



Maintenance Culture among Vocational Curriculum Materials Users in Ogun State Tertiary Institutions

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Abstract: In a bid to achieve the objectives of any vocational curriculum in tertiary institutions, human and material resources are essential input factors. The observations by the researchers however showed that a good number of material resources in use for vocational curricula in higher education are deteriorating gradually. Some are even left redundant and the implementers are incapacitated in the delivery of their classroom, laboratory and workshop responsibilities. These observations informed the study which examined maintenance culture among vocational curriculum materials' users in Ogun State tertiary institutions. Four research questions and two null hypotheses guided the discipline survey. The participants included 135 vocational education staff members and 265 vocational education students in two universities and one college of education in Ogun State, Nigeria, making 400 participants altogether. One main research instrument with a reliability of 0.83 was used for data collection. Using descriptive and inferential statistics of t-test, the study found out that, there are divergent responses on the attitudinal dispositions of staff and students towards maintenance culture. Also, finance ($x=2.94$), lack of technical know-how ($x=2.53$), inadequate qualified vocational education instructors ($x=2.66$) and corrupt practices of institutional maintenance officers ($x=2.51$) are challenges facing maintenance culture in the tertiary institutions. There is significant difference in the maintenance culture practices observed in the college of education and the universities ($t\text{-cal}=.495 > t\text{-tab}=1.94$). Three dimensional approaches are recommended in the end, with a view to improving maintenance culture in the curriculum delivery process of vocational programmes, for better productivity.

Keywords: Curriculum Materials, Maintenance Culture, Vocational Curriculum

INTRODUCTION

Education remains an invaluable tool for human capital development that is essential for economic growth and sustenance all over the world. The economic, social and political statuses of any nation, which are the very fabric of human society, depend on education (Osaigbovo, 2015). Similarly, in order to effectively equip the recipients of education at all levels for economic and social functioning among others, curriculum plays a vital role. Within the context of skills' acquisition which education fosters, vocational curricula of all sorts which equip learners with saleable skills rely strongly on adequate human and material resources. As a result, in order for tertiary institutions in Nigeria to achieve their set visions, missions and goals in line with the dictates of the society, vocational curricular materials are crucial.

Generally, curriculum materials are learning resources that, if used properly, can assist a teacher or tutor in bringing about intended and desirable changes in individual learners (Alade, 2014). The educational enterprise within the concept of production function and educational goals requires physical facilities, human resources, adequate funding and students' input as essential and major variables needed to power it, in order to produce well equipped and all-rounded graduates or products.

Obielumani & Obielumani (2015) put it that in order to enhance the efficiency and effectiveness of the system (education), the tripods of man (human resources), money (adequate funding) and materials (physical facilities) must interact sufficiently both in quantity and quality.



Vocational curriculum materials, which is the area of concern in this study, cover the objects (structures) like classrooms or buildings (lecture halls and theatres), industrial laboratories, workshops, equipment, tools, libraries, administrative and vocational staff offices, utilities, information technology facilities and consumables among others. All these are purposefully needed to house and implement the various curricula of vocational and technical education programmes in Nigeria's tertiary institutions. The vocational curriculum materials are needed to develop cognitive areas of knowledge, abilities and vocational skills, which are necessary requirements for entry into the labour market. The provision of adequate vocational curriculum materials for the workforce in Nigeria's tertiary institutions to work with is one major way by which curriculum goals can be realized. What makes education a valued and meaningful commodity is teaching-learning facilities in terms of availability, adequacy, maintenance and relevance (Nwadiani, 2012).

