

Advent of Technology on Higher Education

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Abstract

With the growing era of globalisation and modernisation, it has become highly important for education fraternity to know the innovations in technology to the best of their knowledge so as to cater to the various needs of students of this age. This paper is an attempt to find out the coverage and usage of technology amongst the students pursuing graduation. It is highly evident that the choice of pursuing higher education today also depends upon the level of technology usage that is required in the given field. This paper is an initiative towards finding out the inclination of students towards the new age technology blended with education.

Introduction

Technology enthusiasts have long heralded the power of technology—from the printing press, to blackboards, to the laptop—to transform education. With the rapid expansion of information communication technologies around the globe, there is a high level of interest in harnessing modern technology to help advance the education status of some of the world's poorest people. A better understanding of why and under what conditions these divergent outcomes emerge is the central aim of this study. The potential of technology to help improve education has significance beyond teaching children reading and math. Quality education plays an important role in promoting economic development, improving health and nutrition and reducing maternal and infant mortality rates. Economic growth, for example, can be directly impacted by the quality of the education systems in developing countries.

There are many questions which arise in the context of technology:

- What level of technology is available to support education?
- What are the possible benefits of this available technology?
- Can there be effective utilisation of technology in education perspective?
- Will there be any help from the ministry of education, especially in developing countries to improve education standards?

The answer to these questions can be ascertained by gaining a broad overview of some common educational challenges that developing world is facing and the range of different

technologies that are available to help address them. There are different angles to look at the conditions which enable the factors which frequently shape the success or failure of technology interventions in education. These help in formulation of different principles and framework to design and implement proper education initiatives. We must have a look at both primary and secondary, and most importantly higher education levels.

BARRIERS TO QUALITY EDUCATION IN THE DEVELOPING WORLD

In developing countries, quality education still remains an elusive factor. There has been a tremendous progress over the past decade in the advent of technology and education. The incessant efforts of governments in developing countries has led to the support from many international institutions as well to share the framework articulated in different goal oriented programs. The number of children enrolled in higher education studies has increased by 62% from that of 1999.

The national enrolment figures mask persistent disparities in educational opportunities within countries, with marginalized groups such as the poor, those living in rural areas, and girls continuing to be left behind. And there is an increasing need to pay attention to formal and non-formal secondary education opportunities, given the large and growing youth population in the developing world. This has led to a call from multiple actors to shift the global education paradigm from a focus on access to a focus on learning for both those in and out of school.

Barriers to Learning

Learning is the only way to enhance one's knowledge and skills. Many institutions in India strive hard to impart quality education in various sectors. There are many ways and institutions working hard to inculcate the value of education and learning among various sectors of the nation. India is a diverse economy. However the accessibility to education in India is limited in many counts. Many students complete the basic education at primary and secondary schooling levels but do not go for higher education. Following are few reasons as to why students do not adhere to higher education studies (Statistics derived from NSS Survey of 2015):

- Families living in rural areas lack financial support and hence are unable to promote their children towards higher education. However, with the growing facilities of scholarships and grants provided by the Government, there has been a considerable

increase in the number of students who go for higher education. In the survey of 2015, it was seen that there is a rise of 28% as to that compared to the one in 2012 in the number of students who opt for higher education in rural areas.

- There are still many states in the country which still lack in facilitating quality higher education to its residents. It was noted that 36% students in such states who wish to pursue higher education, fail to do so only because of the absence of proper educational grounds in their own state. Regional disparities make it difficult for students to study outside in a comfortable way.
- People in India still use traditional methods of occupation as well as education. Therefore it becomes difficult to persuade students to accept the newly developed methods in a positive manner.
- There are almost 37% students who do not pursue higher education as they start earning earlier and are bound with certain responsibilities. To fulfil those responsibilities it becomes very difficult to convince such students for further studies.

