

Curriculum Implementation for Knowledge Management in Nigerian Teacher Education Process

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Abstract

The study investigated curriculum implementation and knowledge management in Nigerian teacher education process. The objective was to determine the extent of knowledge management in teacher education process in Nigeria. Two research questions were answered and one hypothesis tested. The study adopted descriptive survey design with a population of 226 lecturers in the Faculty of Education, Prince Abubakar Audu University, Anyigba, Kogi State and Rivers State University, Port Harcourt. A sample size of 80 lecturers was drawn using the proportionate stratified random sampling technique. The instrument for data collection was an 18- item questionnaire validated by three experts and it gave a reliability coefficient of 0.72 which was obtained using Cronbach Alpha method. The data collected was analyzed with mean and standard deviation and z-test for the hypothesis. The findings showed adequate management support for lecturers in North Central and inadequate management support for lecturers in the South-South and it was also revealed that there was poor provision of resources as perceived by male and female lecturers in teacher education process in Nigeria. It was then concluded that more work was required to boost management support for curriculum implementation in teacher education process, especially, in the South-South Nigeria.

Keywords: Curriculum Implementation, Knowledge Management, Teacher Education

Introduction

Curriculum implementation could be viewed as that process that involves the teacher and the learner cooperatively interacting, negotiating and discussing a concept in order to adjudge that the teacher has taught and that the learner has learnt. Curriculum implementation may also be perceived as what the teacher and the students do with the curriculum document. Amadioha (2010) says it is the activation of the curriculum document in order to give it life. It was also established that it is a process/pattern of following the order curriculum experts and subject specialists have planned and suggested in order to actualize classroom experience of the learner. Meanwhile, Jeremiah & Alamina (2017) had said that curriculum implementation is the real engagement of learners with planned learning activities that teachers and learners are involved in order to promote learning in the learner. This perhaps, is the reason (Akor, 2021) asserted that curriculum implementation is what the teacher and the learners do in a classroom setting to bring about learning and improvement in the learning experience of a learner when exposed to a learning experience.

Again, this process of curriculum implementation confirms the authenticity of the curriculum document, otherwise, it may be open to reform, review, improvement or outright discard. Hence, the need for the management of knowledge in order to ensure that the interaction process between the teacher and the learner is beneficial to both and even more to the society. This is so because the extent to which curriculum experts know is the extent to which knowledge and skills would be made available to the society through the learner under the custody of the teacher (school). Invariably, curriculum implementation here represents a knowledge management channel by which the teacher who in this case is like a salesman is able to effectively and efficiently market the institution being represented to either raise her potentials or drain her potentials, thus, knowledge management is key to curriculum implementation in a school.

Knowledge management is a skill adopted in an establishment to obtain, arrange, disseminate and analyze knowledge such that it is accessible to end users. Robinson (n.d.) says that knowledge management is knowledge mining and aimed at making it easily accessible for use. It is the process of identifying, organizing, storing and passing information within an organized setting. This is because it encourages accessibility, adequate time management and attainment of desired outcome. According to Kaur (2022) knowledge management deals with the creation, identification, and management of knowledge in an organization, tilting it towards effectiveness and efficiency among the users. This conveys that knowledge management develops knowledge and skills for creativity in the users, for organizing, identification, analysis, and utilization of accessible knowledge towards solving the problems of the society through cooperation and collaboration.

When the otherwise happens, there is likely to be the challenge of under-utilization both of human and material potentials in an institution. Perhaps, this can one define knowledge management as the structuring, retaining, and dissemination of knowledge and experience to end users in an establishment. This presents the idea of knowledge management as a deliberate effort towards maximizing team effort for achieving success on any desired objective attainment in order to avert

redundancy, dormancy or siloed potentials. It was further said that knowledge management comes under three purviews as- accumulation of knowledge, storing of knowledge and dissemination of knowledge. This means that institutions like the school must store knowledge that has made it qualitative, encouraging learning and development, and crating environments favourable to information dissemination.

