Information Literacy Skills Assessment of Post Graduate Students in Sant Gadgebaba Amravati University, Amravati, Maharashtra: A Best Practice

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Abstract

This paper presents student centric best practice of imparting Information literacy skills and assessment of Post Graduate students, which can be student centric activity at college and university level. The researcher has made an effort to conduct the pre and post test of P.G. students for which conducted workshops at district level in affiliated colleges of Sant Gadge Baba Amravati University, Amravati, Maharashtra. Total 338 students were approached from 4 districts to gain the data on Internet searching skills, Library skills, Research oriented searching techniques, etc.

Keywords: Information Literacy, Skills, Library, Pre-test, Post-test, Assessment, Post Graduate Students

1. Introduction

Assessment of student learning is crucial in the academic institution of the. It is an essential and usually required, in order to determine for post graduates of the institution are ready to assume a productive role in today's world. Information literacy has the ability to gather relevant information, to process, choose the best of it and present it in a new format to a selected audience. Assessment of library information literacy instruction has not always been a priority in higher education but, as budgets tighten, universities and colleges are finding it necessary to supply evidence of student learning in order to satisfy financial supporters and accreditation requirements.

Library professionals teach various skills to the students which is a life-long learning experience. They are passionate about the need for incorporating information literacy instruction and assessment of student learning into the curricula of academic institutions and have devised methods to measure the student learning outcomes of their information literacy instruction.

2. Information Literacy Skills

An early extended definition of information literacy, incorporating a list of skills required, was devised in year 1985 by the Auraria Library of the University of Colorado. This gave as a general definition that information literacy has 'the ability to effectively access and evaluate information for a given need'. (Bawden, 2001, p.238-39). "Information literacy is a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (ACRL, 2000).

3. Information Literacy: Pre-Test/Post-Test

The pre-test and post-test of Post Graduate Students was administered in the pre-planned workshop focusing the aspects regarding frequency and skill of using Internet, types of sources,

searching information through databases, parts of Citation, documenting research and plagiarism. The pre-test was conducted before starting the sessions while the post-test was administered after two sessions. In order to ensure comparability between the tests, both tests used the same questions and it took approximately 20 minutes to measure students' information literacy levels.

4. Review of Literature

There are several studies conducted to assess the students of academic libraries on national and international level. The literature published on IL (Information Literacy) skills reveal some useful and interesting findings that assist in planning, designing and implementing programmes to develop as well as measure IL skills of specific user communities. The trend found in foreign countries to assess the students in first year or every year. Universities should develop online Information literacy modules, quiz etc for the students. Few reviews of survey conducted for students presented in India and abroad are as following:

Joanna M. Burkhardt (2007) conducted as part of the University of Rhode Island Libraries' "Comprehensive Plan for Information Literacy," a three-credit class in the skills and concepts of information literacy was first offered in the fall of 1999. More than 1,000 undergraduate students have taken the class since that time. A pre-test was given at the beginning of each semester, followed up by a post-test at the end. The pre- and post-test results were analyzed to determine: (1) whether students improved their test scores over the course of the semester, (2) which concepts and skills students mastered, and (3) where the course might need

revision and/or improvement. Analysis showed that skills were acquired and/or improved overall.

N.N. Edzan (2008) traced the development of information literacy initiatives at the various levels within the Malaysian educational system. Information literacy has been embedded within the Malaysian educational system for some time. Information literacy means information skills delivered by the teachers at both the primary and secondary levels. Subsequently, information literacy competencies are further imparted to undergraduates and postgraduates by various academic libraries. The paper looks at the formulation of the National Information Technology Agenda and the initial emergence of information literacy initiatives within Malaysian society. Efforts are being made by various entities to create an information literate society in line with the government's aim of attaining Vision 2020 – the creation of a civil society whereby all citizens will be information literate and well-equipped as knowledge workers.

Sasikalaand Dhanraju (2010) presented the findings of a survey on the level of information skills among the students of higher education. The scope of the study covers various aspects like awareness about the use of library resources, both print and electronic; knowledge about various sources of information including Internet; familiarity with and use of information communication technologies and copyright and fair use of information etc.