Higher Education and Technology

Due to increased focus on primary and secondary education in the past several years the needs and challenges of higher education have increased by leaps and bounds. There is now a focus on higher education along with the development of the nation and trends of globalisation. An effective system needs to be incorporated which goes hand in hand with technology so that growth is equally supported with the advancements of technology.

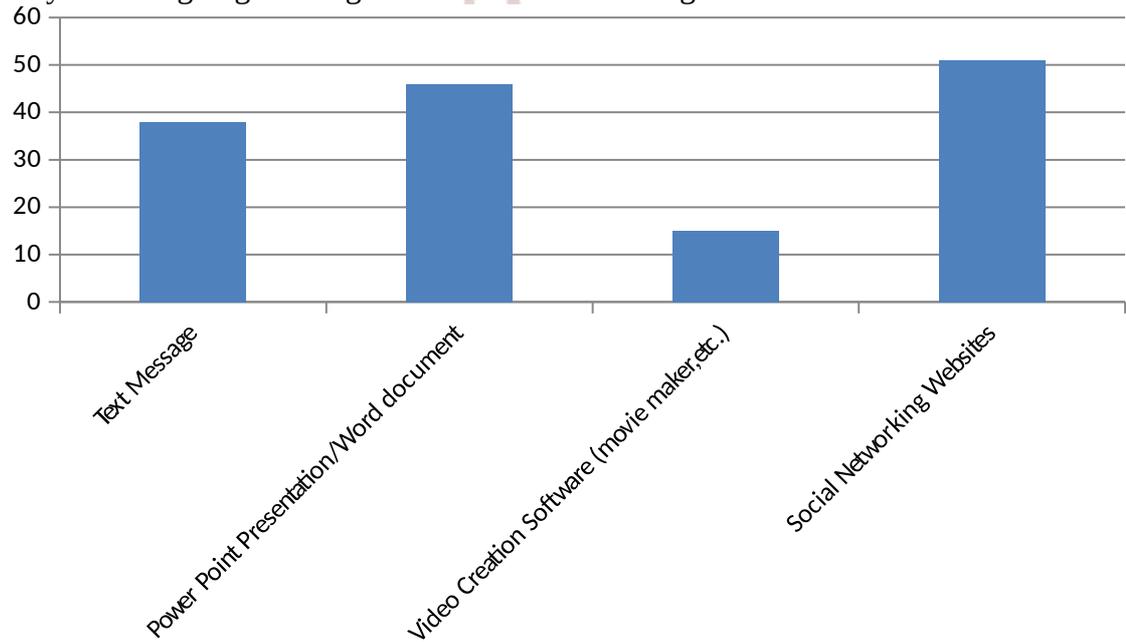
Technological enhancements are wide in area and have too many aspects to be covered. Few of those aspects are as follows:

1. Use of laptops, etc
2. Introduction and usage of internet for teaching data
3. Use of social network
4. Usage of ppts and other technological device for teaching
5. Enhancements of teaching methods for quality education
6. Provision of e-data to students for learning

Survey

Quality higher education is an outcome of both teachers and students. In order to find out the needs and expectations of students, a questionnaire was designed and circulated amongst 150 students pursuing graduation in India. Their opinion was as follows:

