Enhancement Strategies For Quality Technical Education Programmes In Tertiary Institutions In Rivers State

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Abstract: This study examines enhancement strategies for quality technical education programmes in tertiary institutions in Rivers State. Five research questions guided the study while three hypotheses were formulated and tested at 0.05 level of significance. Descriptive survey research design was used and the population of the study was 452 respondents from tertiary institutions in Rivers State. A sample of 366 respondents (79 lecturers and 287 students) was drawn through simple random sampling technique. The data for analysis was collected through a self-constructed instrument titled “Technical Education Enhancement Strategies Questionnaire” (TEESQ) which was validated by three experts (lecturers). A reliability coefficient was established for different sections of the instrument through Pearson Product Moment Correlation (PPMC) method whose coefficients were 0.86, 0.81, 0.83, 0.88 and 0.82 respectively. The research questions were analysed using descriptive statistics of mean with standard deviation while hypotheses were tested with independent t-test. The study revealed strategies to improve government, students, lecturers and school related factors for quality technical education programmes. It was recommended amongst others that government should provide adequate funding for infrastructural facilities such as equipments, training workshops etc to tertiary institutions to aid practical acquisition while lecturers should be technically skillful to improvise instructional materials and also to adopt appropriate teaching methods.

Keywords: Enhancement, Technical Education, Tertiary Institutions, Rivers State

I. Introduction

Education is a general term which refers to an exercise that engages every one. It is a process of enabling individuals to live as useful and acceptable members of a society (Aigbepue, 2011). Also, Igbinedion and Ojeaga (2012) see education as a veritable means of progress for nations and individuals. Similarly, Okebukola (2012) opined that education is a process of updating the knowledge and skills of the individual that will be useful to himself or herself and to the community. Education help individual’s to gain ideas, knowledge and experience that will make them useful to themselves and the society. Hence, Technical Education is a skill and knowledge-based training that helps an individual to be useful. It is defined by UNESCO (2001) and adopted by the Federal Republic of Nigeria in her National Policy on Education (2013) as:

“a comprehensive term referring to those aspects of the educational process involving in addition, to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life”.

Technical Education is the training of technically oriented personnel who are to be the initiators, facilitators and implementers of technological development of a nation by adequately training its citizenry on the need to be technologically literate, leading to self-reliance and sustainability. Technical Education contributions are widespread and visible ranging from metalwork technology, mechanical/ automobile technology, electrical and electronic technology, building and woodwork technology etc. According to Uwaifo (2010), Technical Education can serve as change agents not only for technical systems but also for many other societal changes…as its practical nature makes it more unique in content and approach, thereby requiring special care and attention. The inputs of Technical Education are so visible to the extent that even an illiterate could see when ‘failures’ occur.

Technical education is designed to offer people the opportunity of self-improvement in general proficiency, especially in relation to the present or future occupation. Nuru (2007) opined that changes in any nation’s economy are required to prepare young people for the jobs of the future of which technical education have crucial roles to play. Technical education is practical oriented education which makes it unique in its content and approach thereby demanding special attention. Unfortunately, despite all the glaring contributions of technical education towards nation development, Nigeria is yet to accord this type of education the attention it
deserves. This is one of the major reasons for the rising of unemployment, poverty and unabated crimes in the society today. According to May, Ajayi, Arogundade and Ekundayo (2007) observed that technical education are very much still neglected in the aspect of adequate funding, personnel, modern facilities, staff motivation which consequently are robbing the country of the economic development to be contributed by graduates of technical education. Asogwa and Diogu (2007) maintained that there is an urgent need for the Nigeria’s attention to be redirected towards self reliant and sustainable means of livelihood which technical education provides. Most analysts agree that employers of labour today demand more skills than they did in the past (Yang, 2008). In order to actualize the aim of technical education, several researchers have suggested strategies to be adopted. In this regard, Ojimba (2012) stated that government at all levels must be pressured to devote and implement 26% of the country’s budget to education as stipulated in UNESCO (2002), out of which 50% should be allocated to technical education. For Wodi and Dokubo (2012), funding of technical education should be shared to the maximum extent between government, industries and the community (society) with government providing appropriate financial incentives. Moreso, for quality technical education to be improve, Sofoluwe (2013) advised that Private-Public Partnerships (PPP) in the funding and management should be encouraged. According to Sofoluwe, these partnerships include parents, corporate bodies and companies, international development agencies, Community-Based-Organisations (CBOs) and Philanthropists. While Enemali (2007) suggested that federal government as a way of improving technical education should establish at least one federal technical college in each state of the federation as a model and this effort should be complimented by the states, thereby establishing one technical colleges in each local government area. Also, Raymond and Awulug as cited (in Okwelle & Wordu, 2014) opined that the federal government should have additional polytechnics in such a way that by 2010 enrolment there should be at least twice enrolment in Universities to complement the turn up from technical colleges. In spite of all the suggestions and strategies adopted to improve the nature of technical education programmes in Nigeria, the programme still is stiff-necked and stagnated at a point in terms of achieving its original aims and objectives. This connotes that all the improvement strategies have not yielded a positive result. The question to ask is; does it mean that the present strategies for its improvement are not competent enough to change the status of technical education? It is against this backdrop that this paper seeks to examine enhancement strategies for quality technical education programmes in tertiary institutions in Rivers State, Nigeria as the problem of the study.