A, Jessy; Bhat, Shivananda; and Rao, Mahabaleshwara (2016)examined the information literacy competency of post-graduate students of pharmaceutical sciences course at Manipal University, Manipal. The present case study,

conducted prior to and after an Information Literacy Instruction (ILI) program at the Health Sciences Library of Manipal university, Manipal, assesses different aspects of information competency for utilization of information resources.

5. Objectives of the Study

The primary objectives of the study are as follows:

❖ To identify the competency level of information literacy among the Post Graduate students of Sant Gadge Baba Amravati University, Amravati, Maharashtra; and

❖ To compare the overall level of Information literacy skills before and after receiving Information literacy instructions.

6. Scope and limitations

The study was limited to the Post Graduate students from the jurisdiction of Sant Gadge Baba Amravati University, Amravati, Maharashtra.

7. Research Methodology

A well structured questionnaire was developed in six parts. The first part was general information to know the frequency and purpose of using Internet, second part was to assess the knowledge regarding types of sources, third part was Searching information, using which types of searching strategies were used by the P.G. students to perform research. Fourth part consist questions related to the parts of citation to assess the knowledge of the citations, style manuals, etc, fifth part includes questions regarding how the students document their research and sixth part was related to plagiarism to assess the perception and awareness.

The total population of the study was around 400 Post Graduate students from the colleges affiliated to Sant Gadge Baba Amravati University, Amravati, Maharashtra. The workshop on "Awareness of E-Resources and searching techniques" was conducted under the funding assistance from UGC XII plan under Extension activity were arranged in four districts namely Buldhana, Akola, Yavatmal and Amravati. Total 400 questionnaires were distributed for the pre-test among the P.G. students and got filled before starting the learning session and for the posttest, the same students were asked to fill up the questionnaire again, i.e. 100 from each district colleges were approached for the post-test conducted after the learning sessions in the workshop. Finally 338 Post Graduate students questionnaire was selected for analysis of the data.

8. Analysis and Discussion

The data of 338 P.G. students both pre and post questionnaire was analysed with the help of SPSS (Statistical Package for Social Sciences) software, tabulated and presented in table 1 below:

Table 1 : Use of Internet

Sl. No.	Use of Internet	No. of P.G. Students	%
1	Every day	208	61.54
2	Few times a week	56	16.57
3	Once a month	37	10.95
4	Every few months	13	3.85
5	Never	24	7.10

It is observed form the survey data that highest, percent of P.G.students (61.54%) stated that they use internet everyday, 7.10% to 16.57% mentioned less use of internet.

Table 2: Purpose of Using Internet

Sl. No.	Purpose of using Internet	No. of P.G.	%
1	Email only	58	17.16
2	Fun	48	14.20
3	Information	153	45.27
4	Academic Research	50	14.79
5	Other	29	8.58

The students were asked a questions as to for what purpose you are using Internet. The results revealed that 45.27% Post Graduate students highly stated that they use Internet for the purpose of searching information on Internet and followed by email and academic research purpose.

Table 3: Skill of Using Internet

Sl. No.	Skill of using Internet	No. of P.G.	%
1	Very	131	38.76
2	Somewhat	142	42.01
3	A little	50	14.79
4	Never done	15	4.44
	Total	338	100.00

The responses from users revealed that searching skill on Internet, 38.76% and 42% post graduate students mentioned that they are very and somewhat familiar of using or having skill of searching information on Internet.

Table 4: Types of Sources

Sl. No.	Types of Sources	Pre	Post	Difference
Q1	Dictionary	288 (85.21)	313 (92.60)	+7.40
Q2	Periodical	108 (31.95)	215 (63.61)	+31.66
Q3	Directory	303 (89.64)	327 (96.75)	+7.10
Q4	Encyclopaedia	89 (26.33)	217 (64.20)	+37.87
Q5	Catalogue	125 (36.98)	213 (63.02)	+26.04
Q6	Abstract	136 (40.24)	209 (61.83)	+21.60

