

An Appraisal of Resource Utilization in Vocational and Technical Education in Selected Colleges of Education in Southwest Nigeria

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Abstract Availability and adequacy of resources in an organisation go a long way in achieving specific goals and objectives. The utilisation of these resources is also very germane. This paper dealt with required resources in Vocational Technical Education, its availability and adequacy. The major resources which were identified and researched into are utilisation of space and physical resources in Vocational and Technical Education in selected Collages of Education in South West Nigeria. Descriptive research of the survey type was used with 1,040 subjects. The subjects were selected using stratified, purposive and simple random sampling techniques. Questionnaire and inventory were the instruments used for this study. Recommendations were made based on the findings and conclusion of the study.

Keywords Resources, Vocational, Utilisation

1. Introduction

Resources constitute a major strategic factor in organizational functioning. Thomas and John (1978) states that managers work with many resources to accomplish their goals. Such resources include raw materials to produce goods, building to house operations and financial resources to fund their activities. Thomas and John (1978) also hold the view that human resources are most important. It has been observed that Nigeria is facing a serious problem of how to finance her educational programmes. Ayodele (2000) reports among several reasons that government is unwilling to allocate an increase share of its expenditure to education. Supporting this view, Ibukun (2000) declares that “education in Nigeria is inadequately funded due to the rising cost of resources for learning, skyrocketing enrolment of students and the galloping inflation within the country”.

Other factors which need prompt attention raised by Nigerian Education Research and Development Council (NERDC) (1980) before good qualities can be attained during expansion include the creation of adequate physical facilities such as good books and teaching aids, the education and training of the necessary cadres of teachers with adequate knowledge of what to teach and of the methodology,

the enrichment of learners home and school environment through the provisions of adequately equipped libraries. Other factors still include; the promotion of extra-curricular and co-curricular activities; the quality control of education through supervision, inspection, continuous assessment, the fiscal resources and allocated measures taken by the government towards revitalizing the educational system.

The above factors constitute the basic requirements to which any development-oriented educational system must relate. The requirements are the plans, programmes and projects, which appreciate a closer relationship and the indispensability of quality to any worthwhile educational expansion that is geared towards success. Every organization aim at achieving specific goals and objectives. To accomplish these objectives, tasks must be identified, tools and other resources must be provided and utilised appropriately. Uguru and Abdullahi (2007) agrees that the goal of functional education is to prepare its beneficiaries with all it takes to adjust well in the societies, contribute meaningfully to the development of the society, and as well live a fulfilled life. It was therefore stressed that the above is possible through effective combination and utilization of different resources employed in the running of the educational enterprises. The unavailability of resources to teach the students are likely to lead to poor learning outcomes and also affects the lecturers output. Ayeni (2005) identifies some factors that are responsible for the poor leaning outcome of students in Vocational and Technical Education. These include inappropriate planning of educational programmes, insufficiency of

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qualified vocational educators in the field, insufficient material resources for training, lack of recognition and encouragement of vocational education graduates, inadequate funding and, lack of vocational guidance and counselling.

There is no doubt that the inadequate funding of Vocational and Technical Education may lead to insufficient or non availability of material resources for training. A situation where skilled personnel are available but no material resources to work with will be discouraging. In some Colleges of Education, the few resources that are available are old and not properly installed due to lack of fund. There are instances where some resources are available but the lecturers are not able to utilize them in teaching and learning process as a result of lack of skills. Also in some of these colleges, some modern equipment such as sophisticated sewing machines, computer machines, wood cutters and others are not used by lecturers because of their inability to use them.

Overstretched of available physical space and facilities due to over enrolment as noted by Famade (1999) are there too. All these have great consequences on the outcome of the programme.

It is against this background that this study tried to appraise resource utilization in vocational and technical education in south west Nigeria.