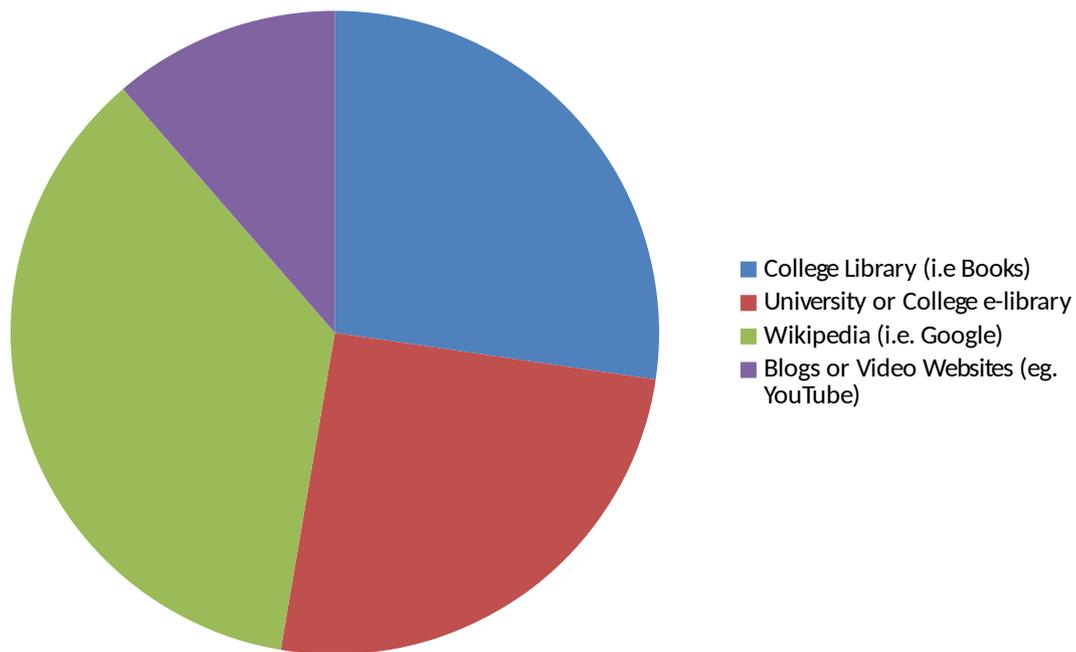
1. Are you willing to go for higher education even after graduation? Y/No



As seen above, 68% students are willing to pursue higher education after graduation. Also there are 32% students who do not wish to continue studying once their graduation is complete. Hence, students who want to go for higher education are more in number and already in the pursuit of acquiring the same.

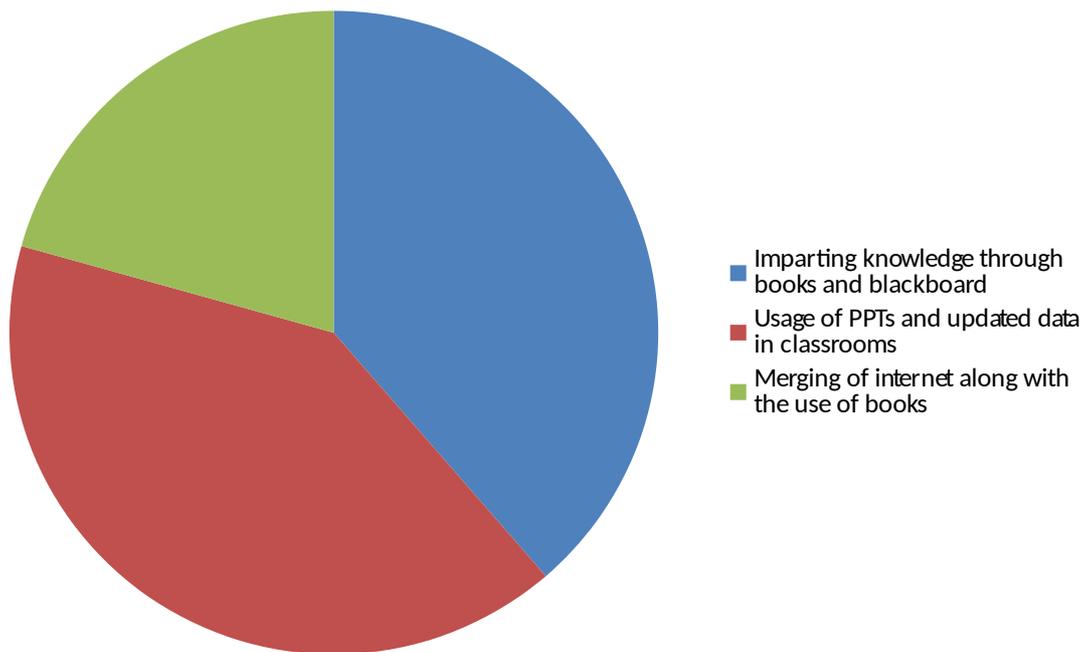
2. If yes, why would you like to go for further education?

