AN STUDY OF PROFICIENCY IN DIGITAL LITERACY SKILLS OF LIBRARIANS OF DEGREE COLLEGES OF BELAGAVI CITY.

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Abstract:

{Digital Literacy is one of the 21st century skills required for Librarians in the digital world. Today's information is born digital. A vast number of libraries are now digital. The scenario in libraries is gradually changing with abundant e-resources and software available to address the needs of digital users. Librarians are facing challenges in acquiring digital competencies for efficient service providing in digital libraries which are vital. Hence this article is about analysing the proficiency in digital literacy skills of librarians of degree colleges in Belagavi city}.

Keywords: Digital Literacy, Digital Literacy Skills, Proficiency, Librarians.

Introduction:

Presently library and information science (LIS) is a highly evolving technology-driven field with digital technology invading particularly the academic library environment, posing questions as to what extent of digital literacy skills the LIS professionals should possess. Introduction of ICT in libraries has also influenced librarians and librarianship too. It has transformed them from custodians of information to digitally literate professionals who can create electronic or digital information, access, process, save, manipulate and disseminate large amount of digital information.

There is no doubt that, currently digital technologies have significantly transformed our lives. It has not been possible for many to take full advantage of the sources created to receive, apply, share, and create information though there is easy access to electronic and digital resources. Therefore, presently the librarians' task is to help all their users to access and utilize the available digital information

and resources for personal and community development. This is an important aspect of the practice of librarianship. For librarians, along with basic literacy which is an ability to search, collect and disseminate information to engage and develop in the LIS field, it is also essential to have the necessary digital awareness, digital literacy skills and positive attitudes after realising the potential of ICTs for both professional and user community development.

2.Digital Literacy:

Digital literacy refers to, **"an individual's ability to find, evaluate and compose clear information through writing and other mediums on various digital platforms"**.

IFLA defines digital literacy as, **"to be digitally literate means one can use technology to its fullest effect efficiently, effectively and ethically to meet information needs in personal, civic and professional lives"**.

The American Library Association's digital-literacy task force offers the following definition, **"Digital literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills".**

Need for Digital Literacy skills among Librarians:

Libraries all over the world are experiencing the consequences arising due to advancement in technology, globalization and digitization of information. Impact of these has led to automation in libraries, development of digital and virtual libraries, conduct of virtual conferences, online learning platforms, Web 2.0, Library 2.0, etc. The digital revolution demands application of digital technology in areas of LIS too. Evolving digital technologies have integrated with the traditional librarian's responsibilities. Provision of information services to the users is a challenging task for present librarians in this digitised world which is highly influenced by the advances in information technology. The careers of librarians are also getting influenced by the evolving technologies and as a result, acquiring digital literacy skills and competencies has become inevitable for librarians. It is essential for librarians to be digitally literate to enable themselves in using the web and e-resources to help the users to access and utilize the e-resources.

Purpose of the study: to analyse the proficiency in Digital Literacy Skills of librarians of degree colleges of Belagavi city.

Objectives of the study:

a) To assess the Librarian's experience with computers.

b) To asses Proficiency of librarians in using Application of Automation, Digital Library, Web- Publishing and Citation Software.
c) To asses Proficiency of librarians in Managing Electronic Resources
d) To know the Awareness of Mobile Applications, Network Sites and Search Engines for Internet based services among librarians.

Scope &Limitations of the study:

The scope of the study is confined to only first grade degree colleges of Belagavi city that are affiliated to Rani Channamma University, Belagavi and limited to librarians only.

Methodology:

A survey method was adopted for collection of data. Structured questionnaires were administered personally among librarians of 12 colleges.

Data analysis and interpretation

Computer course completed	Number of librarians	% of librarians
Short term course	6	50.00
Diploma in CS	3	25.00
PGDCA	3	25.00
PGDLAN	1	8.33

Table 1: Computer course completed wise distribution

Interpretation: Majority 50 percent of the respondents had completed their short term courses on computers followed by 25 percent of the respondents having completed Diploma in CS and PGDCA and only one respondent i.e 8.33 percent of them has completed PGDLAN course.