2. Statement of the Problem

Revelations from the concluding section pointed gross inadequacy of the various resources meant to provide functional education in vocational and technical programme of our educational system. The media are replete with stories of unemployable graduates, half baked ones and falling standard. The nation's industrialists are becoming increasingly sceptical of the products from this programme. This ugly situation can be traced mainly to these inadequacies. Not many researchers have attempted to identify and qualify what resources are available in the colleges

It is against this background that this study tried to appraise resource utilization in vocational and technical education in South West Nigeria.

It is hoped that the findings of this study will help the government and the institution authorities to take better decisions on the efficient and effective utilization of the limited resources provided to Colleges of Education. It would also provide the policy makers and educational planners with necessary statistical information for more effective educational planning and better policy formulation on resource utilization.

Also, it is expected that the findings of this study would assist the accreditation panel of Colleges of Education to understand the problems being faced by the colleges regarding availability and utilization of resources.

3. Research Questions

The following research questions were raised for this

study:

1. Are the required resources in vocational and technical education available?
2. Are the available resources in vocational and technical education adequate?
3. Are the available spaces well utilized?
4. Are the available physical resources well utilized?

4. Research Methodology

The descriptive research of the survey type was used. The sample for the study was made up of 1,040 which in turn was made up of 40 heads of department; 200 lecturers and 800 students.

The subjects were selected using stratified, purposive and simple random sampling techniques. Stratified random sampling technique was used to select eight (8) colleges of education in the south west Nigeria. (3 Federal and 5 States). Purposive sampling technique was used to select the heads of department; simple random sampling technique was used for lecturers and the students in school of Vocational and Technical Education in South West of Nigeria.

Questionnaire and inventory were the instruments used for this study. These instruments were designed the Head of Department Inventory on Resource Utilization (HDIRU), Lecturers Questionnaire on Resource Utilization (LQRUVTE) and Student Questionnaire on Resource Utilization (SQRUVTE). And were validated by experts in educational management and test and measurement

Data were analysed using percentages means and standard deviation.

Results:-The result were presented in the table below.

Table 1 above reveals the mean score on resource availability in each department in the schools of Vocational and Technical Education in South/West Nigeria. The highest mean score on resource availability was in Fine and Applied Arts with 100%. Technical Education had the mean score of 90.7%. Home Economics had 90%, Agricultural Science had 78.5%, while Business Studies Department recorded the least resource availability with 45.7%. On the average, the total mean scores for resource availability in all the departments was 81.5%, while the mean for not available resources was 18.5%. This therefore shows that most of the required resources in Vocational and Technical Education were available with the exception of the Department of Business Studies where some of the required resources were not available. Such resources include; shorthand laboratory, model office facilities such as photocopier, file cabinet, overhead projector and guillotine machine.

Based on the quantity of resources available in Vocational and Technical Education in the Colleges of Education, Technical Education had the highest resource adequacy with 90.6%; Home Economics had 76.5%; followed by Business Studies Education with resource adequacy of 62.6%; Fine and Applied Arts had the percentage of 60.9%; the department of agricultural science had the least resource adequacy

with 48.9%.

The average percentage on resource adequacy in all the Departments was 78.0%. It could be stated that resource in Vocational and Technical Education in the Colleges of Education were adequate except in Agricultural Science Department where honey extractor, bee keeping equipment and cassava planting machine were inadequate. Also in Fine and Applied Arts Caliper Mettle was not adequate. Technical Education Department was in short of shaping machine, drafting machine and computer aided rafting.

As indicated in table 3 on the level of staff office space utilisation, 637 respondents, representing 73.0% held the view that the available staff offices for the Vocational and Technical Education programme in the Colleges of Education were well utilised, while 27.0% of the respondents had a

contrary view. It is also apparent in the table that other spaces were well utilised for the Vocational and Technical Education programme in the colleges. These include departmental office, 72.8% positive response, college library, 72.1%, departmental library, 71.9%, technical workshop, 70.6%, Other well utilised resources include display space with 66.2%, lecture theatre, 65.0% auditorium, 60.9%, classroom space with 60.0%, internet facility space 59.5%, general store 55.1%, laboratory space 54.5% and the least of the well utilised spaces was departmental store with 54.1%. Looking critically at this table, it is quite obvious that the available spaces for the Vocational and Technical programme were well utilised with the average score of 560 respondents with 64.3%, while 312 respondents, that is, 35.7% had contrary view.