- Major/minor requirement
- Major elective course
- General education
- University elective



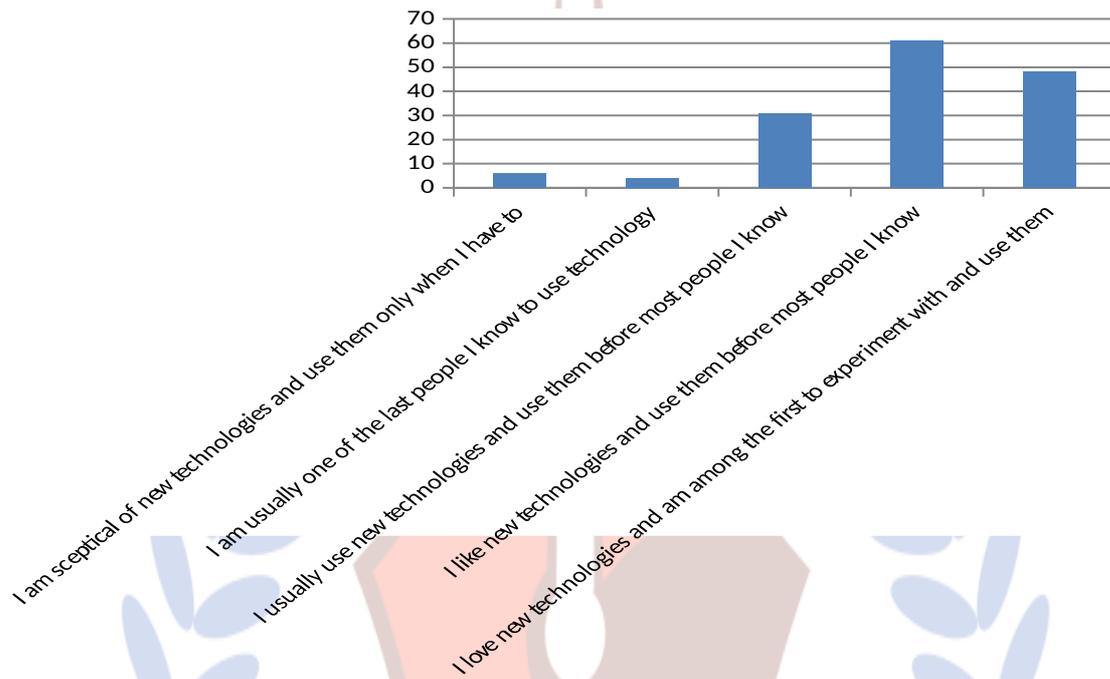
The above is a graphical representation of the reason as to why students opt for higher education. During the research it came to light that most students opt for higher education to be a part of a specific university or to adhere to certain achievements. 39% students choose university elective to be the reason of their higher education. 23% students say that they wish to pursue higher education for attaining some general education whereas 29% students want to pursue higher education as a major elective course in order to supplement their career. 9% students wish to pursue higher education as a major or minor requirement.

3. Which of the following do you use the most along with your daily curriculum?
- Text message
 - Power point presentations/ word documents
 - Video creation software (movie maker, etc)
 - Social networking websites



