



## Assessment of Knowledge Cluster Strategy in Quality Assurance Practices among Staff of Universities in North-West States, Nigeria

<sup>1</sup>Tukur ABDULLAHI, Ph.D.

Email: [gidadotukur88@gmail.com](mailto:gidadotukur88@gmail.com)

<sup>2</sup>Israel Olusegun ADEDEJI, Ph.D.

Email: [segdeji2014@gmail.com](mailto:segdeji2014@gmail.com)

<sup>1</sup>Zamfara State Ministry of Education, Education Quality Assurance Department

<sup>2</sup>Department of Educational Foundations, Federal College of Education (Technical), P. M. B.  
1088, Gusau, Zamfara State

### Abstract

This study investigated the influence of knowledge cluster strategy on quality assurance practices of universities in North-West Geographical Zone in Nigeria. It was specifically set to examine the influence of knowledge cluster strategy on accreditation for academic standard of universities in North-West Geographical Zone Nigeria; identify the influence of knowledge Cluster strategy on staff training and development; and ascertain the influence of knowledge Cluster strategy on research and publication process in universities in North-West Geographical Zone, Nigeria. Research questions were asked and hypotheses were formulated in accordance with the objectives of the study. Descriptive survey research design was used for the study to collect data using constructed questionnaire which was prepared and validated by experts in Educational Administration and Planning. The population of the study was made up of 102 Quality Assurance officials, 170 Management Staff and 7,346 academic staff of the universities in North-West Geographical Zone of Nigeria. Proportionate sampling technique was used to select the sample size of 659 respondents from the sampled universities in North-West Geographical Zone, Nigeria. The instrument for data collection was a closed structured questionnaire. The instrument was pilot tested by using Guttman's split-half method of reliability test to obtain the coefficient 0.82. The data for this study was analysed through the use of frequency counts and percentage. The findings revealed that many universities in North-West Geographical Zone of Nigeria used knowledge cluster strategy to improve quality assurance practices; the application of knowledge Cluster strategy have enhanced quality assurance practices through research and publication for advancement of knowledge in universities in North-West Geographical Zone of Nigeria; The study recommended that the all universities in North-west, Nigeria should maintain the adoption of knowledge Cluster strategy to enhance quality assurance practices through integration of course contents, course duration and curriculum compliance. The study concluded that knowledge cluster strategy influenced quality assurance practices of Universities in North-West Geographical Zone in Nigeria.

**Keywords:** Accreditation, Knowledge Cluster Strategy, Quality Assurance, Research and Publication,



## Introduction

Universities are the intellectual fields of knowledge creation, production, research and exploration. In other words, universities are designed environments to be responsible for educational inquiries, research and exploration of knowledge towards national unity and development. The main purpose of founding universities is to drastically transform the societies educationally, economically, politically, socially and culturally. It is indeed assumed that a nation's development is dependent upon the ability of its universities to produce new knowledge, new technology and new ideas to its citizens accordingly. This commensurate with the view of Ramakrishnan and Ya-sin (2012) who remarked that universities, as the education centres, are expected to serve as drivers of innovation and instauration by providing developmental ideas to the societies.

The Knowledge cluster strategy is a process used by an incorporated team to review the ideas of past successes and failures with the goal of improving future activity, event or task in an organization which its influence through modern guidelines on graduation process of universities in Nigeria should not be over-emphasized. Quality assurance practices on the other hand, is all about consistently meeting product specification and getting things rightly done according to the organizational demands. In the university setting, the concept of quality assurance practices entails the ability of the institutions to meet the expectations of the users of manpower in relation to the quality of skills acquired by their outputs (Ajayi & Akindutire, 2007). Therefore, the ability of universities to provide adequate inputs in terms of modern technological build-up, expertise dialogues, development education process are some of the attributes of knowledge cluster strategy which tremendously influence the quality assurance practices in a university system towards successful implementation of educational polices in this competitive global educational arena (National Universities Commission, 2004).

