

IMPACT OF DIGITAL LIBRARIES ON ACADEMIC PERFORMANCE IN TECHNICAL COURSES: A COMPARATIVE STUDY OF UP & MP

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Abstract

Digital libraries are becoming more and more common. Students of technical courses enjoy the uses of e-library. They feel comfort in using e-books, audio books and e-journals. The printed text material at times is not available. For the purpose of referencing it is also somewhat unaffordable to buy so many books for small topics. In that case digital libraries help and provide us with ample of references even on a small complex topic. All the technical universities are trying to propagate the usage of digital libraries.

An effort was made in this research to study the academic impact of these digital libraries on the students of technical courses being run in Uttar Pradesh and Madhya Pradesh states of India.

Academic performance of B.Tech students was measured on four aspects in this research. These aspects are encouragement to study, clarity of doubts with multiple referencing, study more than curriculum and learning practical applications of the concept.

Key words: *digital libraries, encouragement to study, clarity of doubts, study more than curriculum, learning practical applications*

Introduction:

With the advancement of internet facility at the mass level, students can access digital libraries through their assigned passwords even from their home. Once student

become member of digital library; he remain in touch with lots of text books, reference books and skill development related material that has made learning more interesting and dynamic.

With traditional method of teaching and learning students refer to the printed textbooks and the notes being provided by their faculty members or by their fellow classmates but with the advancement of technology and internet numerous things are now available on internet. Students can access the various national & international books, journals, research papers and articles related to any topic at digital library. They can enhance knowledge to the deepest. In Uttar Pradesh and Madhya Pradesh so many students are using the facilities of digital libraries but the questions are raised on their efficiency, requirement and the budget allocation. To understand the significance of digital libraries from academic point of view this study was done. To what extent students get academic benefit was ascertained through well structured questionnaire.

Libraries are the heart of academic system at higher educational level. They provide information at the right time. Teaching objectives are also changed in this era. Now it is desired to develop student as an active learner and self sufficient. Students critical, analytical thinking and information collecting approach has been developed with the help of e-libraries (Veeranjaneyulu K. and Ravi Kumar, 2011).

Digital libraries are used because students have a perception that vast information will be available comfortably here. Wide collection of primary researches, maps, images, projects and documents made digital libraries attractive destination for knowledge seekers (Krystyna K. Matusiak, 2012)

Lot of changes has taken place in the field of library science. The way knowledge and information was handled, stored and disseminated has changed significantly; now he e-platforms are being used. It is also required to convert the available traditional textbook resources in online version so that more benefit can be provided to the students. Multimedia graphics, audio books, DVDs, etc. are available to the students to understand the complex topics with comfort and ease (Shivakumar, 2017).

Digital libraries provide the need-based ample of knowledge and information. The intellectual growth and research productivity increases considerable by the usage of digital library resources and its huge database. Research on the impact of digital libraries was conducted over 52 universities and it was found that digital libraries are significantly contributing towards academic improvement (Raif, et. al. 2019).

Sample:

To evaluate the academic contribution of digital libraries 120 B.Tech students from MP and 120 students from UP were randomly selected.

Table 1: Sample Size

City	No. of respondents	City	No. of respondents
Lucknow	40	Bhopal	40
Allahabad	40	Indore	40
Agra	40	Jabalpur	40
Total (Uttar Pradesh)	120	Total(Madhya Pradesh)	120

Hypothesis:

