Higher Institution Students’ Access to Information and Communications Technology in Nigeria: Management Imperatives for Labour Market Preparations.

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Abstract

This study explored higher institution students’ access to information and communications technology (ICT) and their labour market preparations in Cross River State of Nigeria. This survey designed study had three hypotheses which guided the investigation. With the use of stratified random sampling technique, 450 students were drawn from students’ population in the three higher institutions studied. Data collection was carried out using Students’ Access to ICT Inventory (SAII) and Students’ Labour Market Preparation Questionnaire (SLMPQ). Population t-test (test of one sample mean), Independent t-test, One way Analysis of Variance and its associated Fisher’s LSD Multiple Comparison Test were used to statistically analyze data collected for this study. Results obtained revealed that higher institution students’ access to ICT tools is significantly low; higher institution students who have access to ICT tools had better preparations for labour market than their counterparts who have not and there is significant influence of higher institution students’ level of access to ICT on their labour market preparation. It was therefore recommended that higher institutions in Cross River State should diversify their curriculum to reflect labour market expectations.

Key words: Higher institution, students’ access, information and communications technology, labour market preparations, management.

1. Introduction

United Nations define youths as those who fall within 15 to 25 years of age (UNDESA, 2005). By this definition, university and other higher institution students fall under this age category. The need for the preparation of youths for the labour market has become long overdue judging from the high unemployment figure of 27.9 percent among the youths (National Bureau of Statistics, 2005). Incidentally, it is this group of people (higher institution graduates) that have one of the highest unemployment rates in Nigeria which stood at 12.40 percent in 2003 (Federal Ministry of Education, 2006). This is in consonance with Bello in
Babalola (2007) who revealed that unemployment incidence in Nigeria is mostly felt among energetic youths within the age ranges of 20 to 24, and 25 to 44 years more than any other age groups in Nigeria. By implication, many youths wander around with dynamic resources without gainful employments. It therefore follows that these youths have the strength to work, but there are no works for them to expend their energies on. This is therefore a waste on the economy because those who have the ability to contribute towards its well-being do not have the opportunity to do so. Alarmingly, Nigeria has one of the highest youth unemployment rates in the world, and this constitutes a major social problem. According to UNESCO source, high unemployment is causing acute poverty and serious social problems in Nigeria (Edukugho, 2004).

The cause of youth unemployment in Nigeria borders on the inability of the higher institutions to prepare their students adequately for the labour market through the programmes they run. Labour market is a place where buyers and sellers of labour are in close contact during which the wages and other conditions of service are determined and agreed upon (Ande, 2005). The labour markets in this case are those organizations that employ higher institution graduates as their labour force. The products of these higher institutions will only fit into the labour market if they possess the skills demanded by them for effective running of their organizations. Higher institutions in Nigeria are known to lack relevant facilities to run their science and technology-related programmes. In most cases, the curriculum contents still reflect the needs of the colonial masters, to the neglect of the country’s needs. This is mainly observed in the Liberal Arts and Humanities’ Disciplines. This came to the limelight when the managing director of one of the leading oil companies in Nigeria declared that Nigerian graduates lack employable skills (Fanimo, Sanyaolu & Salau, 2008). It therefore follows that the skills possessed by the products of our higher institutions are at variance with that required by the labour market.

The poor employable skills possessed by our higher institution products have long been recognized. A one-time Minister of Education, Mrs Obiageli Ezekwesili once lamented that the high level of unemployment in the country was a direct result of the poor education system inherited from the colonial masters. She observed that the British education produced educated people without employable skills, adding that the British education focused more on training individuals to be all-round gentlemen without inculcating in them the necessary skills to help them survive in a highly competitive world (Shaibu, 2006). Similar opinion was expressed by Ikejiani in Abaribe (2002:4) thus:

"Our present education has been consumptive instead of productive. We teach our youths to master their subjects to Nigerian needs in order to enable our school leavers and graduates to solve the fundamental problems of living... our education has been barren; so that very soon we shall face the problem of having many “educated” people but none qualified to do the work needed for the welfare of the people."