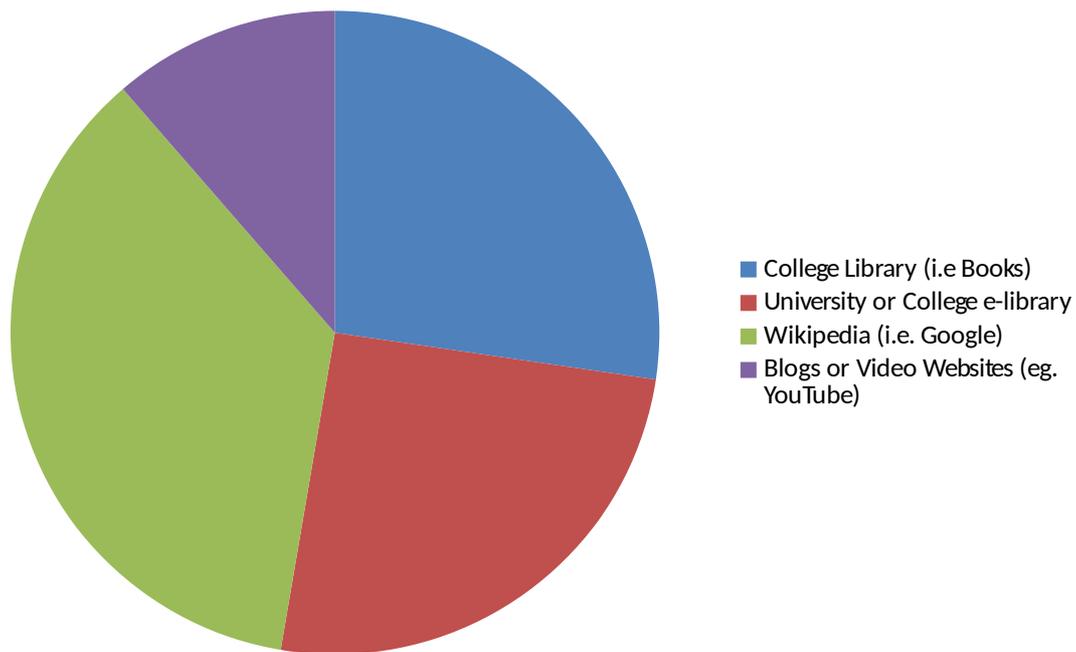
As per the above graph, it is clear that most of the students use the medium of social networking websites i.e. 34% students use social networking for exchanging information. 31% students use power point slides or word document to enhance their study material. 25% students exchange data or information through text messages whereas the number of students who effectively use video creation software such as movie maker, etc. is the least i.e. only 10%. This clearly indicates that students of the new era are quite inclined towards the usage of internet and are well versed with the virtual world.

4. How well are you familiar/ equipped with the use of information technology?
- Not at all equipped
 - Somewhat equipped
 - Fully equipped



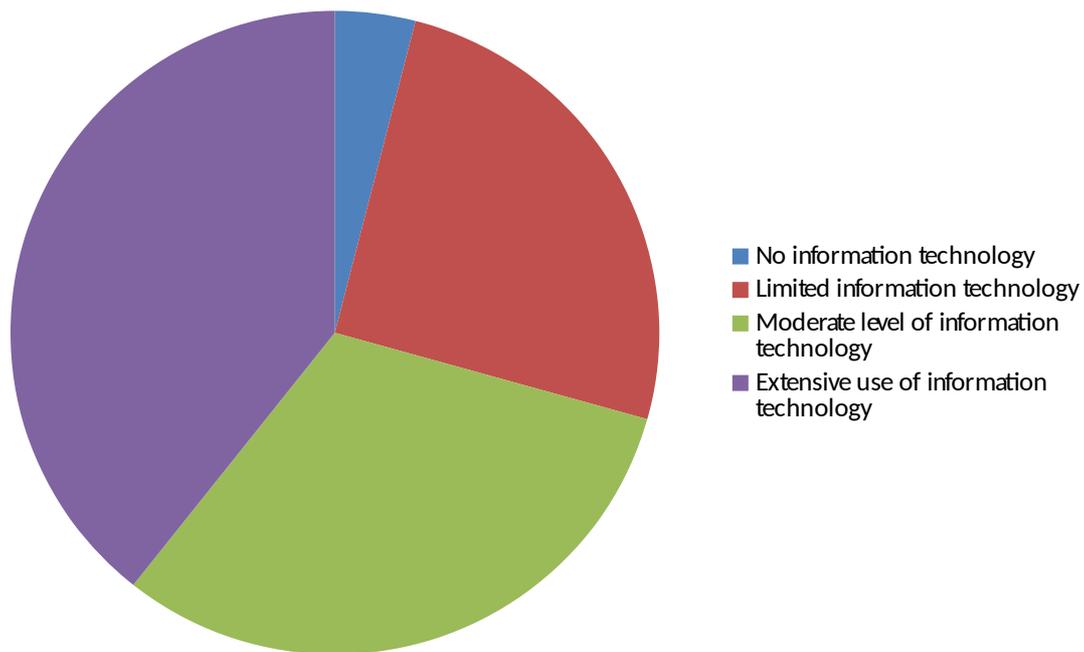
As it can be clearly seen that 69% students are fully equipped with the modern technological equipments and 31% students reveal that they are somewhat equipped with modern technology. The research shows that there is absolutely no student who is not aware to the modern technology. Thus, it is clear that students today are well versed with the technological enhancements growing day by day.