Accreditation is the quality assurance practice that largely focuses on a critical assessment of the set minimum academic standard of institutions through which research and publication activities are carefully evaluated against prescribed criteria. Thus, knowledge cluster strategy bound to influence the practices through collective reviews on organizational policies, operations and services with a view to instantly meeting the expectations of the available manpower in relation to the quality of skills and technical outputs. Minimum academic standards form the baseline for entrenching quality university education prescribes a profile of curriculum, human resources, structures, infrastructures, equipment and required facilities for establishing, governing and managing the university (Ndirangu & Udoto, 2011).

The virtue of knowledge cluster strategy influences quality of staff training and development if systematically applied in human resource planning and development in Nigerian universities. Verily, the attributes of Knowledge cluster strategy promote skills and competences of both employers and employees through among others brainstorming, sharing academic practice and knowledge cluster strategy (Nonaka & Takeuchi, 2015). It was assumed that the staff willingness without qualitative training on technical know-how is bound to costly errors and inefficient organizational services. Therefore, inclusion of advanced knowledge cluster strategy to



quality assurance activities in Nigerian universities conserves knowledge capturing, structuring, managing and disseminating working experiences among workers of different capacities.

Also, research is the driving force for human endeavour as globally acknowledged; such researches should be evidenced by articulations and publications. Influence of knowledge cluster strategy outlines to academic investigations in Nigerian universities enriches the quality of researches and in-depth inquiry processes. It is obvious that research institutes play an interesting role in gathering, sharing, disseminating and transferring of knowledge through national and international conferences, journals and other publications through the virtue of advanced knowledge cluster strategy based on situational changes and education policy processes. Such a work will be far more effective if research institutes and universities in Nigeria form different networks and backgrounds share common knowledge and ideas on certain educational issues (Struyk, 2000).

Today, most organizations are comfortable with emergence of knowledge sharing technologies that facilitate teamwork and Knowledge cluster strategy exercises. Wei-Chong, Yuen and Chew-Gan (2014) remarked that knowledge sharing bear e-mail or other world-wide net communication media has become an indispensable enabler and speedy system that preserves free innovative ideas and competitive experiences that promote today's university operations. Thus, Knowledge cluster strategy approach boosts national and international connections and sharing of technological thoughts that rapidly enhance universities' performance and upgrade them to technically cope with contemporary challenges such as poor electricity, narrow coverage of internet services and poor technological know-how. These challenges made Modebelu and Duvie (2015) asserted that there was a low-level influence of knowledge cluster strategy on creativity elements and competencies of academic staff in Nigerian universities. It is against this background that the researchers carried out this study to assess whether knowledge cluster strategy is employed in quality assurance practices of universities in North-west geographical zone, Nigeria.

The university education in Nigeria has been bedevilled by administrative challenges engendered by among other poor governmental support, regular policy changes, inadequate infrastructure, political intervention, poor staff morale, weak academic culture and students' academic background. Many quality assurance evaluative reports confirmed that Nigeria owns the largest universities in Africa, but their qualitative technological operations towards the future of students remain the topic of discussion. For instance, Salman (2009), Akinyemi and Abidun (2013) as cited in (NUC, 2017) remarked that Nigerian universities enrolled the highest number of students in any African countries, with 129 universities roughly enrolling over 1.9 million applicants/students yearly with approximately 1.5 million candidates awaiting enrolment yearly. With enrolment increasing and the creation of more universities, the issue of graduates' quality and qualification is still a topic of discussion.

Inability of many Nigerian universities to adopt modern approach to knowledge sharing and its integration into their training development processes has been related to inefficiency in ICT which is a major tool of knowledge cluster strategy activities in advanced countries across the globe. Although, NUC's continuous attempts to move Nigerian university education forward involves matching their activities with international standards on a continuous basis, through several strategies of benchmark settings, accreditations, standards and regulatory frameworks, but,



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some Nigerian universities are still producing not well qualified graduates due to staff training problems which in turn negatively affect the economic, social and political development of the country.

