

Use and Awareness of NPTEL among Engineering Students of UIET, Babasaheb Bhimrao Ambedkar University, Lucknow (India): A Study

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Abstract - *With the development of electronic technologies students need current and updated information as on moment. Using electronic technologies e-learning is an online based educational tool or system that enables learning anytime and anywhere. It is an instructive educational program outside of a conventional homeroom. In sight of more e-resources requested, NPTEL is a largest online learning course in the world in engineering, science, humanities and social science subjects. This paper discusses the use and awareness of the National Program of Technology Enhanced Learning (NPTEL), the effect on both continuing educations of engineering students as well as certificate looking engineering students. This paper adopted the survey method and questionnaire as a tool for data collection. Out of 147 questionnaires distributed and 100 were received back by the B. Tech students of Babasaheb Bhimrao Ambedkar University Lucknow. The major findings were more respondent's browsing point of NPTEL from college Library and Engineering Students of BBAU and most of the respondents were interested in NPTEL online learning courses. However, nobody can deny the way that e-learning is the most inventive use of the Internet and it has done wonders all around and as of now is accomplishing instruction study hall too.*

Keywords: NPTEL, E-learning, Engineering Education, Technologies, Electronic Resources, User studies, BBAU.

Introduction

NPTEL is an online E-Learning course which represents "National Program of Technology Enhanced Learning." It is an Indian Institute of Technology, Madras (IIT-Madras) activity with organization with others IITs like IIT (Bombay, Madras, Delhi, Guwahati, Kanpur,

Roorkee, Kharagpur) and Indian Institute of Science. This occurred in Bangalore. This program was essentially begun for overhauling and upgrading the nature of Engineering Education. In short it was started to give subtleties course content, for nothing out of pocket to academic institutions and individual in all parts of Engineering, Science, Management, Technology and humanities Subjects which structure a piece of advanced education. This program is supported by Human Resources Development (HRD). This programe was started in 1999 and toward the finish of 2012. It is trusted that all major undergraduate and number of post graduate programmes was secured with the accessibility of 40 lectures for in excess of 1000 courses. https://nptel.ac.in/about_nptel.html

NPTEL courses are an extraordinary method to pick up the hypothetical understanding into the subject in light of the fact that the substance and their lectures of these courses are incredible. In basically we can say that NPTEL is an online E-learning processes. It provides E-learning through online Web and Video lectures courses in different streams. Zanelidin, E., Ahmed, W., & El-Ariss, B. (2019). This learning is extremely useful for those individuals who are intrigued for E-learning courses.

Review of literature

The study is analyzed with the help of various statistical measures. This study has been a survey (questionnaire) method based on the Engineering Students. The data is collected from the Babasaheb Bhimrao Ambedkar University, Lucknow.

Sharma & Sharma (2018) this paper defined an overview of the major of e-resources viz. Compact Disc ROM databases, online databases, E-journals etc. Motivation behind this paper is to feature the utilization of e-resources in select engineering college libraries of UP State. An endeavor is made to discover the status of e-resources in engineering college libraries. The analysis of the fundamental study uncovers that there isn't adequate number of e-resources that could justify the needs of the users. **Kumar & Anjaiah (2017)** study mainly focused on awareness, access and utilization of e-resources by the professional students' community from JNTUH, Hyderabad. The essential data was gathered through a questionnaire of 200 understudies of UG and PG. out of 200 surveys 160 questionnaires were gotten where the students of UG were high. A large majority of students communicated that they are utilizing e-resources for their study and in setting up their Project report students are utilizing e-resources. This paper featured a greater part of the students favored E-Journals as their primary e-resources, 78 respondents (49%) utilizing of e-resources by weekly and 76% students utilizing Internet, 64% students utilizing E-Books. **Biradar, Kavita & Naik, K. G. Jayarama (2017)** in their article "Use of Electronic Resources and its Impact: An Study of National College of Engineering Library Users" The study focuses on the digital literacy skills and competencies among the research scholars and PG students of deemed university libraries in Bangalore. The study expects to recognize the respondent's utilization, familiarity with e-resources, motivation behind use, impact of e-resources, factors affected and boundaries looked in the access of e-resources. Survey was utilized to gather the data from the respondents. The researcher took 130 questionnaires for analysis utilizing basic rate methods or techniques. **Ghangare (2016)** in his article "Electronic Resources use by Faculty Members of Engineering College Libraries in RTM Nagpur University region: A Study" The study concentrated on the employees of engineering college are especially required for the logical progression of the nation and the utilization of e-resources by employees of engineering college libraries to know the e-resources uses design among employees of engineering college in RTM Nagpur University Area. The study also investigated the fulfillment level of the users with the e-resources