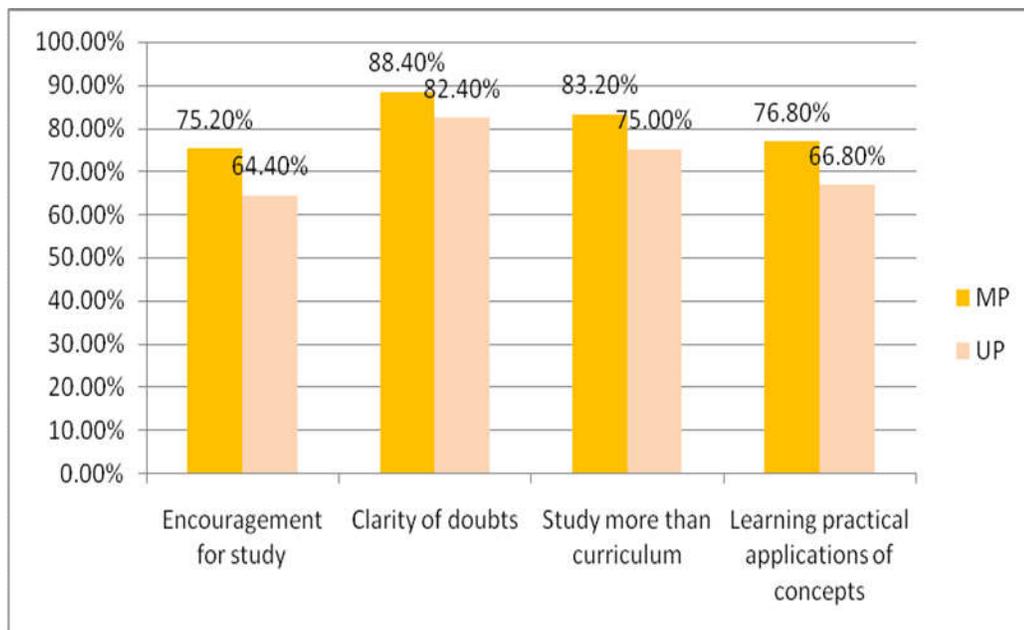
There is no significant difference between the academic impact of digital libraries on the B.Tech students of UP and MP.

Research analysis:

The information relating to the academic impact of digital libraries was systematically collected with the help of a questionnaire. In it the information was collected on Likert five point basis scales. It was found that 75.20% B.Tech students of MP felt that the use of digital libraries has encouraged them to study more; whereas 64.40% of B.Tech students of UP also felt the same. 88.40% B.Tech students of MP showed that their doubts get cleared with multiple referencing facility available at digital libraries while 82.40% students of UP also share the same feeling. 83.20% students of B.Tech studying at technical universities of MP admitted that they studied more than their curriculum because of facilities provided by digital libraries. 75% B.Tech students of UP also admitted the same. With the help of digital libraries 76.80% B.Tech students of MP expressed that they could learn practical aspects of the concept while 66.80% B.Tech students of UP also expressed the utility of e-libraries in learning practical applications of the concept. Digital libraries seems beneficial for the technical students in MP as well as in UP.

Table 2: Impact of digital libraries on academic performance of B.Tech students

Academic criteria	Madhya Pradesh		Uttar Pradesh	
	Total Score	Average Score	Total Score	Average Score
Encouragement for study	451	3.76	386	3.22
Clarity of doubts	530	4.42	494	4.12
Study more than curriculum	499	4.16	450	3.75
Learning practical applications of concepts	461	3.84	401	3.34
Average	485	4.04	433	3.61

Chart 1: Impact of digital libraries on academic performance of B.Tech students

In all four aspects the academic impact of digital libraries on students of MP is better than UP. The overall result based on these four academic improvement aspects contributed by digital libraries of MP is 80.80% while it is 72.20% for UP. To ascertain whether this difference is significant or insignificant independent sample T test was done.

Independent Sample T Test

State	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
MP	120	4.04	0.268	5.14	238	0.00
UP	120	3.61	0.362			

T test shows that the significance value is 0.00 which is less than 0.05 so the difference is significant and it can be said that there is significant difference between the academic impact of digital libraries on the B.Tech students of UP and MP. Students of MP are more benefited by digital libraries.

Conclusion:

The study has shown that students do get significantly benefited in academics by the uses of digital libraries. Though the level of benefit availed by students of Madhya Pradesh is significantly higher than the level of benefits felt by students of Uttar Pradesh.

Without any hesitation, confusion or apprehension more budgets need to be sanctioned for the development of digital libraries in technical universities.

It is nothing but myth that students just enjoy e-resources and do not gain anything academically substantial. The research has proven that digital libraries are not medium of entertainment; it is pathway of academic excellence. So students should be motivated to use these digital libraries and parents should never feel apprehensive because they are spending more time on e-platforms. It is one of the effective learning platforms and should be availed.

It develops clarity of thought as doubts do get cleared and there remain no ambiguity. The concepts get so clear that its practical applications are understood.

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