Babalola (2007) pointed out that skills possessed by university graduates are contrary to the needs of the labour market leading to mismatch. According to him, skills mismatch is a major concern in Nigeria where tertiary education graduates acquire skills that are not demanded by the labour market. Specifically, the skill mismatch was more palpable in the areas of petroleum, gas, agriculture, manufacturing, solid minerals, tourism and ICT as identified in the education sector status report produced by Federal Ministry of Education in 2003. This led to low demand from the private sector for trained graduates from Nigerian universities. The consequence of this is increase in unemployment among this class of youths.

In the face of this seeming failure of the higher institutions to meet up with the labour market expectations in graduate output, there is the need to redesign higher education programmes to incorporate functional courses that will equip our higher education products with the necessary skills that will make them employable. In this regard therefore, their access to Information and Communications Technology (ICT) becomes very essential. According to Obanya (2002), ICT is a broad term that has to do with the harnessing of process, the methods and the product of electronic and communication-related technologies (and other related resources in today’s knowledge-driven society), for enhancing the productivity, the
spread and efficiency of a set of programmed activities geared towards the achievement of clearly determined goals. In education, it involves the application of digital equipment to enhance teaching and learning, and offers great potentials in enhancing students’ learning. Thus, it enables the students to acquire functional skills, which makes them relevant in the present realities in the economy. As such students’ acquisition of basic knowledge and proficiency in it becomes imperative. Of course, this can only be realized where students have unrestricted access to it. Students therefore, as future labour market employees are expected to be aware of, have knowledge of, motivated and have access technically to and be competent in the use of Information and Communications Technology so as to fit creditably into their future roles. Although this programme of study has been introduced in some higher institutions, its level of penetration is still alarmingly low which Aginam (2006) puts at less than 5 percent. One therefore wonders how this low status of ICT can enable our higher institution students acquire functional skills that will equip them to meet up with the challenges posed by the labour market. However, this problem is compounded by the acute paucity of funds which has been plaguing higher institutions for a long time. Nigeria is yet to comply with the 26 percent budgetary allocation to education recommended by UNESCO. It was only in 2008, that national budgetary allocation reached 13 percent (Edukugho, 2008). Other years before and after it are below this mark. This, no doubt is still far from being ideal.

The situation in the country generally is a mirror of what is in vogue in Cross River State higher institutions. A peep through this mirror reveals that students in higher institutions are lagging behind in access to ICT. Most of them are not computer literate. One of the higher institutions, located in the state, owned by federal government has no functional ICT laboratory. What is observed is a fairly large room with few internet-connected computers, whose functioning is determined by epileptic power supply and fluctuating network. Another of the higher institutions has a functional ICT centre managed by AfriHUB, where final year students are encouraged to register for and undergo ICT training. However, the ICT facilities are grossly inadequate for a teeming population that should have access to them.

Students’ access to ICT is imperative if they are to meet the expectations of employers of labour. ICT has become so efficacious that virtually everything in the world today is affected by it. Employers of labour often cite literacy in it as criteria for employment. Therefore access to and proficiency in it is an added advantage for a higher institution graduate to be employable in the labour market.

Given the importance students’ access to ICT has in equipping them for the labour market, it is doubtful whether the realities on ground in the area under study will place them in a position of meeting the labour market expectation. It is on this background that this study aims at proffering an answer to this poser: would students’ access to ICT influence their labour market preparations?

2. Hypotheses

   (a) Higher institution students’ access to ICT tools is not significantly low.

   (b) There is no significant difference between higher institution students who have access to ICT tools and those who do not in their labour market preparations.

   (c) There is no significant influence of higher institution students’ level of access to ICT on their labour market preparations.

3. Literature review

Since high unemployment among university graduates became a national phenomenon with the economic down turn some years back, a lot of searchlights have been cast in discovering the panacea to this problem. This searchlight has beamed on ICT and recognized it as having the potentials to prepare the students for the labour market, especially in this knowledge-driven era.
Research studies reviewed by Davis & Tearle (1999), and Lopez (2003) disclosed that ICTs provide opportunities for students in higher institutions to acquire valuable computer skills which are requisites for gaining employment in the present-day job market. They act as ready tools for preparing students of today for future work places by equipping them with the requisite competence and knowledge necessary to use ICTs in their works. It therefore follows that ICT increases students’ preparation for most future careers and vocations.