Some examples of knowledge types to create, identify, store and disseminate are: explicit knowledge, implicit knowledge, tacit knowledge. This is because each of these knowledge type play a role in bringing about innovation, development of decision making skills, leads to competitive advantage, drive value, reduce operational cost, reduced time to build competence, reduced time to find information etc. Next, it was added that other examples of knowledge could be as declarative, procedural, posteriori and priori knowledge types. Moreso, that knowledge management lead to efficiency, increased collaboration, improved quality of information, optimized training, enhanced communication etc. Most of these features bear semblance and could seamlessly fit into the desired characteristics in a classroom management situation.

Classroom management is the act displayed by a teacher to ensure that teaching and learning takes effect in the classroom environment. It could also represent what the teacher does to make sure that there is order, learner engagement and learning in the class. Igbokwe (2009) says that classroom management is a situation where a teacher creates an atmosphere which would encourage order and promotes learning among the learners in a classroom. Thus, the teacher has the responsibility of ensuring orderliness as well as learning among the learners. So, the teacher does the job of a catalyst. This is perhaps the reason (Scrivener, 2005) had said that classroom management is a process of creating acceptable environment which would support learning. The implication is that one step must be maintained before learning can take place, otherwise, there would not be learning at all. Igbokwe (2009) further added that the act of classroom management also requires the teacher to do controlling in the place of learning, learning materials as well as the things the students do.

Hence, classroom management is an active process that the teacher trainer in the teacher training process must model for the teacher trainee to learn from. Particularly, this occurs when the teacher is deliberate at putting forward steps just to ensure the teaching and learning process produces result (Akor, Ugboja & Okonny, 2023). The essence of the intentional nature of the classroom management process in a teacher education process is for it to bring about desired output in the learners who are teachers in training and expected to be teachers in the future.

Teacher education is a professional process of exposing teachers in training to learning experiences that would make them to be certified to teach by the end of the training programme. Akor, Ugboja and Okonny (2023) say it is an act in professional preparation towards developing people through exposure to knowledge and skills needed to make them qualified teachers in the society. While Akor, Okonny and Pepple (2023) say that the teacher education process also prepares teachers both in personality and skills in order to make them ready for the teaching profession. This is so as Perraton (2010) had said that a true teacher education programme must bear these elements

below: improving general education backgrounds, increasing their knowledge and understanding of the subject they would teach in terms of pedagogy, and understanding of children and learning, development of practical skills and competence among others. So, a teacher education process should embody all these in full; especially that one carried on in the university.

The university is a place of tertiary education. A type of education received after secondary school education either on site or by correspondence (FRN, 2016). Akor (2021) defined the university as a place of higher learning where students obtain degrees and certificates in the end. One of the many goals it pursues is:

- i. Intensifying and diversifying its programme for the development of high level manpower within the context of the needs of the nation.

This seems to convey that this level of education would be in a position to educate people to function fully and normally in the society. But this would be difficult if those in training have not been exposed to the right knowledge and skills or even that which is adequate to enable them act in the desired manner fully in the society, however, in the case of an otherwise situation, the curriculum implementation process and the knowledge management skills of their lecturers and institution need to be questioned.

For decades, there have been the challenge of people graduating from school, for emphasis, teacher education programme and, particularly, from universities and are not able to find jobs. So landing a job upon graduation has been difficult, thus, compounding the problem of unemployment. One then begins to wonder what is responsible and when interviewed, most of the job seekers are not able to defend the certificate they hold; being poor and wanting when it comes to knowledge gained and skills acquired; a situation that leaves them as non or poor problem solvers who lack critical thinking ability and unable to solve immediate societal problems even after having been adjudged qualified and certified which would be contrary to the expectation of being self-reliant as would be desired of a graduate. This observation, after thorough review revealed that there is a disconnect that exists between the content received, how it is applied and what it is meant to deal with? (Amadioha & Akor, 2020). Therefore, the question on the lips of the researchers at this juncture is: At what point of knowledge management in the preparation process did the said disconnect happen? Hence, the study curriculum implementation for knowledge management in Nigerian teacher education process. Specifically, the study sought to achieve the following objectives:

1. Determine the extent of management support in curriculum implementation for knowledge management in Nigerian teacher education process.
2. Determine the extent of resource utilization among male and female lecturers in curriculum implementation for knowledge management in Nigerian teacher education process.