**Purpose of the Study**

The main purpose of this study is to examine the enhancement strategies for quality Technical education programmes in tertiary institutions in Rivers State. Objectively, this study tends to achieve the following:

1. current status of Technical Education programmes in tertiary institutions in Rivers State.
2. describe strategies to enhance government factors for quality Technical Education programmes in tertiary institutions in Rivers State.
3. identify strategies to enhance lecturers factors for quality Technical Education programmes in tertiary institutions in Rivers State.
4. ascertain strategies to enhance students’ factors for quality Technical Education programmes in tertiary institutions in Rivers State.
5. examine strategies to enhance school factors for quality Technical Education programmes in tertiary institutions in Rivers State.

**Research Questions**

The following research questions were answered to guide the study.

1. What is current status of Technical Education programmes in tertiary institutions in Rivers State?
2. What are the strategies to be adopted to enhanced government factors for quality Technical Education programmes in tertiary institutions in Rivers State?
3. What are the strategies to enhanced lecturers’ factors for quality Technical Education programmes in tertiary institutions in Rivers State?
4. What are the strategies to enhanced students’ factors for quality Technical Education programmes in tertiary institutions in Rivers State?
5. What are the strategies to enhanced school factors for quality Technical Education programmes in tertiary institutions in Rivers State?

**Hypotheses**

For the purpose of this study, two null hypotheses were formulated and tested at 0.05 level of significance.

1. There is no significance difference in the mean response of the respondents on the current status of Technical Education programmes in tertiary institutions in Rivers State.
2. There is no significance difference in the mean response of the respondents on the strategies to enhanced government factors for quality Technical Education programmes in tertiary institutions in Rivers State.
3. There is no significance difference in the mean response of the respondents on the strategies to enhanced school factors for quality Technical Education programmes in tertiary institutions in Rivers State.