Although, the issue of both human capital development and shortage of curriculum materials are obviously being addressed in Nigeria as observed by Alade and Akilo (2011), at all levels, still, serious deterioration of the available vocational curriculum materials has been obviously argued. It is observed that some of the facilities on ground, if not many, are in a state of disrepair. There are some dilapidated buildings, broken chairs, leaking workshops roofs, mutilated course materials and textbooks, scattered and empty laboratories, unaddressed detected faults, and vocational curriculum materials overused among other things. It appears that adequate attention is not being given to maintenance activities of the materials. One of the strong observations of Onokerhoraye (2007) about the deterioration of facilities in tertiary education is lack of a maintenance culture, insufficiency of funds to carry out repairs and poor procurement procedures, which have led to a steady running down of existing facilities – buildings, equipment and other infrastructures.

Maintenance culture of vocational curriculum materials, thus, becomes a serious issue at stake to address in this paper with the view of enhancing the quality of vocational curriculum implementation and quality of products. Indeed, maintenance culture in Nigerian tertiary institutions in the contemporary society has become a worrisome issue. This is evidenced by the rate of collapse and breakdown of structures, machinery and systems. Unavailability, inadequacy or non-functionality of a good number of vocational curriculum materials as consequential to vocational curricula problems are often complained of by staff working in Nigerian tertiary institutions. Thus, the human culture towards maintenance of these resources is questionable.

Maintenance is often referred to as the activities put in place to keep and restore the physical condition of an item. In other words, when vocational curriculum materials are maintained, operation of its curriculum is sustained. Commenting on culture, Wale & Patrick (2010) refer to culture as the configuration of learners' behaviour, whose component elements are shared and are transmitted by the members of a particular society. While maintenance means to keep equipment or material resources in operation condition or repair their operational mode. Maintenance culture in the context of this study is, as a result, defined as the shared attitude and behaviour of a particular group towards the care of available vocational curriculum materials. The groups in this case are all involved in the implementation of vocational and technical education curricula, such as: administrators, lecturers, instructors, technologists, technical officers, students, parents and other relevant stakeholders of education.

Maintenance work is crucial to ensure that a system remains available, and when altered, can be restored to its original state. What becomes of a curriculum when the material resources for its implementation are not properly maintained or cared for? Students' potential may not be realized, instructors and lecturers may be incapacitated, teaching and learning may not be effective, the goals and objectives of the vocational curriculum may fall short of realization, learning outcomes may suffer some deficiency and on the whole curriculum output may be debased. Therefore, no matter how goodlaudable vocational curriculum programme objectives may be, maintenance culture of the implementers is considered very crucial for the actualization of these objectives in the long run.

Series of research reports have been recorded on maintenance issues in Nigerian education. For instance, Ikoya (2012) reports that the availability, adequacy and functionality of schools' physical facilities are strongly hinged on efficient management and maintenance of resources. Arogundade (2011) shows that universities in Southwestern Nigeria face a problem of maintenance culture; while, Durosaro (2009) indicates a strong relationship between planned maintenance in the institutions of learning and unit cost of education. Uchendu, Ekanem & Jonah (2013) found out that in some of the institutions of learning, some factors militate against the proper maintenance of physical resources. They imply that physical resources are not regularly maintained, but rather maintained occasionally, and that the private institutions seem to be more maintenance conscious than the public ones.



Moreover, criticisms abound that while some vocational lecturers, institutions, and students sometimes complain about the approaches used by tertiary institutions' management to maintain vocational curriculum materials, some management officials also complain that students and concerned vocational staff do not have appropriate maintenance culture. At times, when the authority of tertiary institutions delegates the function of maintaining institution's material resources to committee members, such committees might eventually be faced with constraints like finance and lack of adequate cooperation of vocational material users. Based on this background, and with the demand for tertiary education which continues to increase unabated, the capacity of Nigeria's tertiary institutions will be unable to meet the vocational needs of those qualified to be admitted when and where curriculum materials are in disarray. As a result, the present state of maintenance culture continuously calls for attention with a view to improving the maintenance culture activities of the vocational curriculum materials in the existing Nigerian tertiary institutions.

