 1.93).

In general, item numbers 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, and 14 yielded a mean score of 3.02, 3.37, 3.25, 3.56, 2.68, 2.93, 3.18, 3.70, 3.14, 3.41, 3.20, 3.33, and 2.87 and a standard deviation of 1.11, 0.70, 1.18, 1.02, 1.00, 0.92, 0.97, 0.79, 0.87, 1.08, 1.04, 1.09, and 0.67 and thus were accepted, while items 11 and 15 yielded a mean score of 11 and 15. Further, 1.97 and 1.70 and a standard deviation of 1.25 and 1.06 were rejected by HE school heads. However, items 1, 2, 3, 4, 6, 7, 8, 9, 10, 13, and 14 with a mean score of 3.19, 3.48, 3.37, 3.64, 3.47, 2.88, 3.43, 3.02, 3.45, 3.36, and 2.55 corresponding to standard deviation of 1.07, 0.68, 1.11, 0.94, 0.83, 0.49, 0.75, 0.88, 1.07, 1.06, and 0.93 were accepted while items 5, 11, 12, and 15 were rejected by LE school heads with a mean score of 1.72, 1.93, 2.26, and 1.60 and a standard deviation of 1.03, 0.87, 1.01, and 0.91, respectively.

> Hypothesis I: There is no significant difference between the curriculum management practices by HE and the LE heads of secondary schools in the Nnewi Education Zone.

According to the data in **Table 2**, there is no difference in the curriculum management techniques of HE and LE school heads. The estimated t-value of 0.707, which is not significant at the 0.05 level of probability, demonstrates this. The null hypothesis, that there is no substantial difference in curriculum management techniques between HE and LE secondary school heads in the Nnewi Education Zone, is accepted. As a result, the findings reveal that there is no substantial difference in curriculum management strategies between HE and LE school leaders.

The curriculum management strategies used by secondary school heads were compared in **Figure 1**. The outcome demonstrated that monitoring what students are supposed to learn, assessing whether or not it was taught, and looking for methods to enhance student learning are all linked duties of HE school leaders. In doing so, they frequently remind the instructors of the program's goals, aims, and objectives at the start of the academic year and assess the opportunities during the execution of the curriculum through the team of instructional material and resource providers. This outcome is related to the report by Beinert et al. (14) who observed that such practices will minimize various mismatches between teaching practices and curriculum goals. The outcome also showed that highly skilled secondary school heads communicate with instructors about their observations, choose an assessment strategy for curriculum implementation, assess student evaluation outcomes, and compare those findings to the curriculum's goals. This, according to Handelzalts (15), places the teachers at the forefront of improving the curriculum since they are the key players in all of its implementation.

TABLE 1 | Mean and standard deviation on the curriculum management practices adopted by heads of secondary schools.

Nos.	Items	Highly experienced			Less experienced		
		$\bar{x}$	SD	Dec.	$\bar{x}$	SD	Dec.
1	I monitor and analyze scientific research and advancements in the field of education.	3.02	1.11	A	3.19	1.07	A
2	I consider my school's opportunities in light of the curriculum's goals.	3.37	0.70	A	3.48	0.68	A
3	I create a curriculum management plan with the assistance of instructors and administrative assistants.	3.25	1.18	A	3.37	1.11	A
4	I examine the curriculum for every course and hold meetings to ascertain what kinds of extracurricular activities are required.	3.56	1.02	A	3.64	0.94	A
5	At the start of the academic year, I remind the instructors of the program's goals, aims, and objectives and prompt discussion.	2.68	1.00	A	1.72	1.03	R
6	I contrast the program's skill and competency domains with the expertise of the teachers.	2.93	0.92	A	3.47	0.83	A
7	During the process of implementing the curriculum, I strive to learn about the potential for the school.	3.18	0.97	A	2.88	0.49	A
8	I lead the group that develops and provides resources and instructional content.	3.70	0.79	A	3.43	0.75	A
9	Together with the "instructional material and resource supplier and developer" team, I create a working strategy.	3.14	0.87	A	3.02	0.88	A
10	Due to the program of guiding to implementation and supervision, I see each lesson being taught.	3.41	1.08	A	3.45	1.07	A
11	I produce cautionary ideas and communicate my observational findings with team leader instructors and other teachers.	1.97	1.25	R	1.93	0.87	R
12	I choose the methodology for evaluating how well the program is being used.	3.20	1.04	A	2.26	1.01	R
13	I use the assessment techniques to determine if the program's overall strategy is appropriate.	3.33	1.09	A	3.36	1.06	A
14	I examine student performance on assessments and evaluations and compare it to the program's objectives.	2.87	0.67	A	2.55	0.93	A
15	I evaluate the tools and materials' quantitative and qualitative suitability for the teaching process.	1.70	1.06	R	1.60	0.91	R
	Cluster mean	3.02	0.98	A	2.89	0.91	A

R, rejected; A, accepted; SD, standard deviation; Dec., decision; $\bar{x}$ mean.