II. Methodology

This study adopted the descriptive survey design since no variable is manipulated in the study. The population of the study was made up of 452 respondents (98 Lecturers and 354 Students) in Technical Education Departments from Rivers State University (RIVSU), Ignatius Ajuru University of Education (IAUOE) and Federal College of Education, Technical (FCET), Omoku respectively. Simple random sampling technique was used to select 366 respondents (79 lecturers and 287 students) which represent 81% of the population. The instrument for data collection was a self-constructed questionnaire titled “Technical Education Enhancement Strategies Questionnaire” (TEESQ) which was pattern after Likert-5-point rating scale of agreement. The instrument (TEESQ) was divided into five different sections based on the objective of the study. Section A examine the current status of Technical Education in tertiary institutions in Rivers State, Section B identify the government factors that should enhanced quality Technical Education while Section C sought out lecturers’ related factors that should be enhanced for quality Technical Education in Rivers State tertiary institutions. Also, Section D and E were respectively design to capture information to elicit both students’ and school factors that should be enhanced in order for Technical Education in tertiary institutions in Rivers State to be quality. The instrument consists of 54 items statement that was subjected to face and content validation by three experts in the Department of Vocational/Technology Education from Rivers State University. The reliability of the instrument “Technical Education Enhancement Strategies Questionnaire” (TEESQ) was established through test-retest method for measure of stability. Simple random sampling technique was used to draw 8 lecturers and 12 students out of the population who were not part of the sample. Copies of the instruments were administered to the 8 lecturers and 12 students. After an interval of two weeks, the same instrument was re-administered to the same group. The initial (test) and the re-test scores of the sample were correlated using Pearson Product Moment Correlation (PFMC) method. A reliability coefficient of 0.86, 0.81, 0.83, 0.88 and 0.82 were established for different sections of the instrument which were considered reliable and adequate. Administration of the instrument was done with the kind assistance of three students who were trained by the researchers as research assistants. Completed copies of the instrument (TEESQ) were collected for analysis. The total instrument distributed was 366 copies out of which 351 copies were retrieved. Research questions were analysed using descriptive statistic of mean with standard deviation. In order to determine the acceptance or rejection level of each of the items in relation to research questions, a decision rule based on real limit of numbers was used. The decision was to accept an item if mean calculated is greater than or equal to 3.00. On the other hand, reject an item if mean calculated is less than 3.00. The hypotheses were tested at 0.05 level of significance using the t-test. The t-test is adopted in this analysis to test large samples because as the sample size becomes sufficiently large, the t-distribution coincides with the Z-distribution (Nworgu, 2015; Nwankwo, 2013). If the calculated value of t (tcal) is less than the critical value of t (tcrit), the hypothesis was accepted but if the calculated value of t (tcal) is greater than or equal to the critical value of t (tcrit), the hypothesis is rejected. The data were analysed with Statistical Package for Social Science (SPSS) and Microsoft excel software.

III. Results and Discussion of Findings

The results of data analysis of the study are presented in Tables 1 to 4 below.

Research Question 1: What is current status of Technical Education programmes in tertiary institutions in Rivers State?

Table 1: Mean Response of Lecturers and Students on the Current Status of Technical Education Programmes in Tertiary Institutions in Rivers State (N₁ = 79; N₂ = 287).

<table>
<thead>
<tr>
<th>S/N</th>
<th>The following are Technical Education</th>
<th>Current Status</th>
<th>Lecturers</th>
<th>Students</th>
<th>Decision</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lack of training allowances for lecturers</td>
<td>3.21 0.86 Accepted</td>
<td>3.99 1.05 Accepted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Lecturers are inadequate</td>
<td>3.18 0.72 Accepted</td>
<td>4.32 0.85 Accepted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Technical Education is not lucrative</td>
<td>3.87 0.61 Accepted</td>
<td>3.21 1.01 Accepted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Poor funding</td>
<td>4.43 0.66 Accepted</td>
<td>3.56 0.73 Accepted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Inadequate training facilities</td>
<td>4.08 0.78 Accepted</td>
<td>4.24 0.56 Accepted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Lack of industrial sponsorship</td>
<td>3.71 1.11 Accepted</td>
<td>4.52 0.60 Accepted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Inadequate instructional model</td>
<td>3.94 0.92 Accepted</td>
<td>3.59 1.11 Accepted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Inadequate learning facilities</td>
<td>4.15 0.59 Accepted</td>
<td>4.06 0.91 Accepted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>It is a discipline for never-do-well students</td>
<td>3.62 1.03 Accepted</td>
<td>3.35 0.87 Accepted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Poorly equipped lecturers</td>
<td>3.58 0.90 Accepted</td>
<td>3.13 0.89 Accepted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grand Mean/SD</td>
<td>3.78 0.82 Accepted</td>
<td>3.80 0.86 Accepted</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researchers’ Field Survey, 2017  N₁ = Lecturers; N₂ = Students

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Table 1 shows that the respondents accepted that all the items listed in the table are the current status of Technical Education programmes in tertiary institutions in Rivers State. This was shown in grand mean of 3.78 and 3.80 for lecturers and students respectively. The standard deviation (SD) of the items ranged from 0.82 to 0.86 which implies that both lecturers and students were close in opinions.

**Research Question 2:** What are the strategies to enhanced government factors for quality Technical Education programmes in tertiary institutions in Rivers State?