Similar challenges are experienced in academic researches, publications and examination processes; the assumption is that many universities in Nigeria are not well invested to systematically and scientifically deal with rigorous investigations. Jumare (2014) investigated application of knowledge management strategies on the management of universities in North-West Zone, Nigeria and found out that knowledge cluster strategy was not used on universities' decision-making process, likewise collaborative physical workspace strategy and Knowledge cluster strategy were not fully applied to planning and communication processes. Also, Modebelu and Duvie (2015) conducted a research on knowledge cluster strategy creativity elements expected of academics in Nigerian universities and the study found out that there was a low-level influence of knowledge cluster strategy on creativity elements and competencies of academic staff in Nigerian universities.

This perhaps has been a distortion to adequate use of advanced research strategies of knowledge cluster strategy. Looking at these challenges, the study attempts to assess whether knowledge cluster strategy is employed in quality assurance practices of universities in North-west geographical zone, Nigeria.

**Objectives of the Study**

1. Assess whether knowledge cluster strategy is employed in accreditation for minimum academic standard of universities in North-west geographical zone, Nigeria.
2. Examine whether knowledge cluster strategy is employed in staff training and development in universities in North-west geographical zone, Nigeria.
3. Assess whether knowledge cluster strategy is employed in research and publication process in universities in North-west geographical zone, Nigeria.

**Research Questions**

1. Do universities in North-west geographical zone, Nigeria employed knowledge cluster strategy in accreditation for minimum academic standard?
2. Do universities in North-west geographical zone, Nigeria employed knowledge cluster strategy in staff training and development?
3. Do universities in North-west geographical zone, Nigeria employed knowledge cluster strategy in research and publication process?

**Methodology**

The study is survey in nature, which was set to investigate how the variables are related to one another as well, the approach enables the researchers to obtain data for the purpose of testing hypotheses or answering research questions related to influence of knowledge cluster strategy on quality assurance practices of universities in North-West Geographical Zone, Nigeria. The approach enables the researcher to obtain data for the purpose of testing hypotheses or answering research questions related to influence of knowledge cluster strategy on quality assurance practices of universities in North-West Geographical Zone, Nigeria. To get fair representation of the target population, the researcher used purposive sampling technique to select six Federal and State



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universities derived from Kaduna, Kano and Sokoto States. Thus, the sample size for this research was 659 respondents. The sample was selected through proportionate sampling technique.

The instrument for data collection was a questionnaire titled “Influence of Knowledge Cluster Strategy on Quality Assurance Practices Questionnaire, IKCSQAPQ”. A five-point Likert scale of Strongly Agree (SA =5), Agree (A =4), Undecided (U =3), Disagree (D =2) and Strongly Disagree (SD =1) were used to determine the opinions of quality assurance officials, management staff and Academic Staff of universities in North-West Zone, Nigeria. The instrument was given to the specialists in Educational Management and Planning Department, Ahmadu Bello University, Zaria to screen and vet the contents of the instrument accordingly. After necessary corrections were made, the reliability of the instrument was done using the formula W-X and assuming 1 as the reliability coefficient. The coefficient result of 60 was obtained at 0.82 using Guttman’s split-half method of reliability test. This signifies that the instrument was reliable. The data collected from the respondents was analysed using frequency counts and simple percentage based on the five Likert scale rating. For the analysis, the rating was collapsed into Agree, Undecided and Disagree. This is because both strongly agree and agree are both in the zone of agreement and also strongly disagree and disagree are both in the zone of disagreement.

## Results

### Research Question 1

How does knowledge cluster strategy influence accreditation for minimum academic standard of universities in North-West Geographical Zone, Nigeria?

**Table 1: Opinions of Respondents on Influence of Knowledge Cluster on Accreditation for Academic Standard of Universities in North-West Geographical Zone in Nigeria**

