Determinant of Needs Assessment for Quality Delivery Services in Nigerian Universities

Amadi N. S. (Ph.D)

Department of Vocational/Technology Education Faculty of Technical and Science Education Rivers State University of Science and Technology, Port Harcourt.

Edo B. L. (Ph.D)

Department of Educational Foundations
Faculty of Technical and Science Education
Rivers State University of Science and Technology,
Port Harcourt
ndubisi_amadi@yahoo.com

Abstract

Need assessment is the process of identifying and measuring areas for improvement as well as determining the methods to achieve it. Due to fundamental job expectations of universities, there are always periodic evaluation of programmes and projects available to identify the areas of improvement. Therefore, the purpose of this study was to examine determinant of needs assessment for quality delivery services in Nigerian universities. The population of the study consisted of all academic staff of Rivers State University of Science and Technology (RSUST) and Ignitius Ajuru University of Education (IAUOE). The sample size consisted of 494. A selfmade instrument, Needs Assessment and Quality Delivery Services Questionnaire (NAQDSQ) was used for the study. Hence, nineteen (19) structured items were drawn for the study. Responses were based on 4-points rating scale in which the responded were requested to answer: strongly agree (SA), Agree (A), Disagree (D) and strongly Disagree (SD). Data collected were analyzed using mean scores for answering the research questions and Z-test for the hypotheses at 0.05 level of significance. The result indicated that the determinant of needs assessment for quality delivery services in the Nigerian universities includes: the rate of students' admission, learning facilities, staff conditions of service and engagement, nature of programme and its credibility. It is therefore concluded that needs assessment set values for facilities and personnel improvement for quality service delivery. It was therefore recommended that specialized and skillful personnel should be deployed for adequate assessment of facilities and the obligations should be articulately discharged with transparency.

Keywords: Determinants, Needs, Assessment, Quality, Delivery, Services.

Introduction

Needs assessment is a systematic approach to study the state of knowledge, ability, interest or attitude of a defined audience or group in a particular environment (Paul, 2014). Also, committee on Needs Assessment of Nigerian Public Universities (2012) conceived it as an appraisal of the existing situation and what is needed for transformation. In other words, it provides a method to

articulate and evaluate what has already been done and what gaps exist.

Quality delivery services imply mobilizing all available resources to sustain standard of the educational system. In this case, the personnel, facilities available, stakeholders and external agencies are not left out in the processes. This is because integrated efforts contribute to acquiring objectives of the education at all levels. Thus, it is obvious to state that needs assessment definitely aimed at quality delivery services using all available inputs to cause transformation, innovation and sustainability of the entire universities system.

From the researchers' perspective, needs assessment is a systematic process for determining and addressing needs or gaps between current conditions and desired conditions or wants. Thus, in the university system, discrepancy between the current condition and wanted condition are measured based on the notion of National University Commission benchmarks that target the process of identifying areas that needs to be updated or adjusted.

Needs assessment is part of planning processes often used for improvement in the totality of education/training objectives, facilities, academic instructions and staff disposition in the universities. For instance, in assessing the academic staff ratio to the students, a specific criterion is set out in various programmes such as 1: 10(science); 1: 30 (art) and 1:10 (medicine) by National University Commission standard. Hence, it has become an effective tool use to clarify problems and identify appropriate interventions or solutions.

The goals of needs assessment is to provide an insight about how universities can impact on the audience, provide knowledge about educational approaches that may be most effective, create awareness about the existing programme and gaps that need to be bridged. In fact, information is provided about current situation that can be used to enhance proficiency, creating of knowledge production as well as creating credibility that the programme is serving the target audience (Paul, 2014).

In another development, needs assessment is designed to refine and improve products and services of the organization. For example, in assessing the academic dispositions, certain yardsticks such as: academic staff numbers and growth rates, distribution of academic staff by gender, age, rank, qualification and the source of their highest degrees, academic staff pursuing master and doctoral degrees at home and abroad are taking into consideration (Wisdom, 2010). These processes are observed because resources are not always enough for even distribution. Notable example is human resource perspective where employment is not evenly distributed. Common experiences indicated that there are situation in which some departments are fully stock with academic personnel while other suffers less staff. This therefore creates lopsidedness in personnel trend in each faculty or department. With needs assessment there could be a balance in the distribution processes.