<table>
<thead>
<tr>
<th>S/N</th>
<th>Enhancement Strategies on Government Factors</th>
<th>Lecturers X1 SD1 Decision</th>
<th>Students X2 SD2 Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Provision of consumable materials</td>
<td>3.51 0.82 Accepted</td>
<td>3.33 0.64 Accepted</td>
</tr>
<tr>
<td>12</td>
<td>Implementation of government policy on Technical Education</td>
<td>4.03 0.70 Accepted</td>
<td>4.03 0.78 Accepted</td>
</tr>
<tr>
<td>13</td>
<td>Provision of infrastructural facilities such as library, classroom blocks, workshops etc.</td>
<td>3.08 0.98 Accepted</td>
<td>3.90 0.88 Accepted</td>
</tr>
<tr>
<td>14</td>
<td>Provision of qualified Technical Education lecturers.</td>
<td>3.82 0.59 Accepted</td>
<td>3.54 0.61 Accepted</td>
</tr>
<tr>
<td>15</td>
<td>Adequate funding of Technical Education Programmes.</td>
<td>4.36 1.03 Accepted</td>
<td>3.31 0.59 Accepted</td>
</tr>
<tr>
<td>16</td>
<td>Provision of funds for public relations activities.</td>
<td>3.99 1.12 Accepted</td>
<td>3.03 1.03 Accepted</td>
</tr>
<tr>
<td>17</td>
<td>Giving of scholarship to students.</td>
<td>4.14 0.77 Accepted</td>
<td>3.18 0.73 Accepted</td>
</tr>
<tr>
<td>18</td>
<td>Provision of in-service training</td>
<td>3.52 0.62 Accepted</td>
<td>4.21 1.08 Accepted</td>
</tr>
<tr>
<td>19</td>
<td>Prompt payment of salary</td>
<td>4.46 1.09 Accepted</td>
<td>3.72 0.99 Accepted</td>
</tr>
<tr>
<td>20</td>
<td>Staff training and retention</td>
<td>4.08 0.97 Accepted</td>
<td>3.65 0.60 Accepted</td>
</tr>
<tr>
<td>21</td>
<td>Provision of training allowances</td>
<td>3.78 0.81 Accepted</td>
<td>4.08 0.56 Accepted</td>
</tr>
<tr>
<td><strong>Grand Mean/SD</strong></td>
<td></td>
<td><strong>3.89 0.86 Accepted</strong></td>
<td><strong>3.63 0.77 Accepted</strong></td>
</tr>
</tbody>
</table>

Source: Researchers’ Field Survey, 2017  
N1 = Lecturers; N2 = Students

The result in Table 2 shows that lecturers response ranges between mean of 3.08 and 4.46 which implies that all the items were accepted while result of the students’ response on strategies to be adopted to enhanced government factors for quality Technical Education ranges from 3.03 to 4.21 which also indicates acceptance. The grand mean of 3.89 and 3.63 were respectively accepted with standard deviation (SD) of 0.86 and 0.77 to indicate closeness in response.

**Research Question 3:** What are the strategies to enhanced lecturers’ factors for quality Technical Education programmes in tertiary institutions in Rivers State?

<table>
<thead>
<tr>
<th>S/N</th>
<th>Enhancement Strategies on Lecturers Factors</th>
<th>Lecturers X1 SD1 Decision</th>
<th>Students X2 SD2 Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Being enthusiastic to teach.</td>
<td>3.90 1.08 Accepted</td>
<td>4.00 0.52 Accepted</td>
</tr>
<tr>
<td>23</td>
<td>Efficiency in Lessons preparation.</td>
<td>3.30 0.85 Accepted</td>
<td>3.67 0.90 Accepted</td>
</tr>
<tr>
<td>24</td>
<td>Improvement of staff working condition.</td>
<td>4.31 0.67 Accepted</td>
<td>3.91 0.74 Accepted</td>
</tr>
<tr>
<td>25</td>
<td>Attending workshops, conferences and seminars should be encouraged.</td>
<td>4.09 0.77 Accepted</td>
<td>3.73 0.62 Accepted</td>
</tr>
<tr>
<td>26</td>
<td>Building of skill competence in area of specialization.</td>
<td>3.97 0.91 Accepted</td>
<td>4.21 0.88 Accepted</td>
</tr>
<tr>
<td>27</td>
<td>Improvisation of instructional materials.</td>
<td>3.82 0.84 Accepted</td>
<td>3.05 0.67 Accepted</td>
</tr>
<tr>
<td>28</td>
<td>Adoption of appropriate teaching methods.</td>
<td>4.06 1.13 Accepted</td>
<td>3.54 0.71 Accepted</td>
</tr>
<tr>
<td>29</td>
<td>The use of modern techniques for teaching</td>
<td>3.33 1.05 Accepted</td>
<td>3.41 0.75 Accepted</td>
</tr>
<tr>
<td>30</td>
<td>Instructional process should be made to be student centred.</td>
<td>3.85 0.59 Accepted</td>
<td>3.80 0.80 Accepted</td>
</tr>
<tr>
<td>31</td>
<td>Course contents should be updated.</td>
<td>3.76 0.62 Accepted</td>
<td>3.13 0.66 Accepted</td>
</tr>
<tr>
<td>32</td>
<td>Technical courses should be taught based on technical experience and not on academic experience.</td>
<td>3.28 0.72 Accepted</td>
<td>3.62 1.03 Accepted</td>
</tr>
<tr>
<td><strong>Grand Mean/SD</strong></td>
<td></td>
<td><strong>3.79 0.84 Accepted</strong></td>
<td><strong>3.64 0.75 Accepted</strong></td>
</tr>
</tbody>
</table>