5. How do you contribute to your academic assignments?
 - College library (i.e. books)
 - University or college e-library (eg. Manupatra)
 - Wikipedia (i.e. google)
 - Blogs or video websites (eg. Youtube)



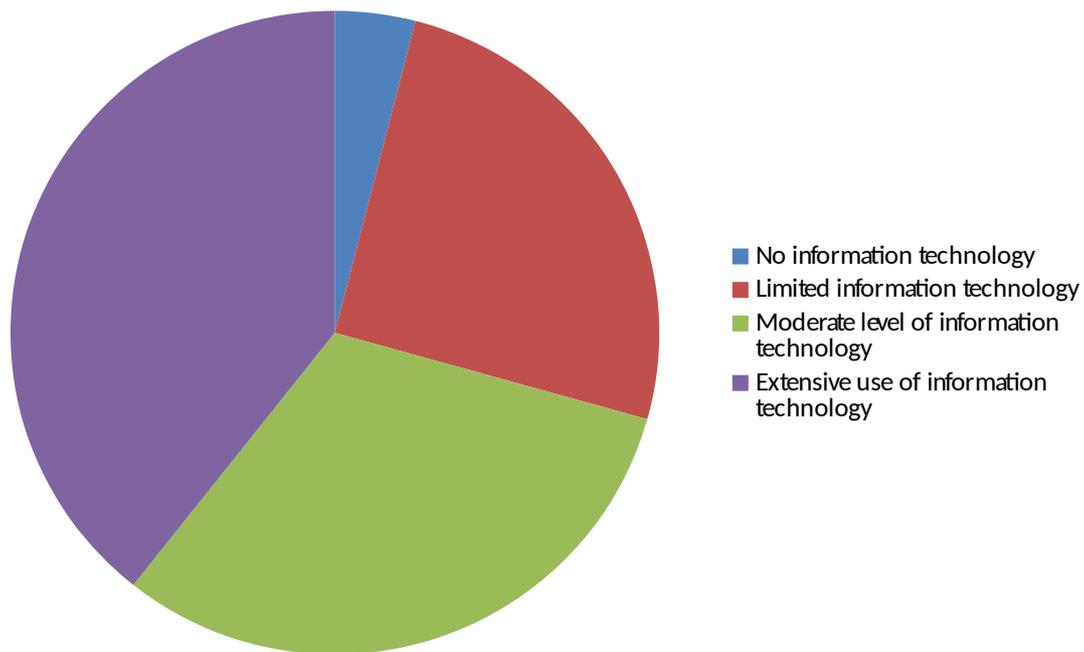
There are many lucrative ways by which students in today's era enhance their academic assignments and curriculum. Most of the students enhance their academic assignments with the help of online portals and search engines (eg. Google). Such students constitute almost 36% of the total crowd. 27% of the students enrich their work with the help of college library or books whereas, 25% students take the help of university or college e-library to fulfil their academic tasks. 12% students also enrich their work with the help of information and material available on blogs or other video websites.