STATEMENT OF THE PROBLEM

The provision and adequate maintenance of vocational curriculum materials in the form of physical facilities, equipment, tools, instructional materials, information and communication technology facilities and consumables among others, for the staff and students in Nigerian tertiary institutions to work with, is one major way by which curriculum objectives can be achieved. Nonetheless, the shortage of material resources, the decay of some of the existing ones, over usage, and overdependence on the available obsolete ones are affecting the optimum sustainable academic growth and quality of vocational graduates being produced in Nigerian tertiary institutions.

As a result of poor or lack of good maintenance culture, some available material resources are often left unused and the curriculum implementers are incapacitated in the delivery of their services. Similarly, maintenance of the human and non-human resources of vocational programmes in terms of training and re-training opportunities, staff welfare, working conditions and environmental improvement, as well as the workability of the material resources, are observed to be questionable.

A close observation by the researchers also shows that a good number of vocational and technical education students could not work with some of the available material resources, which are in a state of disrepair. This has impacted the production function of the institutions in quantity and quality of students' output and staff

research. These observations above and their resultant negative effects informed this study on maintenance culture among vocational curriculum materials' users in Ogun State tertiary institutions.

RESEARCH QUESTIONS

The research questions which guided the study are:

- (1) What are the maintenance cultural practices of vocational education materials' users in Ogun State tertiary institutions?
- (2) What is the attitudinal disposition of vocational education stakeholders (staff and students) towards maintenance of vocational curriculum materials in Ogun State tertiary institutions?
- (3) What are the challenges of maintenance culture facing vocational curriculum materials' users in Ogun State tertiary institutions?
- (4) Does maintenance culture on vocational curriculum materials' users lead to the programme improvement in Ogun State tertiary institutions?

RESEARCH HYPOTHESES

The following null hypotheses guided the study:

Ho₁: There is no significant difference between the mean responses of participants in the College of Education and their counterparts in the universities on the maintenance culture practices of vocational curriculum materials in Ogun State.

Ho₂: There is no significant difference between students and staff mean responses on the challenges of maintenance culture on vocational curriculum materials in Ogun State tertiary institutions.

SCOPE OF THE STUDY

This study is limited to the tertiary institutions in Ogun State where vocational programmes are offered. Specifically, the study is limited to vocational Business Education, Home Economics and Hotel Management, and Technical Education students and their respective vocational lecturers, instructors and support staff (male and female in all), in the College of Education and the state-owned universities in Ogun State. It is also limited to maintenance culture of vocational curriculum materials, which are taken to mean physical facilities (structures), equipment, tools, machines, information and communication technology facilities (computer facilities, instructional resources and teaching aids) and consumables, which go into the implementation of vocational curriculum implementation.



METHODOLOGY

Research Design

Descriptive survey research design was adopted for this study. The approach provided an opportunity to make a vivid description of the information gathered from a population sample without manipulating any variable.

Population of the Study

The population of the study was comprised of all the Vocational Business Education, Home Economics and Technical Education students and staff in the existing College of Education and the Ogun State Government universities, where any of the vocational courses identified above are offered.

Sample and Sampling Technique

A purposive random sampling technique was used to sample 400 participants for the study. This sample covered 135 staff (lecturers and instructors) and 265 vocational students. Among the respondents, 170 are male while 230 are female, making 400 altogether.

Instrument for Data Collection

Maintenance Culture of Vocational Curriculum Materials Rating Scale (MCVCMRS) was the main research instrument used for data collection (See Appendix A). It is divided into two sections: Section A and Section B. Section A takes care of the participants' bio-data while Section B, which is divided into four (4), consists of sets of items intended to elicit participants' responses for the stated research questions. The four-point rating scale uses Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) as the range of responses identified with 4, 3, 2, and 1 point respectively for the spread of opinions.

Validation of the Instrument

The instrument used for this study is the Maintenance Culture of Vocational Curriculum Materials Rating Scale (MCVCMRS), which was validated by vocational experts who examined the items of the instrument and made suggestions for improvement, which guided the final draft of the instrument.