Source: Researchers’ Field Survey, 2017  
N1 = Lecturers; N2 = Students

Table 3 show that the respondents accepted all the items listed in the table as strategies to enhanced lecturers’ factors for quality Technical Education programmes in tertiary institutions Rivers State. This was shown in grand mean of 3.79 and 3.64 for lecturers and students respectively. The standard deviation (SD) of the items ranged from 0.75 to 0.86 which implies that both lecturers and students were close in opinions.

**Research Question 4:** What are the strategies to enhanced students’ factors for quality Technical Education programmes in tertiary institutions in Rivers State?
Enhancement Strategies For Quality Technical Education Programmes In Tertiary Institutions In Rivers State.

The following null hypotheses were tested at 0.05 level of significance.

**Research Question 5:** What are the strategies to enhanced school factors for quality Technical Education programmes in tertiary institutions in Rivers State?

Table 4: Mean Response of Lecturers and Students on Strategies to Enhanced Students’ Factors for Quality Technical Education (N₁ = 79; N₂ = 287).

<table>
<thead>
<tr>
<th>S/N</th>
<th>Enhancement Strategies on Students’ Factors</th>
<th>X₁</th>
<th>Lecturers SD₁</th>
<th>Decision</th>
<th>X₂</th>
<th>Students SD₂</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>Adaptation to e-learning.</td>
<td>3.91</td>
<td>1.08</td>
<td>Accepted</td>
<td>4.29</td>
<td>0.88</td>
<td>Accepted</td>
</tr>
<tr>
<td>34</td>
<td>The use of e-materials (books).</td>
<td>3.77</td>
<td>0.85</td>
<td>Accepted</td>
<td>3.50</td>
<td>0.97</td>
<td>Accepted</td>
</tr>
<tr>
<td>35</td>
<td>Students’ keen interest to learn.</td>
<td>3.81</td>
<td>1.26</td>
<td>Accepted</td>
<td>3.86</td>
<td>0.66</td>
<td>Accepted</td>
</tr>
<tr>
<td>36</td>
<td>Avoidance of Examination malpractice.</td>
<td>3.36</td>
<td>0.87</td>
<td>Accepted</td>
<td>3.08</td>
<td>0.71</td>
<td>Accepted</td>
</tr>
<tr>
<td>37</td>
<td>Exhibiting and maintaining good character in and outside the school.</td>
<td>4.10</td>
<td>1.11</td>
<td>Accepted</td>
<td>3.77</td>
<td>0.85</td>
<td>Accepted</td>
</tr>
<tr>
<td>38</td>
<td>Prompt payment of tuition fees.</td>
<td>3.02</td>
<td>0.98</td>
<td>Accepted</td>
<td>3.97</td>
<td>0.75</td>
<td>Accepted</td>
</tr>
<tr>
<td>39</td>
<td>Being free from cultism.</td>
<td>3.86</td>
<td>1.09</td>
<td>Accepted</td>
<td>3.74</td>
<td>1.02</td>
<td>Accepted</td>
</tr>
<tr>
<td>40</td>
<td>Regular attendance in classroom.</td>
<td>3.73</td>
<td>0.72</td>
<td>Accepted</td>
<td>3.09</td>
<td>0.86</td>
<td>Accepted</td>
</tr>
<tr>
<td>41</td>
<td>Enrolling into practical workshop training outside the school.</td>
<td>3.95</td>
<td>0.67</td>
<td>Accepted</td>
<td>3.71</td>
<td>1.13</td>
<td>Accepted</td>
</tr>
<tr>
<td>42</td>
<td>Attending conferences and symposium.</td>
<td>3.35</td>
<td>0.88</td>
<td>Accepted</td>
<td>3.18</td>
<td>0.65</td>
<td>Accepted</td>
</tr>
<tr>
<td>43</td>
<td>Doing their industrial attachment in related skill-based industries.</td>
<td>3.82</td>
<td>1.04</td>
<td>Accepted</td>
<td>3.47</td>
<td>0.73</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