A study conducted by Global Information Technology Report (2004 and 2005), using Networked Readiness Index (NRI), which surveyed 104 countries in 2004 and 115 countries in 2005/2006. Nigeria ranked 86th out of 104 and 90th out of 115 in 2004 and 2005 respectively. These studies measured the degree of preparation of a nation or community to participate in and benefit from ICT development. This finding is disturbing as it is also revealing. To worsen this matter, Nigeria has no specific policy for ICT in education. It was in February 2007 that the Federal Ministry of Education created its ICT department (WikiEducator 2007). The implication of this not so impressive development is that our country is not yet prepared to tackle the problem of the inability of our higher institutions to become relevant in meeting the challenges of the present realities in the world of work.

Adomi & Anie’s (2006) study found that ICT skills possessed by university graduates were low and as such failed to meet up with the requirements of Nigerian industries. The low skills were specifically found in online/internet searching, system management and computer keyboarding, which made the industries to express concern. As a solution, the industries asked universities to deepen the current exit knowledge levels of ICT skills of their graduates.

Babalola (2007) reported that a study conducted by Federal Ministry of Education in consultation with employers of labour revealed that there is a mismatch between higher institutions curriculum and the needs of the labour market; higher institutions’ inability to consult private sector in fashioning out their programmes have resulted to teaching of outdated curriculum, resources and teaching methods. The study also found that majority of students learn through lectures and academic textbooks and are academically sound but have limited opportunities of acquiring practical experience by using machinery, equipment and practical techniques associated with the professions.

Worse still, a related study assisted by World Bank held that Nigerian university graduates employed in various establishments were not capable of performing creditably. According to the report, the graduates had poor mastery of English Language and lacked requisite technical skills, which confirmed that they were unfit for the labour market (Abaribe, 2002). In corroboration, World Bank (2002) pointed out that the growing unemployment among Nigerian graduates from higher institutions can be attributed to the mismatch between educational output and the requirements of the labour market. These are clear indications that the programmes run by our higher institutions were not functional in nature.

Ololube (2006) reviewed research literature and came out with these findings about ICTs importance to students’ future job aspirations: Information and Communications Technology has the potentials to accelerate, enrich and deepen skills, motivate and engage students in leaning. It helps to relate school experiences to work practices and create economic viability for students as tomorrow’s workers. It contributes to radical changes in school curriculum to reflect labour market demands, strengthens teaching, and provides opportunities for connection between institutions and the world of work. As such, it makes education more efficient and productive.

Studies have shown that higher institutions in Nigeria lack the expertise to provide students with practical hands-on training in ICT, either for basic computer skills required for just about any job in today’s online economy, or for more advanced capabilities required for students on ICT career tracks. With this development industry watchers reported that 97 percent of Nigerian students graduate from the university without ever being taught in a classroom equipped with a projector or multimedia tools. As a result, far too many of these young people graduate with no marketable ICT skills, and may not be competitive enough to enter the global labour market (Umoren, Bassey, Udida, Akuegwu &Tibi, 2007).
4. Methodology

This study was conducted in Cross River State of Nigeria. The state is one of the six states that constitute the south-south geo-political zone, lying on the eastern axis of the zone. It covered three main higher institutions located therein, two of which are owned by Federal Government, while one is owned by the State Government. Its capital is Calabar. The design adopted for this study was survey.

Students in these three higher institutions made up the population. A sample size of 450 students was drawn using stratified random sampling technique. Further breakdown of the sample showed that 150 were drawn from each of the three higher institutions.

Two researchers-constructed instruments called “Students’ Access to ICT Inventory (S.AI.I)” and “Students’ Labour Market Preparation Questionnaire (S.L.M.P.Q).” Each of the instruments had two sections A and B. Their section A contained 7 demographic variables. Section B of S.AI.I had 22 items, 16 of which arranged on 10 point rating scale. They measured students’ access to ICT tools, while 6 measured students’ access to ICT. They were arranged on four point Likert Scale. Section B of S.L.M.P.Q had 10 items measuring students’ preparation for labour market. The items were also arranged on four point Likert Scale. The instruments were face-validated by experts in measurement and evaluation, while the trial tests gave reliability coefficient estimates of 0.79 and 0.88 for S.AI.I and 0.67 for S.L.M.P.Q. These figures indicated that the instruments were reliable for use in achieving the research objectives.

Administration of the instruments was personally carried out with the aid of research assistants recruited in each institution. The instruments were administered to the 450 subjects sampled. The measures adopted in doing this gave a 100 percent returns rate.