| Perceptions of Standard of Learning Facilities in This University |   |                         |           |    |           |    |          |    |       |     |
|---|---|-------------------------|-----------|----|-----------|----|----------|----|-------|-----|
| S/N   | Item Statement  | Category of Respondents | Responses |    |           |    |          |    | Total |     |
|   |   |                         | Agreed    |    | Undecided |    | Disagree |    |       |     |
|   |   |                         | F         | %  | F         | %  | F        | %  | F     | %   |
| 1   | Sharing organizational vision influences integration of course content analysis in this university.             | Q.A. Officials          | 17        | 39 | 3         | 7  | 24       | 55 | 44    | 100 |
|   |   | Mangmnt Staff           | 28        | 40 | 7         | 10 | 35       | 50 | 70    | 100 |
|   |   | Lecturers               | 203       | 43 | 35        | 7  | 233      | 50 | 471   | 100 |
| 2   | Comparative reviews influence standardization of marking, grading and moderation of results in this university. | Q.A. Officials          | 17        | 39 | 3         | 7  | 24       | 55 | 44    | 100 |
|   |   | Mangmnt Staff           | 27        | 39 | 4         | 3  | 41       | 59 | 70    | 100 |
|   |   | Lecturers               | 209       | 44 | 30        | 6  | 232      | 49 | 471   | 100 |
| 3   | System thinking analysis influences standard of learning facilities in this university.                         | Q.A. Officials          | 16        | 36 | 2         | 5  | 26       | 59 | 44    | 100 |
|   |   | Mangmnt Staff           | 30        | 43 | 2         | 3  | 38       | 54 | 70    | 100 |





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|   |  |                |     |    |    |   |     |    |     |     |
|---|--|----------------|-----|----|----|---|-----|----|-----|-----|
| 4 | Personal mastery strategy influences the assessment of standard of teaching facilities in this university. | Lecturers      | 212 | 45 | 25 | 5 | 234 | 50 | 471 | 100 |
|   |  | Q.A. Officials | 16  | 36 | 3  | 7 | 25  | 57 | 44  | 100 |
|   |  | Mangmnt Staff  | 31  | 44 | 2  | 3 | 37  | 53 | 70  | 100 |
| 5 | Joint taskforce supervision influences standard of staff office facilities in this university.             | Lecturers      | 227 | 48 | 23 | 5 | 221 | 47 | 471 | 100 |
|   |  | Q.A. Officials | 16  | 36 | 3  | 7 | 25  | 57 | 44  | 100 |
|   |  | Mangmnt Staff  | 31  | 44 | 2  | 3 | 37  | 53 | 70  | 100 |
|   |  | Lecturers      | 232 | 49 | 16 | 3 | 223 | 47 | 471 | 100 |

From table 1, there was serious disagreement among the opinions of quality assurance officials, management staff and lecturers in their responses to item statements 1-10 of the questionnaire. Item 1 sought to find out whether sharing organizational vision influences integration of course content analysis in their university. According to the responses, the total of 55% of quality assurance officials, 50% of management staff and 50% of lecturers disagreed with the statement. In item 2 it was attempted to find out whether comparative reviews influence standardization of marking, grading and moderation of results in their university. The result of the analysis pointed out that 55% of quality assurance officials, 59% of management staff and 55% of lecturers instantly dissented the idea. Item 3 investigates whether system thinking analysis influences standard of learning facilities in their university. Based on the responses, it was found that 59% of quality assurance officials, 54% of management staff and 50% of lecturers rejected that assertion. Item 4 investigated whether personal mastery strategy influences the assessment of standard of teaching facilities in their university. The position of the majority indicated that 57% of quality assurance officials, 53% of management staff and 52% of lecturers disagreed with the statement. Looking at the computed responses, it was concluded that knowledge management strategies were not fully acknowledged by the stakeholders on quality assurance practices in many universities of North-West Geographical Zone of Nigeria. In respect of item 5, impression of respondents was asked whether joint taskforce supervision influences standard of staff office facilities in their university. The entire of 57% of quality assurance officials, 53% of management staff and 50% of lecturers disagreed with the statement. It is therefore, resolved that the quality assurance practices were not influenced by knowledge cluster strategy in many universities in North-West Geographical Zone in Nigeria in term of accreditation of minimum academic standard.

## Research Question 2

How does knowledge cluster strategy influence staff training and development in universities in North-West Geographical Zone, Nigeria?