**Grand Mean/SD**

| Lecturers | 3.70 | 0.96 | Accepted | 3.61 | 0.84 | Accepted |

Source: Researchers’ Field Survey, 2017 N₁ = Lecturers; N₂ = Students

The result in Table 4 shows that lecturers response ranges between mean of 3.02 and 4.10 which implies that all the items were accepted while result of the students’ response on strategies to be adopted to enhanced students’ factors for quality Technical Education ranges from 3.08 to 4.29 which also indicates acceptance. The grand mean of 3.70 and 3.61 were respectively accepted with standard deviation (SD) of 0.96 and 0.84 to indicate closeness in response.

Table 5: Mean Response of Lecturers and Students on the Strategies to Enhanced School Factors for Quality Technical Education Programmes (N₁ = 79; N₂ = 287).

<table>
<thead>
<tr>
<th>S/N</th>
<th>Enhancement Strategies on School Factors</th>
<th>X₁</th>
<th>Lecturers SD₁</th>
<th>Decision</th>
<th>X₂</th>
<th>Students SD₂</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>Improving the course content.</td>
<td>3.41</td>
<td>1.05</td>
<td>Accepted</td>
<td>3.53</td>
<td>1.11</td>
<td>Accepted</td>
</tr>
<tr>
<td>45</td>
<td>Time allotted for practical.</td>
<td>3.74</td>
<td>0.89</td>
<td>Accepted</td>
<td>3.65</td>
<td>0.98</td>
<td>Accepted</td>
</tr>
<tr>
<td>46</td>
<td>Implementation of the curriculum.</td>
<td>4.14</td>
<td>0.75</td>
<td>Accepted</td>
<td>3.09</td>
<td>0.67</td>
<td>Accepted</td>
</tr>
<tr>
<td>47</td>
<td>Accreditation should unbiased.</td>
<td>4.33</td>
<td>0.61</td>
<td>Accepted</td>
<td>3.86</td>
<td>0.83</td>
<td>Accepted</td>
</tr>
<tr>
<td>48</td>
<td>NBTE standard should be observed.</td>
<td>4.07</td>
<td>0.77</td>
<td>Accepted</td>
<td>3.33</td>
<td>0.73</td>
<td>Accepted</td>
</tr>
<tr>
<td>49</td>
<td>Provision of conducive classrooms.</td>
<td>3.22</td>
<td>1.03</td>
<td>Accepted</td>
<td>4.10</td>
<td>0.69</td>
<td>Accepted</td>
</tr>
<tr>
<td>50</td>
<td>Consistency in school academic calendar.</td>
<td>3.09</td>
<td>0.58</td>
<td>Accepted</td>
<td>3.70</td>
<td>0.85</td>
<td>Accepted</td>
</tr>
<tr>
<td>51</td>
<td>Provision of workshop facilities.</td>
<td>3.81</td>
<td>1.15</td>
<td>Accepted</td>
<td>3.46</td>
<td>0.56</td>
<td>Accepted</td>
</tr>
<tr>
<td>52</td>
<td>Sponsoring of lecturers for conferences, workshops etc.</td>
<td>3.59</td>
<td>1.08</td>
<td>Accepted</td>
<td>3.09</td>
<td>1.23</td>
<td>Accepted</td>
</tr>
<tr>
<td>53</td>
<td>Promoting lecturers who are due as a way of encouragement.</td>
<td>3.42</td>
<td>0.87</td>
<td>Accepted</td>
<td>3.51</td>
<td>1.08</td>
<td>Accepted</td>
</tr>
<tr>
<td>54</td>
<td>Examination assessment should base on performance/merit.</td>
<td>3.97</td>
<td>0.67</td>
<td>Accepted</td>
<td>4.38</td>
<td>0.62</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