Reliability of the Instrument

Thirty (30) copies of the research instrument were administered altogether on the relevant respondents, but outside the scope of the study. Cronbach Alpha was used to determine the reliability co-efficient of 0.813 which showed a percentage of 81.3, and this was rated as a strong reliability co-efficient of the research instrument (MCVCMRS) used for data collection in this study.

Methods of Data Collection

The two researchers with the assistance of some of the tertiary institutions' staff and representatives helped in the co-ordination of data collection. The distribution of the copies of the research instrument and data collection lasted for about four weeks altogether.

Data Analysis

Descriptive statistics of frequency count, percentage, mean and standard deviation were used to answer the research questions; while, inferential statistics of t-test were used to test the null hypotheses raised in the study. The decision rule which guided the acceptance or the rejection of any of the items in the instrument is determined thus as: Any item with mean rating of 2.50 and above was accepted while items with mean rating values bellow 2.50 were rejected. Also, the decision to reject or not to reject the null hypotheses is based on the comparison of the table value (t-tab) with the calculated value (t-cal). Essentially, the null hypothesis (Ho) is rejected where the t-calculated is greater than (>) t-tabulated, but if otherwise, the Ho is not rejected.



RESEARCH FINDINGS AND ANALYSIS

Research Question 1: What are the maintenance cultural practices of vocational curriculum materials' users in Ogun State tertiary institutions?

Table I. Maintenance Culture Practices of Vocational Curriculum Materials' Users in Tertiary Institutions

S/N	Maintenance Practices	SA	A	D	SD	Mean	Standard Deviation	Remark
1.	Maintenance efforts of ensuring a good working condition of vocational curriculum material resources are adequate	-	96	53	251	1.61	.848	Rejected
2.	Maintenance of vocational curriculum material assets is often carried out on regular basis	-	109	-	291	1.55	.892	Rejected
3.	Depreciated vocational curriculum materials are replaced immediately	-	-	121	279	1.30	.460	Rejected
4.	Students are actively involved in the maintenance of vocational curriculum material resources	161	222	-	17	3.32	.688	Accepted
5.	Faulty vocational curriculum materials are responsibly repaired by the users	-	-	78	322	1.20	.397	Rejected
6.	Adequate provisions for maintenance culture orientation are made available	-	98	76	226	1.68	.842	Rejected

Out of the six items presented in Table I, the study participants with the mean scores of 1.61, 1.55, 1.30, 1.20 and 1.68 are within the rejection range. These results show that there are inadequacies in maintenance culture practices of vocational curriculum materials' users. That is, maintenance practices are not often carried out on a regular basis as expected; depreciated ones are not promptly replaced; faulty ones are not responsibly repaired; and adequate provision for maintenance culture

orientation considered by the respondents as not readily made available for them. Meanwhile, the respondents altogether with the mean response of 3.32 acceptance (Table I, Item 4) makes it clear that students are actively involved in the maintenance of vocational curriculum materials available in the tertiary institutions surveyed.

Research Question 2: What is the attitudinal disposition of vocational education stakeholders (staff and students) towards maintenance of vocational curriculum materials in Ogun State tertiary institutions?

Table II. Attitudinal Disposition of Vocational Education Staff and Students towards Maintenance of the Curriculum Materials.

S/N	Attitude Towards Maintenance Culture	SA	A	D	SD	Mean	Standard Deviation	Remark
1.	Maintenance of vocational curriculum material resources should solely be the responsibility of the institutional administrators	18	153	66	163	2.12	1.029	Rejected
2.	The role of students towards the maintenance vocational curriculum materials has been supportive	61	139	41	159	2.26	1.137	Rejected
3.	The role of vocational instructors towards the maintenance of vocational curriculum material resources has been supportive	41	147	143	69	2.40	.890	Rejected
4.	Maintenance of vocational curriculum material resources is not often necessary to be borne by vocational staff and students themselves	58	61	209	72	2.26	.920	Rejected
5.	I feel uncomfortable to be in charge of vocational curriculum material resources' maintenance	41	189	72	98	2.43	.971	Rejected
6.	The financial burden of vocational curriculum material resources; maintenance is not my responsibility	74	177	52	97	2.57	1.050	Accepted