Proficiency	Not Tried	%	Poor	%	Average	%	Good	%	Excellent	%
Libsys	10	83.33	0	0.00	0	0.00	1	8.33	1	8.33
SOUL	9	75.00	0	0.00	0	0.00	2	16.67	1	8.33
EasyLib	8	66.67	0	0.00	1	8.33	3	25.00	0	0.00
KOHA	6	50.00	0	0.00	2	16.67	2	16.67	2	16.67
NewGenLib	7	58.33	0	0.00	2	16.67	2	16.67	1	8.33
Evergreen	10	83.33	0	0.00	1	8.33	1	8.33	0	0.00
E-Granthalaya	7	58.33	0	0.00	2	16.67	2	16.67	1	8.33

Table 2: Proficiency in using library automation software wise distribution of librarians

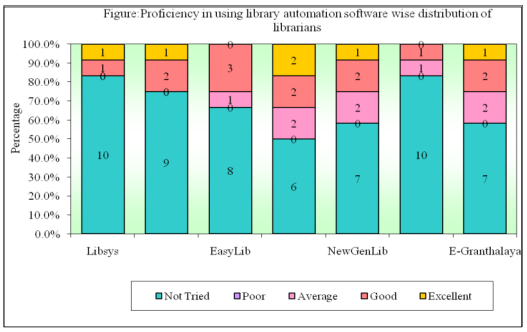


Figure No 1: Proficiency in using Library Automation Software wise Distribution of Librarians

Proficiency	Not Tried	%	Poor	%	Average	%	Good	%	Excellent	%
Greenstone	9	75.00	0	0.00	1	8.33	2	16.67	0	0.00
Dspace	7	58.33	0	0.00	1	8.33	2	16.67	2	16.67
E-Print	10	83.33	0	0.00	0	0.00	2	16.67	0	0.00
Fedora	11	91.67	0	0.00	1	8.33	0	0.00	0	0.00

Table 3: **Proficiency in using digital library software wise distribution of librarians**

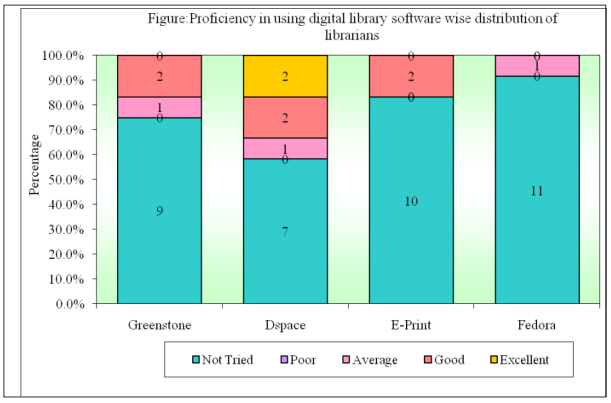


Figure No 2: Proficiency in using Digital Library Software wise Distribution of Librarians

Interpretation: Majority 91.67 percent of them said they have not tried Fedora digital library software whereas, 83.33 percent of them said they have never tried E-Print software, 74 percent of them said they have not tried Greenstone software and 58.33 percent of them said they have not tried any. Majority 16.67 percent respondents said they were good in software Greenstone, Dspace and E- Print. There was 1 respodent who he/she was average in using Greenstone, Dspace and Fedora. Only 16.67 percent of them said they were excellent in using Dspace.