This study therefore examined determinant of needs assessment for quality delivery services in Nigerian universities. In other words, the study critically looked at the procedures or criteria involved in the assessment, benefits and constraints that impair effective utilization of this tool for quality delivery of educational services.

Statement of the Problems

Need assessment is the process of identifying and measuring areas for improvement in an organization as well as determining the methods to achieve it (Obiora, 2012). Because of the fundamental role expectations of the universities, there are always periodic evaluation of the

programmes and projects available for proficiency and creditability.

As expressed by Committee on Needs Assessment of Nigerian Universities (2012), the objectives of undertaking needs assessment is to ascertain the state of existing facilities for teaching and learning in the university; their capacity and functionality. On this note, list of facilities, staff personnel are always drawn out to ascertain their suitability.

To a large extent, needs assessment also reflects on physical infrastructure such as :lecture theatres/auditoria, classrooms, laboratories, workshops, studios, gymnasia, libraries and staff offices; laboratory equipment, ICT facilities and services, books, journals and periodicals, machines and other research equipment. The result of need assessment helps to fix priorities right.

In spite of the various measures and approaches, there are still challenges of inadequate facilities (used beyond the original carrying capacity), dilapidated (poorly ventilated, illuminated, furnished and equipped), over-stretched/over-crowded (lectures theatres, classrooms, laboratories and workshops shared by many programmes across different faculties), improvised (open-air sports pavilion, old cafeteria, convocation arenas and even uncompleted buildings used for lectures. In some cases, workshops are conducted under corrugated sheds or trees). The question therefore is, how can these facilities be improved through need assessment? This informs the researcher to examined determinant of needs assessment for quality delivery services in Nigerian universities.

Purpose of the Study

The purpose of the study was to examine determinant of needs assessment for quality delivery services in Nigerian universities. Specifically, the objectives of the study were:

- To examine the determinant of needs assessment for quality delivery services in the Nigerian universities.
- To find out the benefits of needs assessment for Nigerian universities.
- To determine the constraints against effective utilization of needs assessment as a tool for quality delivery of services in Nigerian universities

Research Questions

- What are the determinants of needs assessment for quality delivery services in Nigerian universities?
- What are the benefits of needs assessment for quality delivery services in Nigerian universities?
- What are the constraints against effective utilization of needs assessment as a tool for quality delivery services in Nigerian universities?

Hypotheses

- There is no significant relationship between academic staff of Rivers State University of Science and Technology (RSUST) and Ignatius Ajuru University of Education (IAUOE) in their perceptions on determinants of needs assessment for quality delivery services in Nigerian universities.
- There is no significant relationship between academic staff of RSUST and IAUOE in their
 opinions on the benefits of needs assessment for quality delivery services Nigerian
 universities.

Literature Review

The academic drift of the 21st century raises concerns about the core functions of universities and how contemporary changes have affected academic missions. In short, universities worldwide are being called upon to fulfill more and more roles often with fewer resources. This, therefore, informs the need to assess the statue of physical and learning facilities available in the institutions. With the used of need assessment, information about prioritized areas for improvement are easily attained.

As expressed by Ryan, Maurya and Yusra (2012) need assessment is concerned with systematic and continual efforts to improve performance. As need implies a gap between current and desired results, assessment is said to be a process of identifying what is and what should be in terms of results.

For Adeyemi (2011) needs assessment is an ongoing process of gathering data and information to determine what needs exists and ways of achieving the entire organizational development. In the same direction, Kaufman, Ingrid, Ryan, and Doug (2008) simply submitted that it is a gap in results. Particular emphasis in this regards, is on the outcomes or ends that result from an organization's products, processes or inputs.

Utilization of needs assessment as a tool either by management or national universities commission (NUC) often takes cognizance of problems, innovations, data incorporation and opinions to make effective decisions or recommendations about what should happen next. On this note, it is conceived that information about needs (gaps between current and desired results) is essential for improving quality delivery of service to the universities. For example, assessment of physical facilities required determinant of name of the facilities, year of constructions/procurement, installment capacity, faculty/dept, current capacity, year of refurbishment and cost, present condition and usage. This is design to know and understand the state and extent of its utility. This fact is in consensus with the perception of Kaufman, et al (2008) who stated that to conduct a quality needs assessment, the current results has to be articulated in order to attain the distance between results in the actual need.