The results in Table II represent the attitudinal disposition of vocational education staff and students towards maintenance of the curriculum materials. Item 1, Table II shows that the majority of the respondents disagree with the view of making the maintenance of vocational curriculum materials the sole responsibility of the institutional administrators, with a rejection mean value of 2.12. Although, item 4 in Table I clearly indicates that students are actively involved in the maintenance of vocational curriculum material resources (3.32), their role towards the maintenance of vocational curriculum materials not been supportive, with a rejection mean value of 2.26 in Table II. This implies differential attitudinal dispositions of the respondents on

maintenance cultural practices. Similarly, the mean values of 2.40 (items 3), 2.26 (item 4) and mean value of 2.43 (item 5) in Table II reveal that vocational instructors have not been supportive in maintenance roles; maintenance of vocational curriculum materials should not often be necessarily borne by vocational staff and students themselves; and that the respondents also feel uncomfortable to be in charge of vocational curriculum materials respectively. Also, the respondents accepted the fact that the financial burden of vocational curriculum materials maintenance is not their responsibility with a mean value of 2.57.

Research Question 3: What are the challenges of maintenance culture facing vocational curriculum materials' users in Ogun State tertiary institutions?

Table III. Challenges Facing Vocational Curriculum Materials' Users on Maintenance Culture

S/N	Maintenance Culture Challenges	SA	A	D	SD	Mean (x)	Standard Deviation	Remark
1.	Finance	178	153	69	0	2.94	.902	Accepted
2.	Lack of technical Know-how	65	151	142	65	2.53	1.010	Accepted
3.	Inadequate qualified vocational education instructors	59	151	139	51	2.66	1.017	Accepted
4.	Inadequate electricity supply for maintaining electrically powered equipment	88	218	0	94	2.75	1.049	Accepted
5.	Time factors for maintenance activities	36	144	76	144	2.18	1.025	Rejected
6.	Corrupt practices of institutional maintenance officers	61	176	109	54	2.51	1.027	Accepted

The results in Table III clearly show that the challenges facing vocational curriculum materials' users on maintenance culture are finance ($x=2.94$), lack of technical know-how ($x=2.53$), inadequate qualified vocational education instructors ($x=2.66$), inadequate

electricity supply for maintaining electrically-powered equipment ($x=2.75$), and corrupt practices of institutional maintenance officers ($x=2.51$). However, time factor as a challenge for maintenance activities is rejected outright by the research respondents with a mean value of 2.18.



Research Question 4: Does maintenance culture on vocational curriculum materials lead to academic programme improvement in Ogun State tertiary institutions?

Table IV. Impact of Maintenance Culture on Vocational Curriculum Materials on Programme Improvement.

S/N	Maintenance Culture Impact	SA	A	D	SD	Mean	Standard Deviation	Remarks
1.	Effective vocational instructional process	182	167	51	0	3.33	.690	Accepted
2.	Achievement of vocational curriculum objectives maximally	0	177	67	156	2.05	.912	Rejected
3.	Improvement on vocational curriculum skill Acquisition	131	114	148	0	2.94	.893	Accepted
4.	Active participation of students during practicum	86	157	29	128	2.56	0.233	Accepted
5.	Improvement in skills competency of vocational students	13	148	105	134	2.10	.909	Rejected

As shown in Table IV, cultural maintenance practices of vocational curriculum material resources' users have positively impacted the following in the curriculum implementation process:

- Effective vocational instructional process - $x=3.33$
- Improvement in vocational curriculum skills acquisition - $x=2.94$
- Active participation of students during practicums- $x=2.56$

But the inadequacies observed earlier in the results presented in Tables I, II and III evidently reveal that the achievement of vocational curriculum objectives has not been maximally realized. A mean value of 2.05 showing rejection by the study respondents (item 2, Table IV) makes it clear and the expected improvement in skills competency of vocational students through their exposure to vocational curriculum has not been realized.