Proficiency	Not Tried	%	Poor	%	Average	%	Good	%	Excellent	%
Wordpress	7	58.33	0	0.00	2	16.67	2	16.67	1	8.33
Drupal	8	66.67	0	0.00	2	16.67	1	8.33	1	8.33
Joomla	9	75.00	0	0.00	0	0.00	1	8.33	2	16.67
Expression Engine	10	83.33	0	0.00	2	16.67	0	0.00	0	0.00
Silver Stripe	9	75.00	0	0.00	2	16.67	0	0.00	0	0.00
Text Pattern	10	83.33	0	0.00	2	16.67	0	0.00	0	0.00

Table 4: Proficiency in using web publishing software wise distribution of librarians

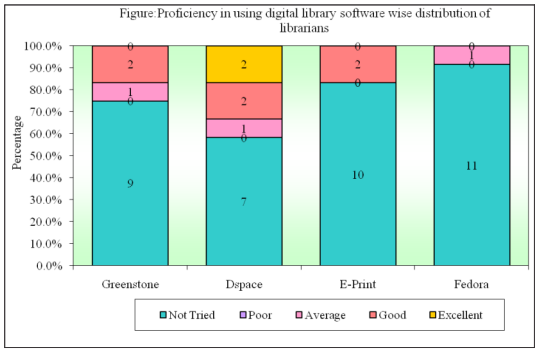


Figure No 3: Proficiency in Using Web Publishing Software wise Distribution of Librarians

Interpretation: Majority of 83.33 percent of respondents said they have not tried Text pattern and Expression engine, web publishing software whereas 16.67 percent of them said that they were average in using WordPress, Drupal, Express engine, Silver shape and Text pattern. About 8 to 10 respondents have never tried any software mentioned above.

Proficiency	Not Tried	%	Poor	%	Average	%	Good	%	Excellent	%
Wordpress	7	58.33	0	0.00	2	16.67	2	16.67	1	8.33
Drupal	8	66.67	0	0.00	2	16.67	1	8.33	1	8.33
Joomla	9	75.00	0	0.00	0	0.00	1	8.33	2	16.67
Expression Engine	10	83.33	0	0.00	2	16.67	0	0.00	0	0.00
Silver Stripe	9	75.00	0	0.00	2	16.67	0	0.00	0	0.00
Text Pattern	10	83.33	0	0.00	2	16.67	0	0.00	0	0.00

Table 5: Proficiency in using Citation Software wise distribution of librarians

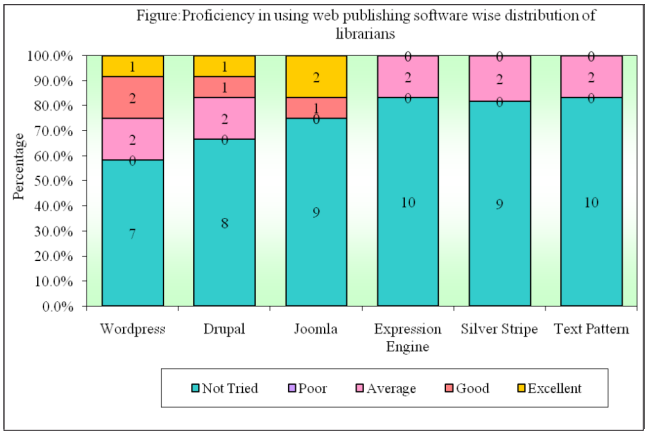


Figure No 4: Proficiency in Using Citation Software wise Distribution of Librarians

Interpretation: Majority of the respondents ranging from 3 to 10 of them i.e 25 percent to 83.33 percent of them have never tried the software such as Citation Machine, Endnote, Zotero, Mendeley, OPAC/Web OPAC. It can be seen that 50 percent of the respondents have used OPAC/Web OPAC and have rated proficiency as excellent. 16.67 percent of them stated their profiency in Zotero, Mendeley and OPAC are poor.