These research questions guided the study:

1. What is the extent of management support in curriculum implementation for knowledge management in Nigerian teacher education process?

2. What is the extent of resource utilization among male and female lecturers in curriculum implementation for knowledge management in Nigerian teacher education process?

This hypothesis was postulated to guide this study ($P = 0.05$):

1. There is no significant difference between the extent of resource utilization among male and female lecturers in curriculum implementation for knowledge management in Nigerian teacher education process.

Research Method

The study was carried out in Nigeria, particularly, in Prince Abubakar Audu University (North Central) and Rivers State University (South-South). The study adopted descriptive survey design. The population for the study was 226 lecturers in faculty of education of the two universities (106 and 120) while the sample size for the study was made up of 80 lecturers who were drawn using the proportionate stratified random sampling technique from different departments of the faculty of education in the two institutions. The instrument used by the researchers for data collection was a questionnaire titled: Questionnaire on Lecturers' Perception on the Extent of Curriculum Implementation for Knowledge Management in Nigerian Teacher Education Process (QLPECIKMNTEP) which was constructed by the researchers. It consists of 18-items which were arranged in two sections A and B. Section A contains the biodata, while section B consists of two subgroups: extent of management support for curriculum implementation and extent of utilization of resources for curriculum implementation. The questionnaire was built on a modified four-point Likert Scale, namely: Very High Extent (VHE), High Extent (HE), Low Extent (LE) and Very Low Extent (VLE) and the levels of responses are weighted as 4, 3, 2, 1 respectively.

The instrument was face validated by three experts, one from Measurement and Evaluation Unit, one from Curriculum and Instruction unit and another one from Educational Technology unit, all from of the Department of Educational Foundations, Faculty of Education, Prince Abubakar Audu University, Anyigba, Kogi State and Rivers State University. The suggestions given were used in producing the final copy of the instrument. Cronbach alpha was used in calculating the reliability to determine the internal consistency which gave an alpha value of 0.72 which was considered high after 10 copies of the questionnaire was administered on lecturers Ignatius Ajuru University of Education, Port Harcourt. The instrument was thereafter administered and collected by the researchers. The data obtained were analyzed using mean and standard deviation for answering the research questions and the hypothesis tested using z-test. Hence, $4+3+2+1=10/4=2.5$. Therefore, items whose mean were less than 2.5 were seen as low extent (LE) responses while those whose mean were 2.5 and above were seen as high level (HE) responses. The decision rule on the null hypotheses was to reject the hypothesis with calculated Z-value greater than the critical Z-value but otherwise accept.

Results

Research Question 1: What is the extent management support in curriculum implementation for knowledge management in Nigerian teacher education process?

Table 1: Mean and Standard Deviation on Extent of Management Support in Curriculum Implementation for Knowledge Management in Nigerian Teacher Education Process

S/ N	Items	North Lecturers		Central	South-South Lecturers			N
		Mean	SD	Remark	Mean	SD	Remark	
1.	Information is adequately disseminated in the university to help in curriculum implementation	3.2	1.9	HE	3.4	1.44	HE	80
2	Information is disseminated promptly all the time to help in curriculum implementation	3.1	1.3	HE	3.2	1.9	HE	80
3	There is free flow of information through hierarchical order to help in curriculum implementation	3.2	2.37	HE	2.1	0.95	LE	80
4	University policies are firm sources of management support to enhance curriculum implementation	3.5	1.58	HE	3.0	1.41	HE	80
5	There is provision of opportunities for academic staff training regularly to help curriculum implementation	3.2	1.9	HE	1.9	1.3	LE	80
6	Management support help in mapping out strategies that enhance curriculum implementation	3.5	2.12	HE	3.3	1.45	HE	80
7	Management support encourage instructional	3.3	2.02	HE	3.5	1.58	HE	80

	planning that does not waste time								
8	Management support encourage instructional activities that does not waste resources	3.2	2.37	HE	3.4	1.55	HE	80	
9	Management support covers provision for practical oriented curriculum implementation	3.4	1.55	HE	1.7	1.45	LE	80	
10.	There are monitoring units as management support for curriculum implementation	3.2	2.37	HE	1.8	1.9	LE	80	
11	Management support emphasize use of curriculum implementation as a means for conducting researches	3.2	1.9	HE	1.7	1.45	LE	80	
	Information is adequately disseminated in the university to help in curriculum implementation	3.27	1.94		2.63	2.39			

