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Importance of Internet in Higher Education (With Special Reference to Mathematics Education)

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Abstract

In national development the role of Higher Education is well established. The system of Higher Education in India is very broad. The goal of Higher Education can be benefited only through qualitative change in the Education system. The ultimate result of Mathematics Education should be enough to compete with full global competitiveness. But we have realize that the Mathematics graduate have lack of practical and internet knowledge or we can say they do not know how in fruitful manner they can use the internet for their educational purpose that may help them to upgrade their theoretical knowledge as well sharpen their skills. The practical and Modern oriented Mathematics Education is today's need.

To meet the needs of today's population, there is greater requirement for growth of Mathematics education. The mathematics education has become more important, this means a marked change in the way mathematics education is perceived in India. Through teaching, research, and service, the dept. of mathematics of college is dedicated to developing tomorrow's leaders, Scientists, and professionals and if this education accelerated by internet it brings a qualitative change.

Keywords: *Mathematics Education, Internet in Higher Education*

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Introduction:

About Higher Education

India's higher education system is the world's third largest in terms of students, next to China and the United States. In future, India will be one of the largest education hubs. India's Higher Education sector has witnessed a tremendous increase in the number of Universities/University level Institutions & Colleges since independence. The 'Right to Education Act' which stipulates compulsory and free education to all children within the age groups of 6-14 years, has brought about a revolution in the education system of the country with statistics revealing a staggering enrolment in schools over the last four years. The involvement of private sector in higher education has seen drastic changes in the field. Today over 60% of higher education institutions in India are promoted by the private sector. This has accelerated establishment of institutes which have originated over the last decade making India home to the largest number of Higher Education institutions in the world, with student enrolments at the second highest (Shaguri, 2013) .

Higher education mainly and generally means university level education. It offers a number of qualifications ranging from Higher National Diplomas and Foundation Degrees to Honors Degrees and as further step, Postgraduate programmes such as Masters Degrees and Doctorates. These are recognized throughout the world as representing specialist expertise supported by a wide range of skills that employers find very useful. Further education is generally includes those post graduate studies in where you can gain your Master and Doctorate degrees. (Education)

India is a large country, with an estimated population of young people aged between 18 to 23 years to be around 150 millions. The sheer size of the market offers huge opportunities for development of the higher education sector in India. India now boasts of having more than 33,000 colleges and 659 universities, which has been quite a remarkable growth during the last six decades. The year 2012 witnessed 21.4 million enrollments, which makes India the 3rd largest educational system in the world. Unfortunately, the educational infrastructure of India is inadequate to handle such huge volumes. In spite all the government spending in the educational sector, it is just too insufficient to meet the growing requirements. Therefore, higher Education sector has now been identified as one of the promising areas for private and foreign investments. It offers immense investment opportunities in both non-regulated and regulated segments (Nexus Novus,

26 July, 2013).

Education has long been seen as a crucial tool for national development, with various education initiatives designed to work towards eliminating poverty, increasing the health of a population or enhancing local economies, among others. (International Trends in Higher Education, 2015)

"The education which does not help the common mass of people to equip themselves for the struggle for life, which does not bring out strength of character, a spirit of philanthropy, and the courage of a lion - is it worth of the name? Real education is that which enables one to stand on one's own legs." - Swami Vivekananda.

According to Eric Hoffer, "The central task of education is to implant a will and facility for learning; it should produce not learned but learning people. The truly human society is a learning society, where grandparents, parents and children are students together" (Hoffer).

Education and particularly higher education has been a critical component of bringing change in a society and a nation. To address the issues relating to equity, accessibility, quality and infrastructure has been a prime concern for the State Government (Dep).

Though these are clearly positive trends, the Indian higher education system continues to demonstrate many structural shortcomings which in turn create challenges in meeting future expectations.

About Mathematics Education

Mathematics education is one of the oldest branches of Indian higher education system. It is regarded as the base of many streams of education such as arthematic, calculus, geomerty, machnics, trignomerty, algebra and business mathematics etc in India.