Systematic processes of needs assessment helps to guide institutions through steps and challenging decisions based on facts. This is why Asiabaka and Mbakwem (2008), simply identify it as a dynamic process that will either lead to an action or not. It involves strategic planning to identify the gaps. For example, in the assessment of teaching staff disposition, statistics is taken on the condition of engagement (full time, visiting, adjunct, contract, sabbatical), numbers of professors, seniors lectures and others (lecturer 11, assistant and graduate assistant lecturers). Similarly, teaching staff by ranks, academic reputation that reflects on publication in the local and international levels, research grants, and collaboration with other institutions or agencies are taken into cognizance. The target here is to identify the nature of distribution and adequacy of the personnel in departments.

Again, the rate of admission of students is a case in point for needs assessment in every university in Nigeria. Numbers of the students' admitted are often determined to minimize influx rate of admission at the beginning of the year. As asserted by (Agboola, Adeyemi, & Ogbodo (2014) there is need to ensure that students are ascertained at the entry point so as to avoid overcrowding of students in a particular faculties or disciplines.

The position taken by another researcher like Adeyemi (2011) has shown that needs assessment set procedures that are used to determine needs, nature as well as setting priorities for future

action. Common experiences revealed that university system like other organizations never have enough resources to meet all needs, hence, needs assessment is conducted to help programmers or planners to identify and select the right products.

Designing of needs assessment involves a sequence of steps that can be grouped into three phases: organizational analysis, that is, effective and efficient utilization of available resources (money, facilities; materials and available expertise within the organization); task analysis that reflects on providing data about a job, knowledge, skills, attitudes and abilities needed to achieve optimum performance. Added to the above is individual analysis that stipulates how well individual employee is doing the job and training needs. This implies that cogent information about staff personnel, students learning ability, accountability, internal programme, decision making, monitoring of students' progress and how to structure their learning capacity are fundamental. In other words, it improves standard and quality assessment methods in the university system (Adediran, Adelegun and Balogun, 2014).

Need assessment therefore is a collaborative effort by both external and internal agencies. Thus, management, deans, heads of department, directors convened to analyze and determine the distribution of facilities and workforce in order to create stability in the organization as well as maintaining absolute collaboration with relevant stakeholders. To be more relevant and highly visualized, an inventory of skills, knowledge and competencies are always being the focus to determine to what extent universities have organized its facilities and work force to achieve the pre-determined goals and objectives.

METHODOLOGY

The study used descriptive survey design to examine determinant of needs assessment for quality delivery services in Nigerian universities. Thus, the population of the study consisted of all academic staff of Rivers State University of Science and Technology (RSUST) and Ignatius Ajuru University of Education (IAUOE). A random sampling technique was used to select 247 academic staff from Rivers State University of Science and Technology, Port Harcourt and 247 academic staff of Ignatius Ajuru University of Education. Hence, the sample size for the study was four hundred and ninety-four (494). A self—made instrument, Needs Assessment and Quality Delivery Services Questionnaire (NAQDSQ) was used for the study. Hence, nineteen (19) structured items were drawn for the study. Responses were based on 4-point rating scale in which the respondents were requested to answer: strongly agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). Thus, 494 copies of the questionnaires were distributed and retrieved for the analysis of the research questions and hypotheses.

The instrument was validated by expert in the field of measurement and evaluation .The reliability index established at 0.68. Descriptive tables, frequency counts, mean scores and standard deviation were used for the data analysis while Z-test was used to test the hypotheses.

RESULTS

Research Question 1: What are the determinants of needs assessment for quality delivery services in Nigerian universities?