Source: Field Survey, 2024

The result on table 1 above showed the responses of the respondent on management support in curriculum implementation and knowledge management in teacher education process in the university. The result indicated that while all the items on the questionnaire was were said to be at high extent for lecturers in the North Central, those in South-South had low extent for free flow of information through hierarchical order, opportunities for academic staff training, provision for practical, monitoring units support and curriculum implementation process not being used as a basis for research with mean (2.1, 1.9, 1.7, 1.8 and 1.7). in the North Central the highest mean was obtained with the university policies being firm source of management support, mapping out strategies followed by management support covering practical oriented for curriculum implementation with mean (3.5, 3.5 and 3.4). Thus, the South-South university management needs to bring a lot of improvement in its management support system.

Research Question 2: What is the extent of resource utilization among male and female lecturers in curriculum implementation for knowledge management in Nigerian teacher education process?

Table 2: Mean and Standard Deviation on Extent of Resource Utilization Among Male and Female Lecturers in Curriculum Implementation for Knowledge Management in Nigerian Teacher Education Process

S/N	Items	Male Lecturers			Female Lecturers			N
		Mean	SD	Remark	Mean	SD	Remark	
1.	There is adequate allocation of human resources in the university	3.2	1.61	HE	3.0	1.55	HE	80
2	There is adequate allocation of material resources	1.4	1.26	LE	1.2	1.55	LE	80
3	Workshops are held where lecturers learn how to develop instructional resources/materials	2.2	2.47	LE	1.3	1.28	LE	80
4	There are adequate laboratories to conduct experiments	1.4	1.55	LE	1.2	1.55	LE	80
5	Request for provision of learning resources does not suffer beaurucracy	1.2	1.55	EL	1.0	1.45	LE	80
6	Field trip opportunities are easily granted	1.0	1.45	LE	1.2	1.55	LE	80
7	There are modern gadgets for use in curriculum implementation	1.5	1.32	LE	1.1	1.34	LE	80
Grand Mean and Standard Deviation		1.7	1.60		1.42	1.46		

Source: Field Survey, 2024

The results on table 2 indicated that the response on the male and female lecturers extent of resource utilization in curriculum implementation for knowledge management. The result showed that both male and female lecturers responded that there is adequate allocation of human resources in the university, thus, high extent (mean 3.2 and 3.0).. However, their response to other items showed them to be at low extent. For, the least mean were on opportunities for field trip, challenge

of beauracracy in provision of learning resources, allocation of materials and inadequacies of laboratories to conduct experiments, modern gadgets inadequacy and no workshops for lecturers new ideas for use with mean (1.0,1.2,1.4,1.4,1.5 and 2.2). The female lecturers have them to be at low extent too except for the mean (1.2, 1.0, 1.2, 1.2, 1.1 and 1.3) respectively. The implication is that the low extent of resource utilization is a wake-up call for the university system to provide resources for curriculum implementation and to enhance knowledge management in teacher education process in the university in Nigeria.

Hypothesis

1. There is no significant difference between the extent of resource utilization among male and female lecturers in curriculum implementation towards knowledge management in Nigerian teacher education process.

Table 3: Z-test on the Extent of Resource Utilization Among Male and Female Lecturers in Curriculum Implementation for Knowledge Management in Nigerian Teacher Education Process

Group	Mean	SD	N	df	Z _{calculated}	Z _{critical}	Decision
North Central Lecturers	1.7	1.60	48	80	0.8	1.98	Accepted
South-South Lecturers	1.42	1.46	32				

Source: Field data, 2024.

The result of table 3 shows that Z-calculated value 0.8 is lesser than the Z-critical value 1.98 at 0.05 level of significance at 78 degree of freedom showing that there is no significant difference between the extent male and female lecturers utilize resources in curriculum implementation for knowledge management in teacher education process in the university in Nigeria. Therefore, the null hypothesis of no significant difference is accepted.