Population t-test (test of single mean), Independent t-test, One Way Analysis of Variance and its associated Fisher’s LSD Multiple Comparison Test were used to analyze data generated for this study

5. Analysis Results

5.1. Hypothesis One

Higher institution students’ access to ICT tools is not significantly low. The only variable here is higher institution students’ access to ICT tools. Data obtained were statistically analyzed using population t-test (test of one sample mean). Results are presented in Table 1.

The results presented in this table 1 revealed that higher institution students’ access to ICT tools is significantly low with respect to Desktop Computers (t = 4.342, p < .05); Laptops (t = -1.115, p < .05); Overhead Projectors (t = -9.533, p <.0.5); Slide Projectors (t = -16.615, p <.0.5); Power Point Projectors (t = -12.639, p <.0.5); Multimedia Projectors (t = -10.842, p <.0.5); Data Projectors (t = -24.526, p <.0.5); Internet Facilities (t = -3.037, p <.0.5); Broadcast Televisions (t = -14.876, p <.0.5); Videos (t = -13.749, p <.0.5); Radios (t = 11.263, p <.0.5); Tape Recorders (t = 9.412, p <.0.5); Compact Discs (t = 20.377, p <.0.5); and Printers (t = 8.364, p <.0.5). The null hypothesis was therefore rejected because the obtained t-values were found to be higher than the critical t-value of 1.965 at .05 alpha level of significance with 449 degrees of freedom. This result also disclosed that higher institution students’ access to ICT tools are not significantly low with respect to photocopiers (t = -1.840, p <.0.5); and mobile telephones (t = 0.538, p <.0.5); given the same critical t-value, alpha level of significance and degrees of freedom.
Further examination of the results in Table 1 revealed that the observed mean access to ICT tools by higher institution students was lower for 10 of the ICT tools than the expected mean access to ICT tools of 5.50, whereas in the remaining 6 ICT tools, it was higher. Statistical comparison of these observed mean values and the expected mean value of 5.50, using population t-test analysis for one sample mean, negative t-values were obtained for the former, while positive t-values were obtained for the latter. By implication, this finding has it that higher institution students’ access to ICT tools is significantly low except in photocopiers and mobile telephones. In other words, higher institution students in Cross River State have little or no access to ICT tools enumerated in this study. What seemed to be a high access was recorded in photocopiers and mobile telephones.
5.2. **Hypotheses Two**

There is no significant difference between higher institution students who have access to ICT tools and those who do not in their labour market preparations. The independent variable is higher institution students’ access to ICT tools while the dependent variable is labour market preparation. Independent t-test statistical analysis is used to compare the mean scores from the two groups. A summary of the results is presented in Table 2.