TEST OF NULL HYPOTHESES

H_{01} : There is no significant difference between the mean responses of participants in the College of Education and their counterparts in the universities on their maintenance culture practices of vocational curriculum materials in Ogun State.

Table V. T-test of Participants in the College of Education and Universities on the Maintenance Culture Practices of Vocational Curriculum Material Resources.

Institution	N	Mean	Std. Dev	Df	t-cal	t-tab	Decision
College of Education	270	1.53	.889	398	.495	1.97	Significant
Universities	130	1.67	.988				

As presented in Table V, an independent sample t-test of the stated null hypothesis (H_{01}) indicates that there is a significant difference in the mean ratings of the participants' responses from the College of Education and those from universities ($t\text{-cal}=.495 > t\text{-tab}=1.97$). Thus, null hypothesis 1 is rejected.

This implies that divergent opinions arise among vocational education participants in the College of Education and their counterparts in the universities on the maintenance culture practices performed on vocational curriculum materials.



Ho₂: There is no significant difference between students and staff members' mean responses on the challenges of maintenance culture on vocational curriculum materials in Ogun State tertiary institutions.

Table VI. T-test of Students and Staff on the Challenges of Maintenance Culture of Vocational Curriculum Material Resources

Participants	N	Mean	Std. Dev	Df	t-cal	t-tab	Decision
Students	350	2.80	1.026	398	5.94	1.97	Significant
Staff	50	2.65	1.078				

The independent sample test of null hypothesis 2, as shown in Table VI, reveals a significant difference between students and staff mean scores on the challenges of maintenance culture on vocational curriculum materials ($t\text{-cal}=5.94 > t\text{-tab}=1.97$). Thus, null hypothesis 2 is hereby rejected. This result implies that there are disparities in the challenges of maintenance culture being experienced by students and staff from Ogun State universities and their counterparts in the College of Education where vocational curricula are being implemented

DISCUSSION OF FINDINGS

Investigating the maintenance culture among vocational curriculum materials' users in Ogun State tertiary institutions, as examined in this study, has revealed some specific findings discussed as follows.

Maintenance culture on vocational curriculum materials often used for implementation is adjudged to be inadequate. As made evident in Table I, the fact that maintenance practices are not carried out on a regular basis coupled with non-replacement of worn-out material resources and delay in the repair of faulty ones give a clear indication that the material input which goes into vocational curriculum implementation in the tertiary institutions sampled is inadequate to achieve the intended vocational curriculum objectives expected. These findings corroborate the findings of Uchendu, Ekanem & Jonah (2013) that physical resources in the institutions of learning are not regularly maintained but rather maintained occasionally. Meanwhile, the study found out that vocational students are actively involved in the maintenance of vocational curriculum materials available in their respective institutions.

On the attitudinal disposition of vocational staff and students towards maintenance culture, some students and vocational instructors have been supportive (Table II) and most of them do not see the maintenance of vocational curriculum material resources as the sole responsibility of the institutional administrators. Perhaps these findings are in agreement with Ahmed (2008) who opined that government property is treated as nobody's property. Still, the respondents in this study feel that maintenance of vocational curriculum materials should not be their burden.