Discussion of the Findings

The result on table 1 above revealed the extent of management support available to the university system in the North Central and South-South of Nigeria. Based on the result, it was observed that all the items responded to on the questionnaire for lecturers in the North Central stood at high extent with the most positive being the university policies being firm and mapping out of strategies for curriculum implementation, perhaps, as indicated on the school calendar. Others were provision for practical oriented curriculum implementation and adequate dissemination of information and provisions made for practical oriented curriculum implementation while dissemination of information promptly had the least mean, yet above average. The result stood out differently for lecturers in the South-South who affirmed high extent for information dissemination promptness, university policies firming up curriculum implementation, mapping out of strategies for curriculum implementation and encouragement of instructional planning by the university but rated the university at low extent for free flow of information through hierarchical order, low provision of opportunities for academic staff training and inability to maximize curriculum

implementation process as a basis for research etc. The findings of the study are confirmed by the (Kanno & Onyeachu, 2012) who found that management support when adequately channeled to enhance the learning experience and academic achievement of the learners and makes curriculum implementation an easy operation for teachers. Thus, by the extension brings about efficiency of knowledge management. The studies by (Fowowe, Akinkuotu & Shittu, 2009; Omolewa, 2007; Ajibola, 2008) had found that management support is a veritable tool in curriculum implementation at all levels of education and so should be given a priority of place in school management especially in the area of training of teacher. The implication is that for effective university education process, particularly, that of teacher education should enjoy full backing of the university management since those persons are being prepared to take up teaching in the future.

The result on table 2 showed affirmation that human resource allocation stands at high extent as perceived by both male and female lecturer both in the North Central and the South- South university. However, the other items were rated at low extent based on the analyzed data. The male lecturers perceived opportunities for field trip at as the lowest in terms of management support while the female lecturers perceived request for provision of learning resources as what gets the least management attention. Others results that stood at low extent after analysis of data are: holding of workshop for lecturers, adequacy of laboratories for experiments and availability of modern gadgets for use in curriculum implementation. This result is confirmed by the hypothesis result which indicated no significant difference for male and female lecturers' perception of the extent of resource utilization in curriculum implementation and knowledge management in teacher education process in the university. The findings are confirmed by (Achimugu, 2016; Eze & Nwafor, 2012; Megbo & Saka, 2015) who found that the none utilization of resources for curriculum implementation removes the flavor of variety and effectiveness from teaching and learning, hence, resources should be provided to make the teachers job easier. While (Bature, Adams & Igbokwe, 2019; Ikeoji, Isima, Ikhane-Ekwigbedi, Dimon, Obaruyi, Atabe, Uduigwome & Osakwe, 2019; Danladi, 2012) had affirmed through a study to say that resource utilization in curriculum implementation concretizes learning, students participation, achievement and retention, thus, strengthening knowledge management. Therefore, the management of universities should strengthen the teacher education process by the provision of such resources needed for curriculum implementation in order to deepen knowledge management in the university system.

Conclusion

Based on the findings of the study, it could be concluded that while management support is key to curriculum implementation for knowledge management, it is clear that the lecturers in the North Central perceived that management support exists in certain respect but that is not the case with the lecturers in the South-South who perceived that a lot is yet undone when it comes to management support. However, apart from adequate allocation of human resources, the male and female lecturers perceived that resources are not adequate with regards to what is needed for curriculum implementation for knowledge management in teacher education process in the university in Nigeria. Thus, more work is required to boost management support for advancement

in teacher education process through knowledge management in the university in Nigeria, particularly in the South-South.

Recommendations

The following are the recommendations supporting the study based on the findings:

1. The management of the universities should regularly organized training for academic staff to boost their output in curriculum implementation and knowledge management.
2. The university management should encourage academic staff to use their curriculum implementation opportunities as a departure point for research.
3. Field trips enhance curriculum implementation for knowledge management, so university management should remove bottlenecks that does not allow lecturers to maximize that.
4. Lecturers decried the inadequacy of material resources for curriculum implementation, thus, university management should open-up opportunities for lecturers to access funds to create their own material resources for curriculum implementation process.
5. Provision of modern gadgets and how to use them should be facilitated by university management.

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