Proficiency	Not Tried	%	Poor	%	Average	%	Good	%	Excellent	%
Library Websites	6	50.00	0	0.00	1	8.33	2	16.67	3	25.00
E-Books	3	25.00	0	0.00	2	16.67	3	25.00	4	33.33
Online Journals	3	25.00	0	0.00	3	25.00	3	25.00	3	25.00
Online Databases	5	41.67	0	0.00	2	16.67	3	25.00	2	16.67
Digital Archives/ Subject Gateways	5	41.67	0	0.00	2	16.67	2	16.67	3	25.00
Open Access Journals	5	41.67	1	8.33	0	0.00	4	33.33	2	16.67
Library Consortia	6	50.00	0	0.00	2	16.67	3	25.00	1	8.33
NPTEL	10	83.33	0	0.00	0	0.00	2	16.67	0	0.00
E-Vidya	10	83.33	0	0.00	0	0.00	1	8.33	1	8.33
Shodhaganga	6	50.00	1	8.33	1	8.33	2	16.67	2	16.67
NLIST	5	41.67	0	0.00	0	0.00	3	25.00	4	33.33
e-Gyankosh	7	58.33	0	0.00	1	8.33	3	25.00	1	8.33

Table 6: Proficiency in Managing Electronic Resources

Interpretation: Respondents ranging from 3 to 10 had never tried managing electronic resources, majority 83.33 percent of them had not tried NPTEL and E-Vidya.33.33 percent of them were good and excellent in managing Shodhaganga and open access journals respectively. When it comes to managing the online journals respondents were distributed

evenly i.e 25 percent each of respondents said they had not tried they were average, they were good and excellent respectively.

Variables	Mean	SD
Proficiency in using Application Software	19.08	8.04
Proficiency in using Library Automation Software	13.58	7.73
Proficiency in using Digital Library Software	6.67	3.68
Proficiency in using Web Publishing Software	9.92	6.08
Proficiency in using Citation Software	10.17	5.08
Proficiency in Managing Electronic Resources	30.92	14.06
Awareness of Mobile Applications	18.33	8.61
Use of Search Engines	26.58	8.44
Usage of Social Networking Sites	19.00	8.27
Proficiency in using Internet based services	26.08	13.10

Table 7: Usage of Search Engines

Interpretation: The respondents were asked about their usage of searchengines. Majority 91.67 percent use Google very often followed by 58.33percent of them use Yahoo. Respondents also used Bing often. 50 percent of the respondents said they have never tried the internet archive. 16.67 percent of them rarely use Ask.com and DuckDuckGo. And 16.67 percent of them use Alta-Vista and Google Scholar less often.

Usage	Not Tried	%	Rarely	%	Less often	%	Often	%	Very often	%
Google	0	0.00	0	0.00	0	0.00	1	8.33	11	91.67
Yahoo	1	8.33	1	8.33	0	0.00	3	25.00	7	58.33
Alta-Vista	4	33.33	0	0.00	2	16.67	2	16.67	4	33.33
Bing	3	25.00	0	0.00	2	16.67	4	33.33	3	25.00
Ask.com	3	25.00	2	16.67	2	16.67	3	25.00	2	16.67
DuckDuckGo	6	50.00	2	16.67	1	8.33	3	25.00	0	0.00
Google Scholar	3	25.00	0	0.00	2	16.67	3	25.00	4	33.33
The Internet Archive	6	50.00	0	0.00	1	8.33	3	25.00	2	16.67

Table 8: Mean and SD of different variables in the study

The mean of the proficiencies of the respondents is being demonstrated in the table above. The mean of Proficiency of using the library automation software is below average i.e 13.58 and so is the proficiency in using digital library software and web publishing software. Majority of them have never tried them at all. When the mean of the usage of internet-based services and usage of search engines is taken into consideration it is above mean value.