**Table 2: Independent t-test Analysis of the Difference Between Higher Institution Students Who Have Access to ICT Tools and Those Who Do Not in their Labour Market Preparations.**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Access</th>
<th>No Access</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=113</td>
<td>N=337</td>
<td></td>
</tr>
<tr>
<td>Desktop Computers</td>
<td>X=10.53</td>
<td>X=9.21</td>
<td>3.474*</td>
</tr>
<tr>
<td></td>
<td>SD=3.61</td>
<td>SD=3.02</td>
<td></td>
</tr>
<tr>
<td>Laptops</td>
<td>X=9.92</td>
<td>X=7.88</td>
<td>7.034*</td>
</tr>
<tr>
<td></td>
<td>SD=2.66</td>
<td>SD=2.56</td>
<td></td>
</tr>
<tr>
<td>Overhead Projectors</td>
<td>X=5.78</td>
<td>X=8.39</td>
<td>4.633*</td>
</tr>
<tr>
<td></td>
<td>SD=2.84</td>
<td>SD=2.69</td>
<td></td>
</tr>
<tr>
<td>Slide Projectors</td>
<td>X=10.16</td>
<td>X=9.03</td>
<td>3.054*</td>
</tr>
<tr>
<td></td>
<td>SD=3.50</td>
<td>SD=3.15</td>
<td></td>
</tr>
<tr>
<td>Power Point Projectors</td>
<td>X=8.67</td>
<td>X=6.97</td>
<td>5.313*</td>
</tr>
<tr>
<td></td>
<td>SD=2.91</td>
<td>SD=3.09</td>
<td></td>
</tr>
<tr>
<td>Multimedia Projectors</td>
<td>X=10.22</td>
<td>X=8.48</td>
<td>4.703*</td>
</tr>
<tr>
<td></td>
<td>SD=3.62</td>
<td>SD=2.57</td>
<td></td>
</tr>
<tr>
<td>Data Projectors</td>
<td>X=9.74</td>
<td>X=7.63</td>
<td>7.033*</td>
</tr>
<tr>
<td></td>
<td>SD=2.68</td>
<td>SD=3.10</td>
<td></td>
</tr>
<tr>
<td>Internet Facilities</td>
<td>X=10.35</td>
<td>X=8.02</td>
<td>6.853*</td>
</tr>
<tr>
<td></td>
<td>SD=3.19</td>
<td>SD=2.83</td>
<td></td>
</tr>
<tr>
<td>Photocopiers</td>
<td>X=10.48</td>
<td>X=9.12</td>
<td>4.000*</td>
</tr>
<tr>
<td></td>
<td>SD=3.27</td>
<td>SD=2.62</td>
<td></td>
</tr>
<tr>
<td>Mobile Telephones</td>
<td>X=11.33</td>
<td>X=9.14</td>
<td>7.552*</td>
</tr>
<tr>
<td></td>
<td>SD=2.55</td>
<td>SD=3.11</td>
<td></td>
</tr>
<tr>
<td>Broadcast Televisions</td>
<td>X=10.59</td>
<td>X=8.66</td>
<td>5.600*</td>
</tr>
<tr>
<td></td>
<td>SD=3.23</td>
<td>SD=3.24</td>
<td></td>
</tr>
<tr>
<td>Video</td>
<td>X=9.68</td>
<td>X=7.76</td>
<td>6.400*</td>
</tr>
<tr>
<td></td>
<td>SD=2.75</td>
<td>SD=2.83</td>
<td></td>
</tr>
<tr>
<td>Radios</td>
<td>X=10.34</td>
<td>X=8.11</td>
<td>6.559*</td>
</tr>
<tr>
<td></td>
<td>SD=3.19</td>
<td>SD=2.77</td>
<td></td>
</tr>
<tr>
<td>Tape Recorders</td>
<td>X=9.76</td>
<td>X=8.21</td>
<td>4.559*</td>
</tr>
<tr>
<td></td>
<td>SD=3.28</td>
<td>SD=2.59</td>
<td></td>
</tr>
<tr>
<td>Compact Discs</td>
<td>X=10.18</td>
<td>X=9.09</td>
<td>3.303*</td>
</tr>
<tr>
<td></td>
<td>SD=2.97</td>
<td>SD=3.07</td>
<td></td>
</tr>
<tr>
<td>Printers</td>
<td>X=11.26</td>
<td>X=9.33</td>
<td>5.216*</td>
</tr>
<tr>
<td></td>
<td>SD=3.51</td>
<td>SD=2.88</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05; df = 448; Critical t = 1.965

The results presented in this table 2 showed that there is a significant difference between higher institution students who have access to ICT tools and those who do not in their labour market preparations in terms of Desktop Computers (t = 3.474, p < .05); Laptops (t = 7.034, p < .05); Overhead Projectors (t = 4.633, p < .05); Slide Projectors (t = 3.054, p < .05); Power Point Projectors (t = 5.313, p < .05); Multimedia Projectors (t = 4.703, p < .05); Data Projectors (t = 7.033, p < .05); Internet Facilities (t = 6.853, p < .05); Photocopiers (t = 4.000, p < .05); Mobile Telephones (t = 7.552, p < .05); Broadcast Televisions (t = 5.600,
p < .05); Videos (t = 6.400, p < .05); Radios (t = 6.559, p < .05); Tape Recorders (t = 4.559, p < .05); Compact Discs (t = 3.303, p < .05); and Printers (t = 5.216, p < .05). The null hypothesis was therefore rejected given the fact that the obtained t-values were found to be higher than the critical t-value of 1.965 at 0.05 alpha level of significance and with 448 degrees of freedom.

Further observation of the results in table 2 disclosed that in all the sub-variables, higher institution students’ who have access to ICT tools had higher mean values than those who have no access to ICT tools in their labour market preparations. This implies that higher institution students who have access to ICT tools had better preparation for labour market than their counterparts who have not.