The students were asked to match the correct answer with the types of sources definition and its meaning, In pre-test 85.21% students could answer dictionary correctly, 31.95% students answered what is periodical, 89.64% students could tell what is directory, 26.33% mentioned Encyclopaedia correctly, Catalogue was correctly answered by only 36.98%, Abstract was answered correctly by 40.24%.After IL sessions, the students were well aware about the type of sources. There was only difference of 7.40 in dictionary and 7.10 in directory as they were about the dictionary and directory sources. Difference of 31.66 % found in periodical, Encyclopaedia found increased and rated to 64.20% and difference is 37.87%. Catalogue and Bibliography was hiked to 26.04% and 48.52% respectively and abstract was found 61.83% with the difference of 21.60%.The students do not refer various reference sources in the libraries, as they participate or perform in any research activity or research project.

Table 5: Scholarly Journals

Sl. No.	Scholarly Journals	No. of correct answersPre	No. of correct answersPost	Difference
Q1	The term "coverage" refers to	89(26.33)	217(64.20)	+37.87
Q2	Characteristic of a scholarly Journal	58(17.16)	136(40.24)	+23.08
Q3	use of periodical index or database	57(16.86)	192(56.80)	+39.94
Q4	Assignment to write a paper based on scholarly information	83(24.56)	237(70.12)	+45.56

As depicted in table no. 5at the time of pre-test the students were not able to know the concept "coverage" means and what is periodical index or database, the pre-test results shows only 26.33% students knew the concept "coverage" means, however till the post-test, 64.20% were aware that time period, languages, types of documents and disciplines represents in a database. Question regarding the characteristics of scholarly journal, only 17.16% could answer correctly to the option "footnotes and bibliographies are regularly used to cite sources" in pre-test and increased in post-test with the difference of 23.08%, next question was ask why would they use a periodical index or database, only 16.86% students could answer correctly "to find out the citations to articles on a topic" in pre-test and with the increase difference in post-test of 39.94% i.e. 56.89% gave answers correctly. When the students were asked "which source would be appropriate source to use for writing assignment paper based on scholarly information? Only 24.56% answered correctly in pre-test and with the difference of 45.56% of students answered correctly in post-test.

Table-6: Searching Strategies

S.N.	Searching Strategies	No. of correct answersPre	No. of correct answersPost	Difference
Q1	When performing research, one important part of forming a Search Strategy is	55(16.27)	211(62.43)	+46.15
Q2	To find a book on a topic in a library, you use	140(41.42)	287(84.91)	+43.49
Q3	OPAC use	116(34.32)	229(67.75)	+33.43
Q4	To write a college level research paper for your subject class, you consult	125(36.98)	282(83.43)	+46.45

S.N.	Searching Strategies	No. of correct answersPre	No. of correct answersPost	Difference
Q5	In an online database, which search below would retrieve the greatest number of records?	108(31.95)	289(85.50)	+53.55
Q6	The most efficient way to find reliable articles for your research paper	67(19.82)	113(33.43)	+13.61
Q7	Information Centre, which provides you Literature search?	95(28.11)	226(66.86)	+38.76
Q8	"SHODGANGA" is related to the database of	53(15.68)	309(91.42)	+75.74

The table 6 was devoted to library skills required searching strategies or locating information from the library software or through e-journals database. Initially at the time of pre-test the students were not able to form the searching strategies, as these terms were new to them. However, after the post-test the students found familiar with the terms and their approach was changed in Q1 from 16.27% to 62.43 with the difference of 45.15%, Q2 from 41.42% to 84.91 with the difference of 43.49%, Q3 i.e OPAC use to access the library catalogue through various parameters, it was 34.32% increased to 67.75% with the difference of 33.43%, Journal was consulted for preparing college level was mentioned correctly by 36.98% in pre-test and 83.43% in post test with the difference of 46.45%, In an online database Boolean operators i.e. or, and, not used to search advance search, correct answer was quoted by 31.95% in pre-test and post-test was hiked to 85.50 with the difference 53.55%, The question of finding reliable articles for research paper is to search for citations or full-text in periodical indexes or database for the topic mentioned correct answer in pre-test by 19.82%

with the increase to 33.43% with less difference of 13.61%.Next question was related to Information Centre "NISCAIR" which provides literature search services and Shodganga as a theses reservoir initiated by INFLIBNET, Gandhinagar were asked. Total 28.11% answered correctly in pre-test and increased to 66.86% with the difference of 38.76% and 15.68% in pre-testmentioned correct answer and revolutionary hike found for Shodhganga increased with the difference of 75.74%.