**Table 2: Opinions of Respondents on the Influence of Knowledge Cluster on Staff Training and Development in Universities in North-West Geographical Zone in Nigeria**

| S/N | Item Statement  | Category of Respondents | Responses |    |           |    |           |    |       |     |
|-----|---|-------------------------|-----------|----|-----------|----|-----------|----|-------|-----|
|     |   |                         | Agreed    |    | Undecided |    | Disagreed |    | Total |     |
|     |   |                         | F         | %  | F         | %  | F         | %  | F     | %   |
| 6   | Sharing organizational vision influences the staff training and development through conferences in this university.       | Q.A. Officials          | 19        | 43 | 4         | 9  | 21        | 48 | 44    | 100 |
|     |   | Mangmnt Staff           | 36        | 51 | 7         | 10 | 27        | 39 | 70    | 100 |
|     |   | Lecturers               | 247       | 52 | 38        | 8  | 186       | 40 | 471   | 100 |
| 7   | Comparative review strategy influences the staff training and development through workshops in this university.           | Q.A. Officials          | 27        | 61 | 2         | 5  | 15        | 34 | 44    | 100 |
|     |   | Mangmnt Staff           | 39        | 56 | 2         | 3  | 29        | 41 | 70    | 100 |
|     |   | Lecturers               | 270       | 57 | 33        | 7  | 168       | 36 | 471   | 100 |
| 8   | System thinking analysis influences the staff training and development through seminars in this university.               | Q.A. Officials          | 27        | 61 | 2         | 3  | 15        | 34 | 44    | 100 |
|     |   | Mangmnt Staff           | 42        | 60 | 2         | 3  | 26        | 37 | 70    | 100 |
|     |   | Lecturers               | 285       | 61 | 31        | 7  | 155       | 33 | 471   | 100 |
| 9   | Personal mastery strategy influences the staff training and development through symposia in this university.              | Q.A. Officials          | 30        | 68 | 3         | 7  | 11        | 35 | 44    | 100 |
|     |   | Mangmnt Staff           | 43        | 61 | 2         | 3  | 25        | 36 | 70    | 100 |
|     |   | Lecturers               | 300       | 64 | 32        | 7  | 139       | 30 | 471   | 100 |
| 10  | Joint taskforce supervision influences the staff training and development through in-service training in this university. | Q.A. Officials          | 31        | 71 | 2         | 5  | 11        | 25 | 44    | 100 |
|     |   | Mangmnt Staff           | 39        | 56 | 4         | 6  | 27        | 39 | 70    | 100 |
|     |   | Lecturers               | 269       | 57 | 34        | 7  | 168       | 36 | 471   | 100 |

From table 2, there was sharing of opinions among quality assurance officials, management staff and lecturers in their response to item statements 6-10 of the questionnaire. Item 6 attempted to find out whether sharing organizational vision influences the staff training and development through conferences in their university. It was discovered that 51% of management staff and 52% of lecturers accepted the statement. While, 57% of quality assurance officials dissented the idea. Item 7 attempts to find out whether comparative review strategy influences the staff training and development through workshops in their university. The computed result disclosed that 61% of quality assurance officials, 56% of management staff and 57% of quality assurance officials accepted the statement. Item 8 investigates whether system thinking analysis influences the staff training and development through seminars in their university. Based on the computed result, 61% of quality assurance officials, 60% of management staff and 61% of lecturers accepted the statement. Item 9 investigated whether personal mastery strategy influences the staff training and development through symposia in their university. According to the findings, the total of 68% of quality assurance officials, 61% of management staff and 64% of lecturers accepted the statement. Going by the responses, it was concluded that knowledge cluster strategy influence staff training and development through knowledge creation and sharing by means of educational conferences, seminars and other national and international discourse. Item 10 of the questionnaire solicits opinions of respondents whether joint taskforce supervision influences the staff training and development through in-service training in their university. The analyzed result showed that 76% of quality assurance officials, 56% of management staff and 57% of lecturers accepted the idea.



### Research Question 3

How does knowledge cluster strategy influence research and publication process in universities in North-West Geographical Zone, Nigeria?

