Introduction

Librarians know that ICT facilities are tools for the information era, like the printing press in its day. There is an awareness of the importance of the application of ICTs in university libraries. The question now is how to use ICTs with their full potential and benefits. ICTs can bring a challenge and a change that should result in the digitized library of the 21st century (UNESCO 2001).

The university environment in Nigeria is changing and there is renewed recognition of the roles of universities in national development in the vast web of telecommunication (Awe, 2005). University libraries in Nigeria form a significant part of the nation's transformation and development by providing quality education. There are investments by the government in network technology infrastructure and connectivity in universities in Nigeria, including the libraries. Including libraries ensures that they are standard bearers in the use of network technologies. University libraries should be the best information providers in the nation (Awe, 2005).

Introducing ICTs in Nigerian university libraries is associated with challenges, setbacks, and obstacles peculiar to each library and its environment and infrastructures, including geographic location, socio-economic factors, and perceptions of the value of information by the parent institution. There is general acceptance of ICTs as vital to the effectiveness of academic library functions, but there are obstacles such as years of working experience and the ICT knowledge and skills of librarians. The volume and speed of access to worldwide information in a networked environment are clear evidence of the globalization of information. Librarians must have a wide range of skills to manage the changing environment.

University libraries and librarians must face the challenges that come with ICTs and the globalization of scholarly information, and the growth of scholarship in a local and international Internet context. Libraries must be transformed into information service units, with fully automated processes. Ideally, all university libraries in Nigeria would experience the full benefits of modern ICTs that would transform them to nearly paperless libraries (Baridan 2006).

Background

The Implication of Librarians' ICT Knowledge and Skills

ICT is the engine that runs the library environment. ICT skills for the information professional are no longer debatable; they are now professional imperatives. It has been noted by the UNDP that:
Developing the capacity to integrate computer ICT into the national economy (in order to ensure) intersectional links (network) depends on skilled people and skilled people are the product of massive investment in education (library and training) (UNDP Report 2000/2001)

Education and learning are now more oriented toward the training and inculcation of skills, rather than the values and ideas of a liberal education (Obikeze, 2003:9). Modern society is essentially a knowledge society, with skills and performance and dominated by ICTs, and with information processing moving toward a computerized global society.

ICT and digital libraries have been variously defined. The most comprehensive is that provided by the Digital Library Federation, which describes “organizations that provide the resources, including specialized staff, to select, structure, and offer intellectual access to interpret over time, collections of digital works so that they are readily and economically available for use by a defined community or set of communities” (Rait, 1999 quoted in Zhou, 2005:433).

From the definition above, it is clear that the training of librarians must concentrate on ICT and digital libraries. This means that about 70 percent of a librarian's training must be ICT skills needed for a digital library.

Zhou (2005) describes the responsibilities of an ICT/digital librarian as follows:

- select, acquire, preserve, organize and manage ICT/digital collection;
- design the technical architecture of ICT/digital library;
- plan, implement, and support ICT/digital services such as information navigation, consultation and transmit services;
- establish friendly user interface over network;
- set up relative standards and policies for the ICT/digital library;
- design, maintain and transmit added-value information products;
- protect digital intellectual property in network environment; and
- ensure information security.

He describes the service mode as follows:

- analyzing and processing different kind of information resources;
- activating and finding potential value hid in any information;
- providing add valued information products and services at right time and right place; and
- finding the right users for information and provide personalized and tailored services

This is dynamic and advanced service, using initiative and innovative methods.

The aim of this paper is to discover whether years of working experience of librarians has an effect on the sources/means through which university librarians acquire ICT knowledge and skills and to discover whether years of working experience affects librarians’ mode of ICT exploration and acquisition.

Methodology

The study adopted a descriptive design using a questionnaire to collect data. A total of 169 questionnaires were retrieved from librarians working in 13 university libraries in six states of the South-South zone of Nigeria. The responses which were in two categories: librarians with 1-16 years of experience 16 years and above. Responses were analyzed by frequencies, percentages, and z-test.
Results and Discussion

Table 1: Working Experience of Respondents

<table>
<thead>
<tr>
<th>No. of Respondents</th>
<th>Working experience</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>99</td>
<td>1-15 years</td>
<td>58.58</td>
</tr>
<tr>
<td>70</td>
<td>16 years and above</td>
<td>41.42</td>
</tr>
</tbody>
</table>

About three-fifths of respondents had 1-15 years of working experience, while the rest had 16 or more.