Table 1. Lecturers response on resource availability in Vocational and Technical Education Colleges of Education South West Nigeria

S/N	Department	Available		Not Available		TOTAL	
		Mean	%	Mean	%	Mean	%
1.	Agricultural Science	32	78.5	8	21.5	40	100
2.	Business Studies	16	45.7	19	54.3	35	100
3.	Fine and Applied Arts	40	100	0	0	40	100
4.	Home Economics	36	90	4	10	40	100
5.	Technical Education	28	90.7	2	9.3	30	100
TOTAL MEAN		30	81.5	7	18.5	37	100

Table 2. Resource adequacy in Vocational and Technical Education Colleges of Education South West Nigeria

S/N	Department	Quantity Available	Minimum Standard	Resource Adequacy (%)
1.	Agricultural Science	134	274	48.9
2.	Business Studies	134	214	62.6
3.	Fine and Applied Arts	136	223	60.9
4.	Home Economics	173	226	76.5
5.	Technical Education	1112	1227	90.6
TOTAL		1689	2164	67.9

Table 3. Students and Staff Responses on Space Utilisation

S/N	Spaces	Well Utilised		Not Well Utilised		TOTAL	TOTAL
		f	%	f	%	F	%
1.	Classrooms space	523	60.0	349	40.0	872	100
2.	Display space	577	66.2	295	33.8	872	100
3.	Laboratory space	475	54.5	397	45.5	872	100
4.	Staff office space	637	73.0	235	27.0	872	100
5.	Departmental office	635	72.8	237	27.2	872	100
6.	College library	629	72.1	243	27.9	872	100
7.	Departmental library	627	71.9	245	28.1	872	100
8.	Auditorium	531	60.9	341	39.1	872	100
9.	Lecture theatre	567	65.0	305	35.0	872	100
10.	Technical workshop	616	70.6	256	29.4	872	100
11.	Internet facility	519	59.5	353	40.5	872	100
12.	General store	481	55.1	391	44.9	872	100
13.	Unit/Departmental store	472	54.1	400	45.9	872	100
Average		560	64.3	312	35.7	872	100

Table 4. Physical Resource Utilisation in Vocational and Technical Education College of Education, South West Nigeria

S/N	Department	Well Utilised		Not Well Utilised		TOTAL	TOTAL
		Mean	%	Mean	%	Mean	%
1.	Agricultural Science	103	51.5	97	48.5	200	100
2.	Business Studies	85	58.2	61	41.8	146	100
3.	Fine and Applied	106	63.1	62	36.9	168	100
4.	Home Economics	114	70.8	47	29.2	161	100
5.	Technical Education	57	36.5	99	63.5	156	100
Average		95	55.2	77	44.8	172	100

The responses of both the lecturers and students on table 4 indicate the physical resource utilisation in Vocational and Technical Education South West Colleges of Education. The mean scores were presented on the basis of departments involved. As indicated in table 4, Home Economics Department well utilised the physical resource with the mean score of 70.8% followed by Fine and Applied Arts with mean score of 63.1%; Business Studies 58.2%; Agricultural Science 51.5%; while the least well utilised physical resources was in Technical Education Department with 36.5%. On the average, 55% of the respondents indicated that physical resource in Vocational and Technical Education were well utilized. It could therefore be showed that physical resources were under utilized in some departments like Agricultural Science where drawing room was not well utilised, Business Studies Department did not well utilize duplicating and binding machines while Technical Education Department did not well utilise Technical Drawing Equipment (drawing table/board, set square and Tee square).