provided by engineering college libraries. The study has especially been taken up to get to the advantages of e-resources over conventional documents. **K. J. & Sornam (2016)** the study observed that to find out the awareness, accessibility and the utilization of e-resources by the employees of engineering colleges in Kerala. It likewise analyzed the hindrances the users are confronting while at the same time utilizing the e-resources and their level of satisfaction. A survey was directed among the employees of 15 chose engineering colleges in Kerala. Out of 375 online questionnaires circulated, 240 substantial reactions were gotten back. The study also found that most of employees are very much aware about the e-resources and the vast majority of them are utilizing e-resources in any event once in a week and practically all staff individuals are happy with the facilities available for accessing e-resources.

Objectives of the study:

The main objectives of the study are:

1. To explore the awareness about NPTEL.
2. To find out the experience of using NPTEL.
3. To know about the satisfaction level of NPTEL.
4. To know the frequency of NPTEL.
5. To know the importance of NPTEL
6. To explore the barrier of NPTEL

Scope of the study

The study is focused on the “Use and Awareness of NPTEL among Engineering Students of UIET, Babasaheb Bhimrao Ambedkar University, Lucknow (India): A Study”. In this research output displays that NPTEL website on-line user. NPTEL has brought tremendous changes to the awareness for research in academic world. The scope of the study is basically based on engineering students and NPTEL website user. This study has been conducted in Babasaheb Bhimrao Ambedkar University, Lucknow. Research has been conducted by survey method to giving questionnaire to the engineering student of BBAU.

Methodology

For the present study, the survey method is adopted. In this study 147 questionnaires were filled by the B.Tech students. Out of 147 questionnaires 100 were received by the B.Tech students of BBAU and 83 respondents were aware about NPTEL. Rest of Students can't reply about that study. Those Students who can give the response is better for that study and their response can show NPTEL E-Learning is better for our Present and Future. It is very helpful for the engineering students of any colleges or institutions like BBAU.

Data analysis & interpretation:

Table-1: Awareness about NPTEL

S.No.	Know about NPTEL	Respondents	Percentage
1.	Yes	83	83%
2.	No	17	17%

Table-1: The above Table shows the respondents of the people who know about NPTEL, 83(83%) respondents said “Yes” out of 100 respondents and 17(17%) respondents said “No” out of 100 respondents.

Table-2: Sources of Awareness

S.N.	Sources of Awareness	Respondents	Percentage
1.	Teachers	28	33.73%
2.	Students	42	50.60%
3.	Family	06	07.22%
4.	Friends	07	08.43%
5.	Others	00	00.00%

Table-2: The above table shows the respondents of the people, how they know about NPTEL, where maximum respondents 42(50.60%) and minimum respondents is 07(08.43%) can go to Students Side and Friends respectively out of 83 respondents.

Table-3 Years of using NPTEL

S.N.	Years of using NPTEL	Respondents	Percentage
1.	Within 1 Year	50	60.24%
2.	1 to 2 Year	27	32.53%
3.	3 to 5 Year	06	07.22%

Table-3: The above table shows the respondents of the Engineering Students of BBAU, where maximum respondents 50(60.24%) and minimum respondents 06(07.22%) can occur within 1 year and 3 to 5 year respectively.

Table-4 Satisfaction level of NPTEL

S.N.	Satisfaction level of NPTEL	Respondents	Percentage
1.	Fully Satisfied	27	32.53%
2.	Satisfied	45	54.21%
3.	Partially Satisfied	11	13.25%
4.	Not Satisfied	00	00.00%

Table -4: This table shows the satisfaction level of NPTEL, where 27(32.53%) respondents were fully satisfied, maximum respondents 45(54.21%) were satisfied by this study and there were no Engineering Students of BBAU, who were not satisfied by this study.

Table-5 Purpose of using E-Resources

S.N.	Purpose of using NPTEL E-Resources	Respondents	Percentage
1.	Studying course work	47	56.62%
2.	Update Knowledge	13	15.66%
3.	For Competition Purpose	20	24.09%
4.	For Research work	03	03.61%

Table-5: The above table shows the purpose of this study where maximum respondents 47(56.62%) can occur studying course work and minimum respondents 03(03.61%) for research work out of 83 respondents.

Table-6 Interested in NPTEL online learning

S.N.	Interested in NPTEL Online Learning	Respondents	Percentage
1.	Yes	62	74.69%
2.	No	21	25.30%

Table-6: The above table shows the responses who were interested in NPTEL Online learning where 62(74.69%) respondents said “Yes” and 21(25.30%) respondents said “No” of this study.