5.3. Hypothesis Three

There is no significant influence of higher institution students’ level of access to ICT on their labour market preparations. The independent variable is higher institution students’ level of access to ICT, while the dependent variable is labour market preparations. Using One Way Analysis of Variance (ANOVA) and its associated Fisher’s LSD Multiple Comparison Test data obtained from the variables are analyzed. Summaries of the results are presented in Tables 3 and 4.

Table 3: One Way Analysis of Variance (ANOVA) of the Influence of Higher Institution Students’ Level of Access to ICT on their Labour Market Preparations.

<table>
<thead>
<tr>
<th>Higher Institution Students' Level of Access to ICT</th>
<th>N</th>
<th>X</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>138</td>
<td>10.07</td>
<td>2.15</td>
</tr>
<tr>
<td>Moderate</td>
<td>110</td>
<td>10.43</td>
<td>2.03</td>
</tr>
<tr>
<td>Low</td>
<td>202</td>
<td>11.31</td>
<td>3.49</td>
</tr>
<tr>
<td>Total</td>
<td>450</td>
<td>10.71</td>
<td>2.56</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between group</td>
<td>136.85</td>
<td>2</td>
<td>68.43</td>
<td>6.95*</td>
</tr>
<tr>
<td>Within group</td>
<td>4399.17</td>
<td>447</td>
<td>9.84</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4536.02</td>
<td>449</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05; df = 2, 447; Critical f = 3.02

As presented in this table 3, the results indicated a high mean students’ access to ICT for labour market preparations (X = 10.07), moderate mean students’ access to ICT for labour market preparations (X = 10.43) and low mean students’ access to ICT for labour market preparations (X = 11.31).

When One Way Analysis of Variable (ANOVA) was applied, significant F – value of 6.95 was obtained. This F – value was found to be higher than the critical F – value of 3.02 at 0.05 alpha level of significance with 2 and 447 degrees of freedom and so, the null hypothesis was rejected. With this result therefore, there is a significant influence of higher institution students’ level of access to ICT on their labour market preparations. Given the significant F – value, a post hoc analysis using Fisher’s Multiple Comparison Test was carried out. A summary of the result is presented in Table 4.
1. Group means are along the diagonal

2. Differences between group means are above the diagonal

3. Fisher’s LSD t-values are below the diagonal

The results in this table 4 disclosed that higher institution students in the high group had more access to ICT than their counterparts in low group (t = -3.647, p <.05). Similarly, higher institution students in moderate group had more access to ICT than their counterparts in low group (t = -2.378, p <.05). This finding therefore implies that higher institution students in high group in all cases had more access to ICT than their counterparts in moderate and low groups, and so are likely to be more prepared towards labour market than other groups.

6. Discussion of Results

The outcome of the analysis of hypothesis one disclosed that higher institution students’ access to ICT tools is significantly low. This finding suggests that higher institution students in Cross River State lacked access to ICT tools such as Desktop Computers, Laptops, Overhead Projectors, Slide Projectors, Power Point projectors, Multimedia Projectors, Data Projectors, Internet Facilities, Broadcast Televisions, Videos, Radios, Tape Recorders, Compact Discs and Printers. This therefore mean that they are not adequately prepared for the labour market because skills in these ICT tools are among the criteria most employers of labour set out as necessary for the employment of graduates. Perhaps, this students’ low access to ICT tools may have accounted principally for the high graduate unemployment prevalent in Cross River State in particular and Nigeria in general presently.

This finding is consistent with the outcome of Bassey, Umoren, Akuegwu, Udida, Ntukidem & Ekabua’s (2007) study, which revealed that graduating university students’ access to e-learning technology is significantly low. A germane explanation for this finding centres on the unimpressive funding of education by the Federal Government, which a few years back has been revolving between 7 and 8 percent (Udeaja, 2005). However, given the slight increase to 13 percent in 2008 national budget to education, followed by reductions in subsequent years, not much is expected to change. In addition to this, the poor nature of internally-generated revenue in higher institutions in Cross River State has not helped matters, which act as hiccups to any remarkable improvement. With this development, higher institutions in Cross River State are still disadvantaged with regards to mustering enough funds to procure ICT tools for access to students, and as such these students’ preparation for the labour market will continue to be low. The fallout of this is that unemployment rate among the graduates will continue to sky-rocket.
Furthermore, this result revealed that higher institution students’ access to ICT tools with respect to photocopiers and mobile telephones is not significantly low. In other words, higher institution students’ access to these ICT tools is significantly high. That is, higher institution students’ access to ICT tools with regards to photocopiers and mobile telephones is high. This is because they are available in such a way that students can easily lay hands on them and use. The reason for this is that these two tools are ubiquitous in higher institutions for students’ use even though their ownership borders on private initiative.