**Grand Mean/SD**

| Lecturers | 3.71 | 0.90 | Accepted | 3.61 | 0.85 | Accepted |

Source: Researchers’ Field Survey, 2017 N₁ = Lecturers; N₂ = Students

Table 3 show that the respondents accepted all the items listed in the table as strategies to enhanced school factors for quality Technical Education programmes in tertiary institutions Rivers State. This was shown in grand mean of 3.71 and 3.61 for lecturers and students respectively. The standard deviation (SD) of the items ranged from 0.85 to 0.90 which implies that both lecturers and students were close in opinions.

**Statistical Test of Hypotheses**

The following null hypotheses were tested at 0.05 level of significance.

**H₀₁:** There is no significance difference in the mean response of the respondents on the current status of Technical Education programmes in tertiary institutions in Rivers State.

Table 6: t-Test analysis on the Current Status of Technical Education Programmes

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>df</th>
<th>tcal</th>
<th>tcrit</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecturers</td>
<td>79</td>
<td>3.78</td>
<td>0.82</td>
<td>364</td>
<td>-0.19</td>
<td>1.960</td>
<td>Accepted</td>
</tr>
<tr>
<td>Students</td>
<td>287</td>
<td>3.80</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researchers’ Field Survey, 2017 Accept H₀₁ if tcal < tcrit, else Reject

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The null hypothesis is accepted since t_{cal} (-0.19) is less than t_{crit} (1.960). This implies that there is no significance difference in the mean scores of lecturers and students on the current status of Technical Education programmes in tertiary institutions in Rivers State.

**H\textsubscript{03}:** There is no significance difference in the mean response of the respondents on the strategies to enhanced government factors for quality Technical Education programmes in tertiary institutions in Rivers State.

### Table 7: t-Test analysis on Government Factors for Technical Education Programmes

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>df</th>
<th>t_{cal}</th>
<th>t_{crit}</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecturers</td>
<td>79</td>
<td>3.89</td>
<td>0.86</td>
<td></td>
<td>364</td>
<td>2.42</td>
<td>1.960</td>
</tr>
<tr>
<td>Students</td>
<td>287</td>
<td>3.63</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: *Researchers’ Field Survey, 2017* Accept H\textsubscript{0} if t_{cal} < t_{crit}, else Reject

The null hypothesis is rejected since t_{cal} (2.42) is greater than t_{crit} (1.960). This implies that there is a significance difference in the mean scores of lecturers and students on the strategies to enhanced government factors for quality Technical Education programmes in tertiary institutions in Rivers State.

**H\textsubscript{03}:** There is no significance difference in the mean response of the respondents on the strategies to enhanced school factors for quality Technical Education programmes in tertiary institutions in Rivers State.

### Table 8: t-Test analysis on School Factors for Technical Education Programmes

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>df</th>
<th>t_{cal}</th>
<th>t_{crit}</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecturers</td>
<td>79</td>
<td>3.71</td>
<td>0.90</td>
<td></td>
<td>364</td>
<td>0.88</td>
<td>1.960</td>
</tr>
<tr>
<td>Students</td>
<td>287</td>
<td>3.61</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: *Researchers’ Field Survey, 2017* Accept H\textsubscript{0} if t_{cal} < t_{crit}, else Reject

The null hypothesis is accepted since t_{cal} (0.88) is less than t_{crit} (1.960). This implies that there is no significance difference in the mean scores of lecturers and students on the strategies to enhanced school factors for quality Technical Education programmes in tertiary institutions in Rivers State.

### III. Discussion of Findings

The result in Table 1 reveals that the current status of Technical Education in Rivers State include lack of training allowances for lecturers, inadequate number of lecturers, ill-equipped lecturers, poor funding, inadequate training facilities such as workshop space, laboratories and lack of industrial sponsorship. This result was satisfied by Ojimba (2012) that asserted that most technical education departments in Nigerian Universities do not have laboratories or workshop space, let alone useable equipment and where they exist, they are grossly inadequate, as the workshops only have items or equipment that were provided when the departments were first established of which most of them are already obsolete or grounded. In another support, Aigbepu (2011) opined that inadequate and ill-equipped Technical Education teachers are challenges to the implementation of Technical Education curriculum.