6. Which best describes your preference?
- Prefer taking courses that use no information technology
 - Prefer taking courses that use limited information technology
 - Prefer taking courses that use moderate level of information technology
 - Prefer taking courses that uses information technology extensively



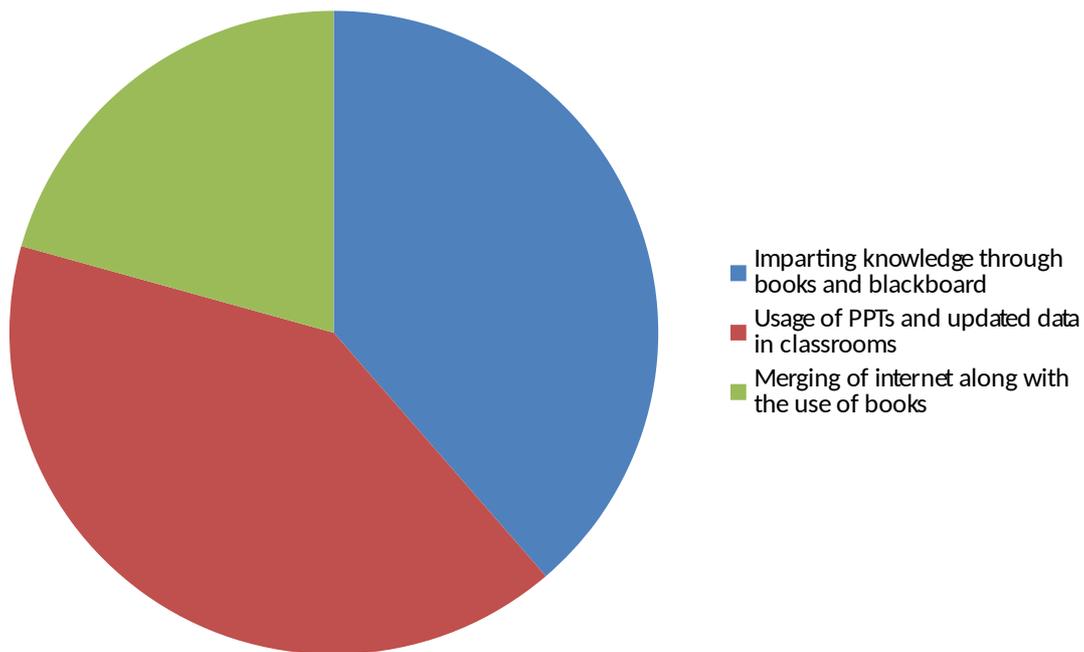
The above diagram throws light on the number of students who would prefer their courses with a blend of information technology. This study shows that 39% students prefer their further course with proper use of information technology. 31% students prefer courses with moderate use of technology along with that of books and blackboard whereas 25% students prefer courses with the least usage of technology. Also there are 5% students who wish to study with the traditional methods of learning i.e. via blackboard and books. thus, although students are well versed with modern technology there are still a few students who opt for traditional methods of learning.

7. What is the best according to you out of the following:
 - Imparting knowledge through books and blackboard
 - Usage of PPTs and updated data in classrooms
 - Merging of internet along with the use of books



As seen in the survey 41% of the students prefer the usage of PPTs and updated data via internet in classrooms for teaching purposes. 39% students prefer gaining knowledge still through traditional methods of books and blackboard. Whereas, 21% students refer to a blended version of internet along with the use of books. This shows that though students are well versed with modern technology, it is still seen that students do not wish to give up on the traditional methods of books and usage of blackboard.