5. Discussion of Findings

It is apparent in table 1 that most of the required resources in Vocational and Technical Education in South West Colleges of Education were available. However, a survey of these resources revealed shortage in some departments. The most affected one is Business Studies, where resources such as shorthand laboratory, model office facilities and audio-visual room equipment were not provided. The non-availability of some of these resources could be attributed to lack of fund or the priority attention of the management staff towards the department or the school concerned. This situation may not allow for effective teaching by the lecturers and learning outcome of students in Vocational and Technical Education.

Studies such as Longe (1985); and Famade (1999) have shown that availability of resources aid the implementation process to produce outputs in organisation like Colleges of Education. Many research reports have shown that material inputs influence perceived students' learning outcome. Fagbemi (1988), and Ogunniyi (1982) agreed that non-availability of resources such as teachers, laboratories, workshops and funds are major hindrances to effective teaching and learning particularly in our tertiary institutions. Udo (2006), Osude and Miller (1999), agrees that availability, relevance and adequacy of resources contribute to perceived students' learning outcome.

Still on the problem of adequacy of resources for the Vocational and Technical Education in the Colleges of Education, it is quite obvious as vividly indicated in table 2 that most of the resources were adequate. Except, in some departments, where some required resources were grossly inadequate. For instance in Agricultural Science Department, resources such as honey extractor, bee keeping equipment and cassava pelleting machine were inadequate, also in Fine and Applied Art, calliper mental was inadequate. Technical

Education Department was inadequate with shaping machines, drafting machine and computer aided rafting. Adequacy of resources could be the reason for good learning outcome, particularly if the lecturers utilised such resources well. The inadequacy of some of these facilities could be as a result of aging, state of disrepair or being obsolete as they are no more in use and probably source of electricity to run the machines might be very poor. Nevertheless, the adequacy of most of the resources will only be meaningful if they are well utilised. As succinctly put by Ivowi (1982), that where resources are adequate, most of the users (teachers) do ignore them, especially during the practical lessons in the laboratory. It must also be stressed that the inadequacy of some of the resources could affect perceived students' learning outcome. Ayeduso (1997); and Gboko (1998) reveals that poor performance were due to inadequate of resources.

As clearly indicated in table 3, it is obvious that the available spaces in Vocational and Technical Education in the Colleges of Education were well utilised. This could be as a result of lecturers efficiency and student commitment to study. It is not superfluous that space utilisation contribute significantly to effective teaching and learning. As remarked by Morphet (1987), "the available spaces help pupils to learn better and enhance efficiency." As represented in table 4, the available physical resources in some of the Vocational and Technical Education departments in the South West Colleges of Education were under-utilised. These under-utilised physical resources were found in Agricultural Science Department such as drawing room, Business Studies Department (duplicating machine and binding machine, Technical Education Department (technical drawing equipment). The under utilisation of some of these physical facilities could be attributed to factors such as shortage of lecturers or inefficiency or lack of seriousness or commitment on the part of students. Other factors could be inadequate electricity and portable water supply for the use of these physical facilities. Udo (2006) remarks that shortage of technical lecturers contributed to under utilisation of physical resources.

6. Conclusions

From the findings it can be concluded that most of the required resources in Vocational and Technical Education were available and adequate.

7. Recommendations

Based on the findings and conclusion of this study, the following recommendations were made:

- Resources such as shorthand laboratory, photocopiers, overhead projectors and guillotine machines should be made available to the schools of vocational and technical education in the Colleges of Education.
- The Colleges should ensure that resources such as honey extractor, bee keeping equipment and cassava pellet

machines are adequately provided for the use of the departments of agriculture.

- Laboratory spaces, departmental stores and general stores should be more utilised by the schools of vocational and technical education in the Colleges of Education.

- Physical resources such as drawing room equipment, duplicating and binding machines and technical drawing equipment should be well utilised.

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