Table 1: Mean scores responses on the determinants of needs assessment for quality delivery services in Nigerian universities

	·								
		RSUS	RSUST			IAUO ELECTURERS			
		LECT	LECTURERS			N=247			
]	N=247						
S/N	ITEMS	M		SD	M	SD	DECISIO		
О		DECI	DECISION				N		
1	Rate of student admission	3.21	.83	Agreed	3.2 6	.93	Agreed		
2	Lecturer /student ratio	3.30	.80	Agreed	3.1 7	.88	Agreed		
3	Identifying learning resources	3.07	.99	Agreed	3.1	1.0 7	Agreed		
4	Satellite campus and its affiliate programme	3.57	.67	Agreed	3.5 9	.66	Agreed		
5	Identify staff and conditions of engagement	3.24	.85	Agreed	3.2 5	.85	Agreed		
6	Students categories (full time, part time and sandwich) programme	3.16	.89	Agreed	3.1	.87	Agreed		
7	On–campus hostel (private, government)	3.25	.78	Agreed	3.2	.85	Agreed		
	Grand Mean & SD	3.26	0.8		3.2	.87			
			3		5				

The result of the above table indicated that the respondents subscribed to all the items as the determinants of needs assessment in Nigerian universities with the average mean score of (\overline{X} =3.3).

Research Question 2: What are the benefits of needs assessment for quality delivery services in Nigerian universities?

Table 2: Mean scores responses on the benefits of needs assessment for quality delivery services in Nigerian universities

		RSUST			IAUOE LECTURERS		
		LECTURERS			N = 247		
		N	N = 247				
S/N	ITEMS	M	SD	DECI	M	SD	DECISIO
O				SION			N
1	Quality delivery services.	3.2	.87	Agree	3.13	.85	Agreed
		7		d			
2	Setting of standard for	3.2	.74	Agree	3.37	.76	Agreed
	instructional activities.	7		d			
3	Improve the quality of teaching	3.4	.82	Agree	3.24	.78	Agreed
	and learning facilities.			d			
4	Determine the extent of	3.5	.80	Agree	3.30	.77	Agreed
	utilization and functionality of			d			
	the available facilities.						

5	Set criteria or benchmarks for achieving each educational programme	3.5	.77	Agree d	3.44	.77	Agreed
6	Determine the level of performance by personnel.	3.1	.88	Agree d	3.05	.87	Agreed
7	Determine measure of progress among various universities	2.5	1.08	Agree d	2.41	1.06	Disagreed
	Grand Mean & SD	3.2	0.85		3.13	0.84	

The table above indicated that the respondents subscribed to most of the items as the benefits the average mean score of ($\overline{X} = 3.2$).

Research Question 3: What are the constraints against effective utilization of needs assessment as a tool for quality delivery of service in Nigerian Universities?

Table 3: Mean scores responses on the constraints against effective utilization of needs assessment as a tool for quality delivery of service in Nigerian Universities

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	RSUST				IAUOE LECTURERS			
		LECTURERS			N = 247			
			N = 247					
S/N	ITEMS	M	SD	DECI	M	SD	DECISI	
О				SION			ON	
1	Lack of consistent data on the	3.29	.77	Agree	3.27	.75	Agreed	
	previous			d				
	needs assessment.							
2	Lack of sincere information on	3.53	.74	Agree	3.70	.71	Agreed	
	the available resources.			d				
3	Lack of technical personnel.	3.49	.80	Agree	3.45	.79	Agreed	
	_			d				
4	Lack of up-to-date figures on	3.04	.91	Agree	3.07	.92	Agreed	
	staff disposition.			d				
5	Findings are not always	3.34	.71	Agree	3.33	.71	Agreed	
	circulated to the public.			d				
	Grand Mean & SD	3.34	0.7		3.37	0.78		
			9					

The result of the table above confirmed all the items as the constraints against effective utilization of needs assessment as a tool for quality service delivery with the average mean score of ($\overline{X} = 3.4$).

TEST OF HYPOTHESES

Ho₁: There is no significant difference between academic staff of Rivers State University of Science and Technology (RSUST) and Ignitius Ajuru University of Education (IAUOE) on determinant of needs assessment for quality delivery services in Nigerian universities.

Table 4: Z Test on academic staff determinant of needs assessment for quality delivery services in Nigerian universities.

Respondents		N	\overline{X}	STD	DF	Z-	Z-
						CAL	CRIT
Academic	staff	247	3.26	0.83			
(RSUST)					492	0.95	1.96
Academic	staff	247	3.25	0.87			
(IAUOE)							

p > 0.05 (not

significant)
The result of

the above

table 4 shows that z-cal (0.95) was less that z-value (1.96) at degree of freedom (492) and 0.05 level of significance. This implies that the hypothesis which stated that there is no significant difference between academic staff of RSUST and IAUOE on their perception on the determinants of needs assessment in Nigerian universities for quality delivery services was accepted.