Table-7 Using NPTEL resources in library

S.N.	Frequency of using NPTEL Resources in Library	Respondents	Percentage
1.	Daily	35	42.16%
2.	Once a week	35	42.16%
3.	Occasionally	12	14.45%
4.	Never	01	01.20%

Table -7: This table shows the frequency of NPTEL resources in library, where maximum respondents 35(42.16%) can goes to two side of this study one of them is Daily and another one is Once a week and minimum respondents 01(01.20%) who said never to the frequency of this study.

Table-8 Location accessing NPTEL E-Resources

S.N.	Location for accessing NPTEL E- Resources	Respondents	Percentage
1.	Library	32	38.55%
2.	Department	26	31.32%
3.	Computer Center	14	16.86%
4.	Home	11	13.25%
5.	Any Other	00	00.00%

Table 6.8: The above table shows the Location for accessing NPTEL E-Resources, where maximum respondents 32(38.55%) from the sources of Library and minimum respondents 11(13.25%) from Home.

Table-9 Importance of NPTEL E-Resources in Academic Library

S.N.	Importance of NPTEL E-Resources in Academic Side	Respondents	Percentage
1.	Most Important	31	37.34%
2.	Important	46	55.42%
3.	Not Important	04	04.81%
4.	Don't Know	02	02.40%

Table -9: This given table shows the Importance of NPTEL E-Resources in Academic Side, The Engineering Students of BBAU can gives the maximum respondents 31(37.34%) is most important for their future and some of the respondents 02(02.40%) said Don't Know about its Importance.

Table-10 Preference of NPTEL E-Resources

S.N.	Preference for using NPTEL E- Resources	Respondents	Percentage
1.	Desktop	26	31.32%
2.	Mobile	35	42.16%
3.	Laptop	22	26.50%
4.	Any Other	00	00.00%

Table-10: The above table shows the preference for using NPTEL E-Resources where maximum respondents 35(42.16%) and minimum respondents 22(26.50%) said from Mobile and Laptop respectively.

Table-11 Purpose of using NPTEL E-Resources

S.N.	Purpose of using NPTEL E-Resources	Respondents	Percentage
1.	HTML	28	33.73%
2.	PDF	53	63.85%
3.	DOC	02	02.40%
4.	Any Other	00	00.00%

Table-11: The above table shows the purpose of NPTEL E-Resources where maximum respondents 53(63.85%) and minimum respondents 02(02.40%) were given by the Engineering Students of BBAU respectively.

Table-12 NPTEL E-Resources Program

S.N.	NPTEL E-Resources Program	Respondents	Percentage
1.	Yes	61	73.49%
2.	No	22	26.50%

Table-12: This given table depicts about NPTEL E-Resources Program where respondents 61(73.49%) said “Yes” and respondents 22(26.50%) said “No” out of 83 respondents about this NPTEL E-Resources programs.

Table-13 Downloading in NPTEL E-Resources

S.N.	Downloading in NPTEL E- Resources	Respondents	Percentage
1.	Yes	52	62.65%
2.	No	31	37.34%

Table-13: This table depicts about the Downloading in NPTEL E-Resources where the respondents 52(62.65%) said “Yes” and the respondents 31(37.34%) said “No” by the Engineering Students of BBAU.

Table-14 IF “YES” THEN... Problem facing of NPTEL E-Resources

S.N.	Problem faced while using NPTEL E- Resources	Respondents	Percentage
1.	Inadequate Infrastructure	25	48.07%
2.	Low Speed of Internet	14	26.92%
3.	Power Failure	10	19.23%
4.	Lack Awareness	03	05.76%

Table -14: This table depicts about the problem facing while using NPTEL E-Resources where maximum respondents 25(48.07%) and minimum respondents 03(05.76%) out of 52

respondents can occurs from Inadequate Infrastructure and Lack of Awareness respectively, those who said “Yes” from the previous table.

1.1.1.1 Table 6.15 Quality of information from NPTEL

S.N.	Quality of Information from NPTEL	Respondents	Percentage
1.	Excellent	29	34.93%
2.	Good	42	50.60%
3.	Average	12	14.45%
4.	Poor	00	00.00%

Table -15: The above table shows the Quality of Information from NPTEL, the Engineering Students of BBAU given the maximum respondents 42(50.60%) out of 83 respondents said “Good” and No Student can give the response “Poor” about their Quality.