In order for Nigerian tertiary institutions to achieve their set vision, mission and vocational goals, the facilities, equipment and consumables as well as their maintenance, no doubt are crucial. This study, however, has found that finance, lack of technical know-how, inadequately qualified vocational education instructors, poor electricity supply and corrupt practices of institutional maintenance officers are all threats to maintenance culture of vocational curriculum material input (Table III). Some of these challenges are quite similar to the observations of Obielumani & Obielumani (2015) that under-funding problems, strikes, economic recession and inflation, corruption and poor management of available resources are some of the reasons why the Nigerian university system is perpetually undergoing crises. Be as it may, time factor is not applauded as a challenge nor excuse affecting maintenance culture of vocational curriculum materials in this study. Where there are challenges and inadequacies in maintenance culture, as found out in this study, programme development would be drastically hampered. This supports the assertion of Stanley (2011) that identified inadequacies in maintenance practices are banes of development. Corroborating the challenges facing maintenance culture in vocational education curriculum implementation, Arogundade (2011) also affirmed that those challenges are factors which could divert attention from the primary goal of learning and create adverse effects on students' behaviour.

Although, the inadequacies observed in this study affected the achievement of vocational curriculum objectives (Table IV), cultural practices being demonstrated by the users on the available materials have impacted the vocational curriculum process ($x=3.33$); led to improvement of vocational curriculum skills acquisition ($x=2.94$); and enhanced active participation of students during practicums ($x=2.56$).

The results in Table V, which established divergent opinions with significant difference among the participants in both the College of Education and the universities sampled on, indicate that the difference in maintenance culture practices of vocational curriculum materials perhaps might be a result of administrative factors, policy issues and attitudinal dispositions in their respective institutions. Likewise, the significant difference among students and staff on the challenges of maintenance culture



in tertiary institutions are indicators that all is not well with vocational curriculum being implemented where the input (material resources) are inadequate. Lack of maintenance culture, insufficiency of fund to carry out repairs, and poor procurement procedures which often lead to a steady running down of existing vocational items, tools, facilities, equipment, infrastructure and consumables, would reduce the carrying capabilities of tertiary institutions and practical expositions expected in vocational curriculum delivery in respective tertiary institutions in Nigeria.

CONCLUSION

It has been acknowledged in this study that the vocational curriculum enterprise being implemented in Nigerian tertiary institutions requires material resources added to human input so as to empower the curriculum to produce functional graduates. However, the maintenance culture of the material resources in tertiary institutions being affected with a number of challenges, as discovered in this study. Despite the fact that it is not the sole responsibility of institutional administrators to bear the burden of maintenance culture, divergent opinions still abound on how supportive are students and vocational instructors. It is evident that the extent of collective participation of the respondents in maintenance culture practices yields improvement in instructional delivery and vocational skills' acquisition. Notwithstanding the above, the competencies of vocational students where material resources are not well maintained are in doubt. In the same vein, the extent of achieving vocational curriculum objectives in the tertiary institutions where vocational courses are offered becomes worrisome. While it is crystal clear that the inadequacies observed in maintenance culture among vocational curriculum users who participated in this study cannot be solved overnight, there is the need for concerted efforts and proactive measures of stakeholders of vocational education, including the curriculum implementers, for improvements as recommended below.

RECOMMENDATIONS

Three dimensional approaches are hereby recommended for improvement in maintenance culture among vocational curriculum materials' users and they are:

1. **Tertiary Institutions' Approach:** Authorities of tertiary institutions in collaboration with the proprietors (stakeholders of the institutions) are encouraged to repair and revitalize the existing vocational curriculum materials of all sorts within their domain and further increase their expenditure and funding of vocational resources with a view to matching the enrollment explosion in some of the vocational programmes in Nigeria.

2. **Private Bodies' Approach:** Vocational entrepreneurship establishment/industries, as well as philanthropists, should be consulted to render their participative roles/responsibilities in maintenance culture of tertiary institutions by making efforts to join hands in

repairs and replacement of spoilt material resources, as well as in supplying modern materials and equipment on compassionate or moderate price ground.

3. **Vocational Staff and Students' Approach:** Vocational staff and students are to be discouraged from treating government's property as nobody's property. Instead, they are encouraged to always observe maintenance culture guidelines, so as to improve the longevity of the materials. Similarly, there should be adequate monitoring and supervision of users of vocational materials/equipment by designated monitoring groups as at when due.

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