The results of hypothesis two indicated that students who have access to ICT tools significantly differ from those who do not in their labour market preparations. In other words, higher institution students who have access to ICT tools had better labour market preparation than their counterparts who do not.

A plausible explanation for this finding is that ICT is the rave of the moment where most of the activities in the industrial, educational, health and business organisations are carried out by it, and even companies that require the services of employees to operate, have shifted from manual to electronic facilities. Closely akin to this is the fact that the world has been transformed to an age where the activities are now knowledge-driven (Yusuf, 2005). So ICTs provide the skills necessary to fit into the changing societies. It therefore follows that any prospective employee must possess these necessary ICT skills in order to become relevant and meet the demands of the labour market. It is therefore based on these realities that higher institution students who have access to ICT tools stand a better chance of possessing the skills required to fit into the labour market, and are likely to be employed more than their counterparts who lack access to ICT tools.

The outcome of hypothesis three revealed that there is a significant influence of higher institution students’ access to ICT on their labour market preparations. That is students who are exposed to ICT has what it takes to meet the demands of the labour market. This is so because ICT provides the students the opportunities to gain valuable computer skills which are revealed in today’s job market (Akuegwu, Udida & Nwii-ue, 2007).

The reason for this finding is that given the fact that ICT act as a ready means of preparing today’s students for future workplaces (Yusuf, 2005), having access to ICT implies gaining the necessary skills, knowledge and understanding to function effectively in the labour market. As such, ICT provides a link between higher institutions and labour market, where higher institutions train manpower for the labour market and thereby fulfill its community service roles. This articulation is in consonance with the reports of Adomi & Anie (2006) that Nigerian industries were concerned about levels of graduate skills in online/internet searching, systems management and computer keyboarding, and as such asked the universities to deepen the current exit knowledge levels of ICT skills of their graduates. It therefore follows that labour market depends on higher institutions to provide it the necessary manpower needed by it to remain afloat in a competitive economy.

In the same vein, the level of higher institution students’ access to ICT determines their level of preparation for the labour market. That is, the extent of students’ labour market preparations is a function of their degrees of access to ICT. One therefore cannot operate beyond the skills and knowledge possessed. This accounts for why students’ level of access to ICT influences their labour market preparations.

7. Conclusion

On the strength of the findings of this study, it was therefore concluded that higher institution students’ access to ICT tools is significantly low. In contrast, their access to ICT tools with respect to photocopiers and mobile telephones is not significantly low. Higher institution students who have access to ICT had better preparations for the labour market than their counterparts who have not. There is a significant influence of higher institution students’ level of access to ICT on their labour market preparation. Therefore the degree of students’ preparation for the labour market is a function of the extent of their access to ICT facilities or tools.

8. Management Imperatives for Labour Market Preparations
1. Management of higher institutions should ensure that their curriculum is diversified to reflect labour market demands. This will enable them to satisfy the needs of the labour market, and so reduce the high unemployment rate among higher institution graduates.

2. Management of higher institutions should establish a forum whereby they and stakeholders in labour market should rub minds so as to ascertain the areas where new injections need to be introduced in the schools’ programmes. This will necessitate the absorption of higher institution graduates into the labour market without hassles. In a situation whereby the graduates cannot be integrated into the labour market tantamount to economic waste both to the higher institutions and labour market.

3. Management of higher institutions should initiate modalities whereby they can attract assistance from the labour market. This can be in form of floating an endowment fund or revitalizing the existing ones, purely meant to address their ICT needs whereby labour markets can be called upon to assist by donating handsomely. The proceeds will therefore be channeled towards procuring ICT tools in such a number that students can readily have unhindered access to them. The labour market can as well donate these tools and equipment to them.

4. Management of higher institutions should as a matter of fact set in motion modalities whereby students can be encouraged to own their personal computers. This will act as a means of addressing the access problems occasioned by the dearth of these ICT gadgets. In a situation whereby students own their personal computers will enable them to practice on their own and gain the necessary skills required by labour markets in this regard.
References


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