**Table 3: Opinions of Respondents on the influence of Knowledge Cluster on Research and Publication in Universities in North-West Geographical Zone in Nigeria**

| S/N | Item Statement   | Category of Respondents | RESPONSES |    |           |    |           |    |       |     |
|-----|--|-------------------------|-----------|----|-----------|----|-----------|----|-------|-----|
|     |  |                         | Agreed    |    | Undecided |    | Disagreed |    | Total |     |
|     |  |                         | F         | %  | F         | %  | F         | %  | F     | %   |
| 11  | Sharing organizational vision influences the research activities through conferences in this university. | Q.A. Officials          | 35        | 80 | 1         | 2  | 8         | 18 | 44    | 100 |
|     |  | Mangmnt Staff           | 57        | 81 | 2         | 3  | 11        | 16 | 70    | 100 |
|     |  | Lecturers               | 416       | 88 | 12        | 3  | 43        | 9  | 471   | 100 |
| 12  | Comparative reviews strategy influences the research activities through workshops in this university.    | Q.A. Officials          | 36        | 81 | 3         | 7  | 5         | 11 | 44    | 100 |
|     |  | Mangmnt Staff           | 60        | 86 | 4         | 6  | 6         | 9  | 70    | 100 |
|     |  | Lecturers               | 436       | 93 | 19        | 4  | 16        | 3  | 471   | 100 |
| 13  | System thinking analysis influences the research activities through seminars in this university.         | Q.A. Officials          | 36        | 82 | 2         | 5  | 6         | 14 | 44    | 100 |
|     |  | Mangmnt Staff           | 62        | 89 | 5         | 7  | 3         | 4  | 70    | 100 |
|     |  | Lecturers               | 439       | 93 | 14        | 3  | 18        | 4  | 471   | 100 |
| 14  | Personal mastery strategy influences the research activities through mentorship in this university.      | Q.A. Officials          | 39        | 89 | 5         | 11 | -         | -  | 44    | 100 |
|     |  | Mangmnt Staff           | 62        | 89 | 2         | 3  | 6         | 9  | 70    | 100 |
|     |  | Lecturers               | 447       | 95 | 7         | 2  | 17        | 4  | 471   | 100 |
| 15  | Joint taskforce supervision influences the research activities through symposia in this university.      | Q.A. Officials          | 39        | 89 | 5         | 11 | -         | -  | 44    | 100 |
|     |  | Mangmnt Staff           | 64        | 91 | 3         | 4  | 3         | 4  | 70    | 100 |
|     |  | Lecturers               | 453       | 96 | 3         | 1  | 15        | 3  | 471   | 100 |

In table 3, there was unanimous agreement of opinions among quality assurance officials, management staff and lecturers in their response to item statements 11 to 15 of the questionnaire. Item 11 attempted to find out whether sharing organizational vision influences the research activities through conferences in their university. The stance taken by 80% of quality assurance officials, 81% of management staff and 88% of lecturers agreed with the statement. On their responses to item 12 which attempted to find out whether comparative reviews strategy influences the research activities through workshops in their university. The total of 81% of quality assurance officials, 86% of management staff and 93% of lecturers assented the idea. Item 13 investigates whether system thinking analysis influences the research activities through seminars in their university. According to the findings, 82% of quality assurance officials, 89% of management staff and 93% of lecturers agreed with the statement. Item 14 investigated whether personal mastery strategy influences the research activities through mentorship in their university. The result statistically 89% of quality assurance officials, 89% of management staff and 95% of lecturers accorded the idea. The generated outcome of this section reaffirmed that most research and publication activities are based on the attributes of knowledge cluster in many





universities of North-West Geographical Zone of Nigeria. With regard to item 15, opinions of respondents were asked whether joint taskforce supervision influences the research activities through symposia in their university. Based on the responses, 89% of quality assurance officials, 91% of management staff and 96% of lecturers agreed with the statement.

### **Discussion of Findings**

This study was carried out to assess whether knowledge cluster strategy is employed in quality assurance practices of universities in North-west geographical zone, Nigeria. The first of the specific purposes of this study was to examine whether knowledge cluster strategy is employed in accreditation for minimum academic standard of universities in North-west geographical zone, Nigeria. The findings to this study revealed that most universities in North-West Geographical Zone, Nigeria employed knowledge cluster strategy in accreditation for minimum academic standard. This finding was in congruence with Ndirangu and Udoto (2011) who asserted that minimum academic standards form the baseline for entrenching quality university education, prescribes a profile of curriculum, human resources, structures, infrastructures, equipment and required facilities for establishing, governing and managing the university