India, with its strong mathematical traditions, may be expected by the world to produce excellence in mathematics. But this may be an unreasonable expectation, since India is grappling with problems of endemic poverty, and even universalising education is a challenge. Yet, despite adversity, India has managed to produce mathematicians like Ramanujan and Harish-Chandra. All this adds up to an intriguing picture. (R. Ramanujam K.Subramaniam)
(https://mathedu.hbcse.tifr.res.in/wp-content/ uploads/2014/01/INP-Book_Mathematics-Edu-in-India_2012_KS-RR.pdf)

Internet in Higher Education

In general it was clear that the majority of the students believed they can use the Internet as an educational tool. Only a very small amount of participants stated that they were not able to use it for educational purposes, which is very promising for the future. There were certain areas that students felt comfortable while using the Internet such as the search engines on the Internet, which is easily and efficiently used and preferred by 80% of the participants in this study. Also, they stated that they used social websites to share knowledge and talk about school subjects. They also claimed that they could easily use the Internet to find sources of information, download necessary files and pictures and so on. Moreover, the participants stated that they used e-dictionaries, e-encyclopedias and translation tools to help them write their homework and do their projects. (Nazan Dogruera)
(https://www.sciencedirect.com/science/article/pii/S1877042811025547)

This era of pervasive technology has significant implications for higher education. Nearly two-thirds (63%) of survey respondents from the public and private sectors say that technological innovation will have a major impact on teaching methodologies over the next five years. (ECONOMIST INTELLIGENCE UNIT, 2008)

With rapid developments in information technology (IT), most university students demand more use of IT in their education for two main reasons: (1) it helps the course material be presented in a more comprehensible way; (2) it gives them familiarity with the high-tech tools they might be expected to use in their future careers after graduation. (Jumhur AKSU)

According to Curtis Bonk, Ph.D., professor of Instructional Systems Technology at Indiana University, educators have an ethical obligation to consider using technology to enable students' learning. Bonks, who has penned several widely used books, including The World Is Open: How Web Technology is Revolutionizing Education, says it's not as simple as responding to students' expectations that courses will have a Web component. (Weinstein, 2016)

It would be an impossible task to find a higher education institution not claiming to be doing its best to benefit from the opportunities offered by information and communication technologies. Technology is an integral part of the lives of today's students in higher education. (Pedro)

Technology has the potential to help alleviate many of the challenges facing today's higher education system. (STANLEY AH ALT)

Objective

Our objective of the present study is to analyze the attitude and behavior of Mathematics Students towards the use of Internet in higher education. Our study surveys based on 150 Mathematics students. The population analyzed here is urban population which can be considered as representative of mathematics student in Ghaziabad.

Research methodology

Our study is based on two types of data (1) Primary Data and (2) Secondary data, Primary Data is nature based data in my Study. Questionnaire is the source of collection of Primary data and Secondary data is based on different research papers, articles, text books, e-books etc.

Study population analyzed with the Mathematics students who are perusing higher education in Ghaziabad City. The sample size was 150 students. The students were offered to reply to all the questions to the best of their knowledge. we got 150 responded back out of 150 questionnaires. Overall response rate was out of the150 to 150. we use Microsoft Excel for calculation purpose after data collection.

Result and discussion

According to the data shown in Table 1 represent that most of students are not well versed with the use of Internet but most of them believe that it is user friendly and effective in providing useful information. Our research result also shows most of them are not aware about how to use authentic websites to get the desirable information.

Most of them prefer to search on a web rather to go through text book as technology saves time and effort.

Most of them do not agree that whatever is taught in classroom is available on internet but they found it's pleasurable to surf internet for ready information related to mathematics subjects.

No.	Particulars	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	You are well versed with use of Internet	14%	36%	5%	33%	12%
2	Internet is user friendly and effective in providing useful information	34%	41%	11%	12%	2%
3	You are aware of authentic internet websites from where you can get desired information about your mathematics subjects	15%	30%	5%	38%	12%
4	You prefer searching website rather than going to mathematics text books	36%	33%	21%	10%	Nil
5	You prefer mathematics text books for reading rather than searching websites	20%	20%	25%	32%	3%
6	It's pleasurable to read mathematics	26%	25%	31%	15%	3%
7	It's pleasurable to surf internet for ready information about mathematics subjects	23%	32%	7%	37%	1%
8	You prefer to sit in E-library during free hours	10%	21%	41%	28%	Nil
9	You prefer to sit in central library during free hours	10%	14%	40%	36%	Nil
10	Concept of Mathematics is taught in classroom is available on internet	11%	20%	15%	37%	17%

Conclusion:

With a mounting importance on information, global competitiveness, Higher Education was seemed as increasingly essential for the developing Countries like India. Internet is at this instant forcing education sector to modify as per the need of the time.

The most emerging dimension of the Mathematics education in the 21st century is necessitate for all School to make use of internet and make it vital part of course contents.

The quality of Mathematics Education has become a important part in the changing environment. As per specialization, practical should be provided to the students. By making relevant and practical oriented Mathematics Education, we may impact global competitiveness to our students.

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