Discussion of findings

The goal of the study was to learn about the curriculum management strategies used by secondary school principals in the Nnewi Education Zone. The majority of school leaders are found to arrange the instructional content as well as the resource suppliers and developer team. To explain this, according to Merkwae (16), instructional materials increase students' attention and engagement. As a result, resource providers and developers play a critical role in developing modular teaching tools that can be broken down into sections, reorganized, or have portions removed or added without jeopardizing the curriculum's content. In terms of extracurricular activities, most school heads do a review of all course curricula and hold meetings to establish what kinds of extracurricular activities are required. This is similar to the findings of Boehler et al. (17), who found that reviewing all of the course curricula might give insights and an analysis of successful programs to help schools improve their curriculum implementation. v-Swingler et al. (18) also established a strong relationship between

TABLE 2 | *t*-test analysis on difference between the curriculum management practices by highly experienced and the less experienced heads of secondary schools in the Nnewi Education Zone.

School types	n	$\bar{x}$	SD	*t*-cal	*t*-crit	df	sig.	Dec.
Highly experienced	58	3.02	0.98					
				0.707	1.983	104	0.05	Not sig.
Less experienced	48	2.89	0.91					

curricular, co-curricular, and extra-curricular activities and curriculum implementation.

As part of their curriculum management procedures, school leaders collaborate with administrative assistants and instructors to create a curriculum management plan. According to Tirado and Barriga (19), an effective curriculum management plan increased assurance of compliance with the quality framework and clarified what will constitute success in relation to module and provision outcomes, allowing students to better understand the link between monitoring and their ability to achieve learning outcomes. There is evidence to support frequent student assessment
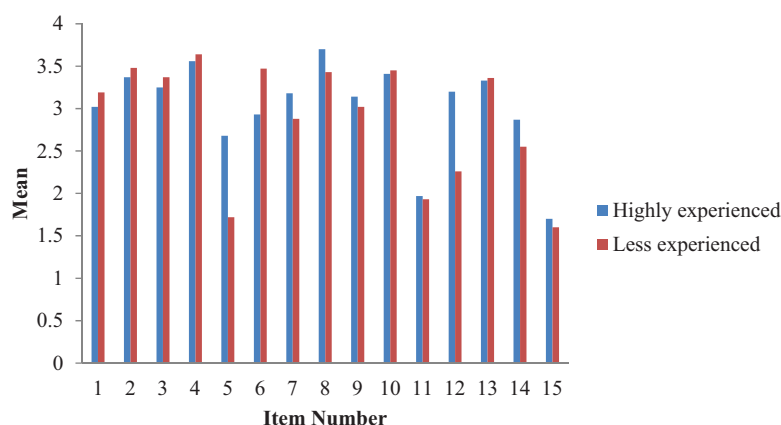
FIGURE 1 | Comparing the curriculum management practices adopted by highly experienced and less experienced heads of secondary schools.

and evaluation findings, as well as comparisons to curricular goals in the study area. According to Kurangi et al. (20), this crucial practice aids strategy execution through curriculum design and administration. Although experienced school leaders choose the assessment approach for curriculum implementation, this practice is not well received by LE school leaders. The explanation for this gap might be due to the fact that well-known models are used in many domains of evaluation, and LE school leaders may not have a thorough understanding of the models (21).

Conclusion

The current study aimed to identify the curriculum management practices used by HE secondary school heads in the Nnewi Education Zone. The findings revealed that there is no difference in the curriculum management practices used by HE and LE school heads. The study's findings suggest that certain school heads' management approaches differ slightly (HE = 0.98, LE = 0.91). This might be attributed to the fact that some school leaders lack expertise and experience in the implementation of curriculum management initiatives. However, to increase their expertise in curriculum management, school leaders should strive for continual professional development and conduct lifetime learning. The study also reveals that the school's current curriculum management techniques may have an impact on students' academic progress.

The current study found that, for a variety of reasons, there is a large gap in the use of the research that is currently available on the curriculum management strategies used by HE and LE heads of secondary schools. Further research is required to get a deeper understanding of the situation and come up with solutions. Additionally, teachers' continued participation in studies on curriculum implementation strategies is recommended. Their viewpoints are crucial for recognizing the problems and potential curriculum implementation solutions. The government should

standardize the teacher development program, and school curriculum administrators should work with teachers, school committees, parents, and guardians to properly execute the curriculum.

Author contributions

CN: study conceptualization and design, data collection, analysis and result interpretation, and manuscript preparation.

Acknowledgments

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