From the findings of Table 2, Technical Education programmes in Rivers State can be enhanced if the strategies on government factors are adopted. These strategies includes provision of infrastructural facilities such as library classroom blocks, provision of qualified Technical Education lecturers, adequate funding, provision of funds for public relations activities. These findings are consistent with those of Iyalla (2007), who reported that students would be active in school public relations when it is properly funded and where students are given the necessary orientation. The unavailability of fund confirms the observations of Carlsmith and Railsback (2001) that the perception is widespread that public relations are not a legitimate expense for a public entity. The concurrent demand for schools to communicate better and more openly with the public requires adequate funding if enrolment to teacher education programme is to be improved. Also, Okwelle (2011) corroborated this and posits that provision of fund for public relations activities is a strategy for students’ involvement in Technical Education. The finding is also in line with the assertion of Igheradja (2015) as opined that challenges of Technical Education are dilapidated infrastructural facilities, poorly equipped libraries, workshops, and laboratories, poor provision of TVET instructional materials, and un-conducive school environment.

Result in Table 3 reveal that lecturers being enthusiastic to teach, efficient in the preparation of lesson note, improvement in staff working condition, lecturers attending workshops and conferences, improvisation of instructional materials, building of skill competency in area of specialization, adoption of appropriate teaching techniques and the use of modern teaching methods are strategies to enhance lecturers factors for quality Technical Education programmes in tertiary institutions in Rivers State. These findings were supported by those of NBTE (2011), Moja (2000), Olumese (2002), and Nwokomah (2005) who stressed that poor teaching methods employed by Technical Education lecturers, and poor provision of teaching materials, lack of interest...
to teach and skill competence, poor working condition and poor preparation of lessons are challenges of implementing Technical Education curriculum.

In examining the strategies to enhanced students’ factors for quality Technical Education programmes in tertiary institutions in Rivers State, results in Table 4 reveals that adoption of e-learning, avoidance of examination malpractice, exhibiting and maintaining good character in and outside the school, prompt payment of school fees and being free from cultism are some of the strategies. These is in conformity with the findings of Igberadja (2015) who reported that students’ related challenges such as cultism, examination malpractice, and social academic vices are challenges of implementing educational curriculum in Nigeria. Also, Okwelle (2011) supported these results that students’ attitude outside and inside the school promote the image of Technical Education.

The findings of Table 5 shows that accreditation of Technical Education programmes should not be bias base, adhering to NBTE standard, provision of infrastructural facilities such as workshop, laboratories, equipment are strategies to enhanced school factors for quality Technical Education programmes in tertiary institutions in Rivers State. This result is in collaboration with Oryem-Origa (2005) who found that the available facilities programme for Technical Education programmes as at today are quantitatively and qualitatively inadequate and besides they are obsolete and this indicated that only 40% of institutions of higher education in Nigeria have laboratory or workshop space for technical education programmes.

**IV. Conclusion and Recommendations**

Conclusively, Technical Education programmes in tertiary institutions in Rivers State, Nigeria is face with multifaceted challenges emanating from diverse sources such as poor funding, lack of students’ interest, poor and dilapidated infrastructural facilities, lack of government interest etc. For progress to be made and in order to achieve positive outcomes in Technical Education programmes in tertiary institutions in Rivers State, Nigeria, the challenges confronting the programme must be recognized and address vigorously. A comprehensive reform toward Technical Education and a deliberate national attempt to give a face-lift to the programme should be targeted. Based on the findings of this study, it was concluded that enhancement strategies to address government, lecturers’, students’ and school related factors is a panacea for quality Technical Education programmes in tertiary institutions in Rivers State, Nigeria.

Based on the findings of the study, the following recommendations were made.

1. That government should provide adequate funding for infrastructural facilities such as equipments, training workshops etc to tertiary institutions to aid practical acquisition.
2. Lecturers should be technically skillful to improvise instructional materials and also to adopt appropriate teaching methods.
3. Students should enroll into other workshop training outside the school for practical knowledge acquisition and ensure to do industrial attachment period in an industry relating to field of specialization to gain experience.
4. Accreditation of the programmes should be unbiased and that the NBTE standard should be satisfied as these will enhance standardization of the programmes in terms of infrastructure and manpower.

**References**


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