The second purpose of this study was to find out whether universities in North-west geographical zone, Nigeria employed knowledge cluster strategy in staff training and development. The finding to this purpose indicated that most of the universities in North-west, Nigeria employed knowledge cluster strategy in staff training and development. This finding corroborates the assertion of Nonaka and Takeuchi (2015) that knowledge cluster strategy promotes skills and competences of both employers and employees through among others brainstorming, sharing academic practice and knowledge. The study also examined whether knowledge cluster strategy is employed in research and publication process by universities in North-west geographical zone, Nigeria. The findings to this purpose revealed that most of the universities in North-west, Nigeria employed knowledge cluster strategy in research and publication process. These findings, therefore, revealed that most universities in North-west, Nigeria employed knowledge cluster strategy in quality assurance practices.

### **Conclusion**

This study concluded that the knowledge cluster strategy is employed in quality assurance practices by most universities in North-west, Nigeria through the accreditation process, staff training and development, by assessing the conduct of conferences, seminars and workshops; and research and publication process through assessing the process of advanced inquiry and conference supervision in most universities in North-West Geographical Zone of Nigeria. However, there are few others that need to adopt the use of knowledge cluster strategy for efficient and effective quality assurance practices by most universities in North-west, Nigeria.

### **Recommendations**

Based on the findings and conclusion of the study, the researchers recommended that:

1. The accreditation exercise is a very sensitive part of the quality assurance practices that should be carefully executed, therefore, the versatile knowledge cluster strategy should be systematically applied to standardize its operations through integration of course contents, course duration



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- and curriculum compliance by all universities in North-West Geographical Zone of Nigeria;
2. The modern knowledge cluster strategy is in best position to technically improve staff training and development, it should be reviewed the more to expatiate the process of academic conferences, seminars, workshops and in-service training in all universities in North-West Geographical Zone of Nigeria;
3. The knowledge cluster systems should be adopted to academically advance the process of research and publication through brainstorming on mentorship and conference supervision in universities in North-West Geographical Zone of Nigeria.

**References**

- Ajayi, I. A. & Akindutire, I. O. (2007). The unresolved issues of quality assurance in Nigerian Universities. *Journal of Sociology and Education in Africa*. 6(1) 66-99.
- Jumare, A. M. (2014). Application of knowledge management on the management of universities in North-West Zone in Nigeria. *Unpublished PhD Thesis. Submitted to the Postgraduate School ABU Zaria*.
- Modebelu, M. N. & Duvie, A. N. (2015). Knowledge cluster strategy creativity elements expected of academics in Nigerian universities. *The International Conference on E-Learning in the workplace*. 2 (6), 67-75.
- Nonaka I., & Takeuchi, H. (2015). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. UK, Oxford: Oxford University Press.
- National Universities Commission (2004). Appraisal of higher education policy options. *The Comet*, Thursday p.26. NUC Documents. The Role of National Universities Commission in Quality Assurance in Nigeria.
- National University Commission (2007). *Course system and grade point average in Nigerian universities*. NUC, Abuja.
- National Universities Commission (2017). Webometric ranking of world universities: Matters arising. *Monday Memo NUC, Abuja*, 5(11);1-10
- Ndirangu, M. & Udoto, M. U. (2011). *Quality of learning facilities and learning environment: Challenges for teaching and learning in Kenya's public universities*. Elbarrrd Publishing Ltd.
- Nonaka I., Takeuchi, H. (2015). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford: Oxford University Press
- Ramakrishnan, U. & Ya-Sin, O. (2012). *Intellectual capital*. Basingstoke: Macmillan Business Press.
- Salman, J. (2009). Tertiary education in the 21st century: Challenges and opportunities. *Higher Education Management* 13:2, 105-129.
- Struyk, R. (2000). *Transactional knowledge cluster networks: Purpose, membership and cohesion*. Washington, DC: Urban Institute.
- Wei-Chong, C., Yuen, Y., & Chew-Gan, G. (2014). Knowledge sharing of academic staff: A comparison between private and public universities in Malaysia. *Library Review*, 63(3), 203-223.