Table-16 Barrier for using NPTEL

S.N.	Barrier for using NPTEL	Respondents	Percentage
1.	Time Crises	34	40.96%
2.	Not appropriate Information	18	21.68%
3.	Communication Skills	23	27.71%
4.	Insufficient terminals	08	09.63%

Table-16: This table depicts about the Barrier for using NPTEL where maximum respondents 34(40.96%) and minimum respondents 08(09.63%) out of 83 respondents for Time Crises and Insufficient Terminals respectively.

Table-17 Format of Downloading NPTEL videos

S.N.	Format of Downloading NPTEL Videos	Respondents	Percentage
1.	MP4	45	54.21%
2.	FLV	18	21.68%
3.	3GP	20	24.09%
4.	Any Others	00	00.00%

Table-17: The above table depicts about the Format of Downloading NPTEL Videos where the maximum respondents 45(54.21%) were using the MP4 format and minimum respondents 20(24.09%) were using the 3GP format for downloading the NPTEL videos, by the Engineering Students of BBAU.

Findings

Major findings which have been identified on the basis of the analysis of data collected from the Engineering Students of BBAU, digital library experts, science teachers and college of librarians have been listed in this chapter. The acceptance of the hypothesis has been examined. These findings support strongly the design and analysis of data.

1. The study found that the responses of the people who know about NPTEL, 83(83%) respondents says “Yes” and 17(17%) respondents says “No” out of 100 respondents by the Engineering Students of BBAU.

2. The study explore that the responses of the people, how they know about NPTEL, where maximum respondents 42(50.60%) and minimum respondents is 07(08.43%) can goes to Students Side and Friends respectively out of 83 respondents.
3. The study reveals that more respondent's browsing point of NPTEL from college Library and Engineering Students of BBAU.
4. The study represented that Engineering Students of BBAU were maximum of the respondents 50(60.24%) can occurs within 1 year and minimum respondents 06(07.22%) 3 to 5 year respectively.
5. The study explore that the satisfaction level of NPTEL, where 27(32.53%) respondents are fully satisfied, maximum respondents 45(54.21%) are satisfied by this study and No Engineering Students of BBAU, who are not satisfied by this study.
6. The study found that the where maximum respondents 47(56.62%) were studying course work and minimum respondents 03(03.61%) for research work out of 83 respondents.
7. The study found that students were interested in NPTEL online learning courses. Most of the respondents (74.69%) were says "Yes" and 21(25.30%) respondents were says "No" of this study.
8. The study reveals that the frequency of NPTEL resources in library, where maximum respondents 35(42.16%) can goes to two side of this study one of them is Daily and another one is Once a week and minimum respondents 01(01.20%) who were says Never of the frequency of this study.
9. The study explore that the Location for accessing NPTEL E-Resources, where maximum respondents 32(38.55%) from the sources of Library and minimum respondents 11(13.25%) from Home given by Engineering Students of BBAU.
10. The study explore that the preference for using NPTEL E-Resources where maximum respondents 35(42.16%) and minimum respondents 22(26.50%) were says from Mobile and Laptop respectively.
11. The study depicts about NPTEL E-Resources Program where respondents 61(73.49%) were says "Yes" and respondents 22(26.50%) were says "No" out of 83 respondents about this NPTEL E-Resources programs.
12. These data analysis shows the Quality of Information from NPTEL, the Engineering Students of BBAU gives the maximum respondents 42(50.60%) out of 83 respondents were says "Good" and No Students were gives "Poor" response about their Quality.
13. The study found that the barrier for using NPTEL where maximum respondents 34(40.96%) and minimum respondents 08(09.63%) out of 83 respondents for Time Crises and Insufficient Terminals.
14. The study also found that about the Format of Downloading NPTEL Videos where the maximum respondents 45(54.21%) were using the MP4 format and minimum respondents 20(24.09%) were using the 3GP format for downloading the NPTEL videos, by the Engineering Students of BBAU.

Conclusion:

The world is changing around us. There is further need to engage our students with all the advantages that refreshed innovation can give to prepare them to what's to come. Today education entrepreneurs' people have thought of an entire scope of such arrangements that give exceptional chances to improve instructive frameworks. The possibility of 'computerized study halls' the place training is conveyed through advanced stages has gotten the creative mind of the instruction network. They act like a decent technique for connecting with the digitized age and improving individual learning opportunities.

Presently a day's NPTEL is new conceived of advanced library collection, as a librarian and staff should know all the specialized or technical parameter of this video and web courses to give to the client viably, this study will definitely focuses the evaluation of utilization and guide for get to effectively.

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