Table 2: Librarians’ working experience and acquisition of ICT knowledge and skills

<table>
<thead>
<tr>
<th>Sources/means of ICT knowledge acquisition</th>
<th>1-15 years</th>
<th>16 and over</th>
<th>1-15 years</th>
<th>16 and over</th>
<th>1-15 years</th>
<th>16 and over</th>
<th>1-15 years</th>
<th>16 and over</th>
</tr>
</thead>
<tbody>
<tr>
<td>User education/information literacy programme</td>
<td>40</td>
<td>26</td>
<td>40</td>
<td>26</td>
<td>18</td>
<td>29</td>
<td>41</td>
<td>34</td>
</tr>
<tr>
<td>Computer/ICT training programme</td>
<td>61</td>
<td>36</td>
<td>62</td>
<td>31</td>
<td>12</td>
<td>14</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>Formal LIS courses</td>
<td>31</td>
<td>20</td>
<td>27</td>
<td>18</td>
<td>27</td>
<td>26</td>
<td>41</td>
<td>34</td>
</tr>
<tr>
<td>Network technology/ICT books/manual</td>
<td>49</td>
<td>32</td>
<td>50</td>
<td>31</td>
<td>26</td>
<td>19</td>
<td>32</td>
<td>25</td>
</tr>
<tr>
<td>Internet</td>
<td>47</td>
<td>32</td>
<td>48</td>
<td>31</td>
<td>15</td>
<td>15</td>
<td>37</td>
<td>29</td>
</tr>
<tr>
<td>Workshops/seminar conferences</td>
<td>59</td>
<td>40</td>
<td>60</td>
<td>40</td>
<td>12</td>
<td>17</td>
<td>28</td>
<td>18</td>
</tr>
<tr>
<td>Trial and error</td>
<td>28</td>
<td>15</td>
<td>23</td>
<td>12</td>
<td>23</td>
<td>18</td>
<td>48</td>
<td>29</td>
</tr>
<tr>
<td>From cybercafé staff</td>
<td>44</td>
<td>29</td>
<td>44</td>
<td>24</td>
<td>17</td>
<td>17</td>
<td>38</td>
<td>24</td>
</tr>
<tr>
<td>Friends/colleagues</td>
<td>51</td>
<td>32</td>
<td>52</td>
<td>46</td>
<td>20</td>
<td>15</td>
<td>28</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 2 reveals that librarians with less working experience (1-15 years) use more different ways to acquire ICT knowledge and skills than librarians with more experience. Years of experience should not make librarians complacent. Writers such as Zenke, Raines, and Filipczak (2000) dismiss as myths such a concept of older workers not being as bright and skillful as younger ones.

Table 3: Z-test Analysis of Librarians’ Working Experience and Acquisition of ICTs Knowledge and Skills

<table>
<thead>
<tr>
<th>Group</th>
<th>No</th>
<th>X</th>
<th>S.D</th>
<th>Df</th>
<th>Z-Cal</th>
<th>Z-crit</th>
<th>Level of significance</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-15 years</td>
<td>99</td>
<td>15.99</td>
<td>7.62</td>
<td>167</td>
<td>0.28</td>
<td>1.96</td>
<td>0.05</td>
<td>Not significant</td>
</tr>
<tr>
<td>16 and older</td>
<td>70</td>
<td>16.21</td>
<td>7.82</td>
<td>167</td>
<td>0.28</td>
<td>1.96</td>
<td>0.05</td>
<td>Not significant</td>
</tr>
<tr>
<td>Total</td>
<td>169</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

“Working Experience and Librarians’ Knowledge of Information and Communication Technologies (ICTs) in Nigerian University Libraries,” Stella E. Igun, PhD. Library Philosophy and Practice 2010 (July)
The data on table 3 shows that the null hypothesis of no significant difference is accepted. The z-calculated of 0.28 is less than z-critical of 1.96. This implies that there is no significant difference in librarians' working experience and their acquisition of network technologies and skills. Although, Spacey, Goulding, and Murray (2004) note that in relation to attitudes, younger workers display a higher intention to use ICTs with ease than their older counterparts. The present study disagrees with these authors. The mean on ICT knowledge and skills for librarians with more experience is higher than that of those with less experience. (16.21 and 15.99 respectively). There is no significant difference statistically.

Conclusion

To help librarians build capacity in ICT knowledge and skills, efforts should be made by librarians and stakeholders to develop various sources for acquiring more knowledge and skills. Librarians’ knowledge and skills should be updated through constant use of ICTs. This will help increase and improve speed and accuracy, and bring about a faster and easier means of communication exchange globally.

References