Table-7: Parts of Citation

S.N.	Parts of Citation	No. of correct answersPre	No. of correct answersPost	Difference
Q1	Title of the article	160(47.34)	263(77.81)	+30.47
Q2	Title of the periodical	142(42.01)	207(61.24)	+19.23
Q3	64 (20) represents	103(30.47)	287(84.91)	+54.44

To understand the awareness among the students about the parts of citation, following example was provided:

Kors, Alan Charles. "Morality on today's college campuses." Vital Speeches of the Day. 64 (20): 633-637. Aug 1, 1998."

From the above citation it was asked to identify the title of the article and title of the periodical and what 64 (20) represents. It was seen that 47.34% answers were correct in pre-test and increase in post test i.e. 77.81% with the difference 30.47% while title of the periodical was identified correctly by 42.01% to 61.24% with the difference of 19.23% and answer "64 (20) represents" for the volume and issue was given correct by 30.47% in pre-test and 84.91 with the difference of 54.44%.

A question for documenting was asked to the students. Total of 96 students i.e. 28.40% answered correctly to the information found on the internet correctly in pre-test and increased to 143 i.e. 42.31% with the difference of 13.91%, and a bibliography was mentioned to second question correctly by 28.70% in pre-test and 47.04% with the difference of 18.34% increase in the correct answer.

Table-8: Documenting Research

S.N.	Documenting Research	No. of correct answers (Pre-test %)	No. of correct answers(Post-test %)	Difference (%)
Q1	Needs to be cited in a bibliography or list of references	96(28.40)	143(42.31)	+13.91
Q2	The part of a paper, article, or book that lists the sources consulted is called…	97(28.70)	159(47.04)	+18.34

Table 9: Plagiarism

S.N.	Plagiarism	No. of correct answers (Pre-test %)	No. of correct answers(Post-test %)	Difference
Q1	Act of plagiarism	33(9.76)	229(67.75)	+57.99
Q2	Protected by copyright	47(13.91)	212(62.72)	+48.82

The last question was related to the concept of plagiarism and how anti-plagiarism software detects the plagiarised material. The students were asked about the act of plagiarism, which was mentioned correctly by only by 9.76% and increased to 67.75% with the difference of 57.99% after the post-test. A question "can a picture from a book published in 1990" be protected by copyright. The correct answer was given by 13.91% PG students in pre-test and 62.72% increased in post-test with the difference of 48.82%.

9. Findings

❖ Total of 93% P.G. students access Internet but, not found familiar to search information through open access journals, online journals and library databases;

❖ Only 31% hike found in post-test in gaining knowledge about types of sources;

❖ Only 40-50% P.G. students found to be aware of scholarly journals and using online journals and databases for assignments and research projects;

❖ Searching strategies were found developed in P.G students. About 50 to 90% students inculcate searching techniques after IL sessions in post-test.

❖ 84% P.G. students gained knowledge about parts of citation and also benefitted with the knowledge of documenting research.

❖ Plagiarism concept was new to P.G. students but, 62 to 67% students very well understood and showed better results after IL sessions in post-test.

10. Conclusion

The study shows the positive impact of information literacy skills on the Post Graduate students. It is very much surprising to know that P.G. students are unaware of various concepts of library related and the searching strategies. Mostly they search the information through Internet and found to be unaware about the skills of searching through library databases.

The project to make literate and assess Post Graduate students of the colleges affiliated to Sant Gadge Baba Amravati University, Amravati at district levels was successful to know the competency standards of the students. The training sessions are required on college and university level to impart knowledge regarding to Internet searching skills, Library skills, Research oriented searching techniques etc. Librarians should take efforts to assess the students every year

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