Variables	Proficiency in using Application Software	Proficiency in using Library Automation Software	Proficiency in using Digital Library Software	Proficiency in using Web Publishing Software	Proficiency in using Citation Software	Proficiency in Managing Electronic Resources	Awareness of Mobile Applications	Use of Search Engines	Usage of Social Networking Sites	Proficiency in using Internet based services
Proficiency in using Application Software										
Proficiency in using Library Automation Software	r=0.4264									
Proficiency in using Digital Library Software	r=0.3394	r=0.6666*								
Proficiency in using Web Publishing Software	r=0.3014	r=0.5292	r=0.8850*							
Proficiency in using Citation Software	r=0.3092	r=0.6853*	r=0.8505*	r=0.9070*						
Proficiency in Managing Electronic Resources	r=0.2671	r=0.7292*	r=0.7820	r=0.6951*	r=0.8252*					
Awareness of Mobile Applications	r=0.0442	r=0.4889	r=0.5699	r=0.7057*	r=0.5977*	r=0.5862				
Use of Search Engines	r=0.1788	r=0.3276	r=0.3234	r=0.3678	r=0.2670	r=0.3001	r=0.7709*			
Usage of Social Networking Sites	r=0.3077	r=0.3571	r=0.5264	r=0.4809	r=0.2641	r=0.2979	r=0.5928*	r=0.7337*		
Proficiency in using Internet based services	r=0.1277	r=0.6525*	r=0.7030*	r=0.7328*	r=0.6859*	r=0.7578*	r=0.7555*	r=0.5154	r=0.6305*	

*p<0.05

Table 9: Correlations among different variables of librarians

Interpretation: The correlation between proficiency in using wen publishing software has strong uphill positive linear relationship with using of digital library software. This means that higher the usage of digital library software higher will be the proficiency of web publishing software too (r=0.8850). Similarly, proficiency in using citation software has strong uphill positive linear relationship between the proficiency in using the digital library software.

Both the variable is corelated in a positive manner (r=8505). The proficiency in using the citation software has strong uphill positive linear relationship with using web publishing software (r=0.9070). in the above mentioned table, it can be noticed that there is positive linear relationship between the usage of web publishing software, usage of digital library software and web publishing software. This positive liner relationship shows that the respondents if have the proficiency in using the web publishing software may also be proficient in using the digital library and citation software. Where as in this present study the majority of the respondents have never tried these therefore the proficiency in using the software may be accessed as poor.

Major Findings

i. Majority of the respondents had completed short term computer course followed by Diploma in CS and PGDCA

ii. Majority of the respondents were not proficient in using library automation software.

iii. Majority of the respondents had never used digital literacy software such as greenstone, Dspace, E-print and Fedora.

iv. Majority of the respondents had never used the web publishing software like Word Press, Text patter, Silver stripe, Expression engine, Joomla etc.

v. Majority of the respondents had not tried citation software such as Citation machine, end note, Zotero, Mendeley etc. and hence they were not proficient in citation software

vi. Majority of them had not tried manging electronic resources such as library websites, online data bases, digital archives, open access journals, E-Vidya, e-Gyankosh, NPTEl etc.

Discussion and Conclusion

With integration of library technology in modern days, technology influences the things very much so and relevance of the source and authentication of the knowledge to handle the library databases is also very well included in this paper. The courses are often offered to the librarians to cope up with the new technology and handle the library sources. The library information, catalogue software and marking the source with accuracy by using the technology is utilised by the most of the librarians. The other sources of information like search engines, open access of databases and providing the internet access to these databases and other category are also important in this criterion.

The proficiency of the librarian is very much necessary to handle such information and results are found to be showing that the librarians' proficiency is significantly low in some category especially in e-sources, mobile applications, using internet-based services and using of citation software. These are the things to be learnt by the budding librarians at least. The utilisation of the social networking and websites for the library technology is low and other essential library software utilisation by the librarians is significant.

Utilisation of the technology by the librarians and utilisation of other application can be improvised through the adoption of such software by making them user friendly. Librarians must be prepared for conditions and necessary actions required to perform and handle the technology and they should be provided with regular trainings to update their digital literacy skills and also new soft skills.

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