Ho₂: There is no significant difference between academic staff of RSUST and IAUOE on their opinion on the benefits of needs assessment for quality delivery services.

Table 5: Z-test on benefits of needs assessment for quality delivery services

•	Z-test on benefits of	2-test on benefits of needs assessment for quanty derivery services									
	Respondents		N	Mean	Std	Df	Z-	Z-crit			
							cal				
	Academic	staff	247	3.22	0.85						
	(RSUST)					492	0.64	1.96			
	Academic	staff	247	3.13	0.84						
	(IAUOE)										

p>0.05 (not significant)

The result of the above table 5 shows that z-cal (0.64) was less that z-value (1.96) at degree of freedom (492) and 0.05 level of significance. This implies that the hypothesis which stated that there is no significance relationship between academic staff of RSUST and IAUOE on benefits of needs assessment for quality delivery services was accepted.

Discussions

The result of hypothesis one indicated that there is no significant difference between academic staff of RSUST and IAUOE on determinants of needs assessment in Nigerian universities. This may be that the impact of needs assessment in the university has not really been felt. In other words, most of the facilities assess has not really gained the quality expected of it.

Findings also revealed that the respondents agreed that needs assessment determined the rate of students' admission in the university system. This implies that through needs assessment students' admission into each faculty or department is designed. Evidence from the study indicated that Lecturer /student ratio is acknowledged. This view is in line with national university commission (NUC) standard that enunciated the ratio of students per lecturers. For instance, in assessing the academic staff ratio to the students, a specific criterion is set out in various programmes such as 1: 10(science), 1: 30 (art) and 1:10 (medicine).

Furthermore, findings showed that needs assessment is determined by the nature and available learning resources. During the assessment programme, resources like projectors, multimedia

system internet, computer furniture, air condition are assessed to determine their viability, usefulness and utility capacity.

In the light of the above, it is discovered through investigation that satellite campus and its affiliate programme is one of the determinant of needs assessment. In this case, the number of satellite campuses, affiliate programme, mode of the programme (full or part time), and year of establishment are identified. The nature of the programme and the extent of quality delivery are also investigated.

Evidence from the study suggested that staff and conditions of engagement influence the needs assessment of the university system. Assessment of teaching staff disposition and statistics and conditions of engagement (full time, visiting, adjunct, and contract, sabbatical), numbers of professors, seniors lectures and others (lecturer 11, assistant lecturers and graduate assistant) are also taken into consideration. Similarly, teaching staff by ranks, academic reputation that reflects on publications in the local and international levels, research grants and collaboration with other institutions or agencies are taken into cognizance.

In addition, the study highlighted the fact that students categories (full time, part time and sandwich) programme are assessed. This is to identify the various categories of students are different programme and year of completion.

Furthermore, hypothesis two showed an indication that there is no significant difference between academic staff of RSUST and IAUOE on benefits of needs assessment in Nigerian universities. However, there an indication that needs assessment provides the opportunity of setting of standard for instructional activities. This finding is in consonance with Adeyemi (2011) who stated it is a systematic set of procedures that are used to determine and examine nature, causes, and set priorities for future action.

Improvement in the quality of teaching and learning facilities is noted as the determinants. This is because the nature, quality, usability and durability of the learning facilities are identified for proper repositioning. In other words, these processes determine the extent of utilization and functionality of the available facilities learning facilities.

Setting criteria or benchmarks for achieving each educational programme is acknowledged by the respondents as a benefit. This observation is in line with the observation of (FME, 2005) which stated that bench marks has become a veritable medium of improving institutional capacity as well as developing strategic plans for policy formulation and implementation. The merit is that it checks the rate of distributions of both human and material resources hence reducing lopsidedness.

The study also indicate that lack of consistent data on the previous needs assessment, lack of sincere information on the available resources, lack of technical personnel and lack of up-to-date figures on staff disposition are some constraints against effective utilization of needs assessment for quality delivery of service in Nigerian Universities.

Conclusion and Recommendations

Conclusively needs assessment set values for facilities and personnel in the university system which has caused improvement in the quality of service delivery. It was recommended that experience personnel should be deployed for transparency and quality assessment of facilities.

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