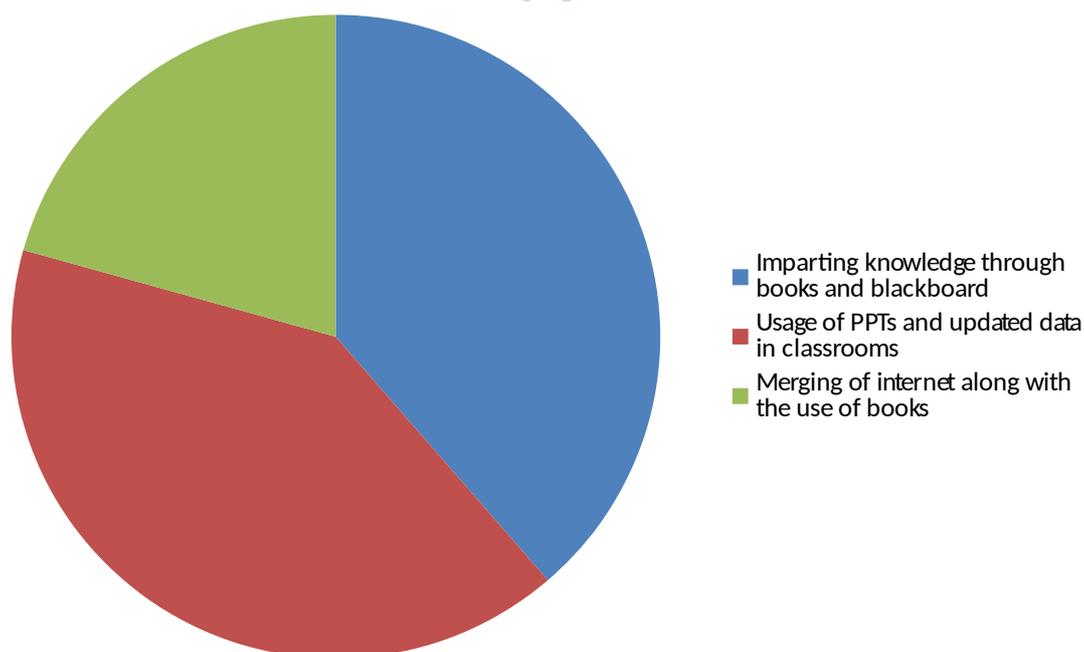
8. How do you think is information best communicated at your institution?
- Word of mouth
 - SMS/ virtual messaging
 - Email
 - Social networking



In order to fulfil its academic and other endeavours every organisation utilises some sources to communicate its information. For this purpose SMS or virtual messaging is used up to 34% whereas, information is also communicated through word of mouth up to 32%. Other sources such as email is used upto 18% and social networking sites are used up to 16%. Thus, it is imperative to note that not only students, but educational institutions today, are also becoming technology friendly.

9. Which of the following best describes you?

- I am sceptical of new technologies and use them only when I have to
- I am usually one of the last people I know to use technology
- I usually use new technologies when most people I know do
- I like new technologies and use them before most people I know
- I love new technologies and am among the first to experiment with and use them



As seen in the above graph, maximum students i.e. 41% students are already well versed with new technologies and are wide users of the same. On the other hand, 32% students are such who use technology as and when they are introduced and also promote the same. 21% students use technology and walk hand in hand with the new era of globalisation as a part of their hobby, too. On the other hand it is also seen that 4% students are not very familiar to the usage of technology and use the only when required. Also, there is a small lot of 2% students who are reluctant to the use of new age technology and are the last ones to use them. This shows that most of the students are in proper use of technological enhancements. Also there are a few students who are still reluctant to use technology but still do not avoid it totally.

Conclusion

The research shows that students are well versed with the use of new technologies and the framework that the new era has designed is well being incorporated between institutions and students. This study also reveals the fact that the respondents are in favour of technology but they do not wish to let go of the usage of books and blackboards. Thus, it is clear that there should be a proper blend of new age technology and traditional methods of learning. Therefore, in order to promote higher education in the country, it is highly essential for all educational institutions to provide its students with quality education in the face of proper books and new age technology.