# **Information Technology And Higher Education**

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#### **HIGHER EDUCATION – IT AIMS:**

The aim of the present day education is to prepare the youth for complete living. Every boy and girl should be provided with adequate means of education and be assured of the pleasures, experiences and wisdom that can be found on books and other reading material, which preserve the thoughts and writings of strong and great use of letters and masters of contemporary subjects.

According to John Dewey, the great education stand philosopher, the purpose of education in to develop such habits, attitudes and qualities of character in a youth as well enable to bear worthily, when he grows up to take the responsibilities of democratic citizenship.

According to Dr. D. S. Kothari, the basic task of education is to promote powers of the mind, acquisition of special skills and advancement of knowledge but, above all, to generate in the youth mind, a sense of purposefulness and maximum dedication, confidence in them and faith in the country's future.

## (1) INFORMATION TECHNOLOGY:

Information technology (IT) is electronic technology used for collecting, storing, and processing and communication information. It includes microelectronic and info-electronic based technologies incorporated in many products and production process and increasingly affecting the service sector. It covers inter alia computers electronic office equipment, telecommunications, industrial robots and computer controlled machine, electronic components and software products.

Thus comprehensively information technology (IT) can be defined as the use of hardware and software for efficient managements of information i.e., storage, retrieval, processing, communication, diffusion and sharing of information for social, economical and cultural upliftment.

#### 2) INFORMATION TECHNOLOGY AND HIGH-ER EDUCATION:

Information Technology (IT) is dynamic in nature. It has lots of potentiality to improve and manage different aspects of higher education such as:

- Teaching.
- Sharing of resources.
- Professional development of teachers.
- Increasing accessibility.
- Research and development.
- Virtual university.
- Human resources development.

- Distance education.
- Total quality management.

# (3) INFORMATION TECHNOLOGY AND TEACHING:

Teaching at higher education, mostly, concentrates on giving information, which is not the sole objective at higher education. Along with giving information, the other objectives of higher education are:

- Developing reasoning and thinking power.
- Developing judgment and decision making ability.
- Improving comprehension, speed and vocabulary.
- Developing self-concept and value clarification.
- Developing proper study habits.

• Developing tolerance and ambiguity, risk taking capacity, scientific temper, etc.

# (4) INFORMATION TECHNOLOGY AND SHAR-ING RESOURCES:

All over the globe there is recessing and investment in education is decreasing. More funds are made available for spreading and expansion of education at lower level than at tertiary level. Thus, financial constraints have made planners, administrators, managers and researchers from department of university where central facility has been as well by teachers, students and researchers from other university. This concept of resource sharing exists in our country.

# (5) INFORMATION TECHNOLOGY AND PRO-FESSIONAL DEVELOPMENT OF TEACHERS:

There are many determinants of quality of learning of which one is the quality of teachers. There was a time when society believed that teachers we are born but not trained. this belief does not hold good today because there are various teacher training institutes providing training to the teaches and have expanded different aspects of teachings but it has been to all those who are teaching at the tertiary level, that is, colleges and universities. Thus, the teachers are not only born but can also be trained.

• There has been no expansion both quantitative of the existing training institutes.

- In certain areas even trainees are not available.
- The infrastructure facilities are very limited.
- Training is provided outside the work place.
- Number of training institutes is very limited.
- Trainees are spread all over the country.
- Very limited funds are available.

• Even teachers don't bother / worry about their professional development. Some time they don't even feel the need of it.

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# (6) INFORMATION TECHNOLOGY AND IN-CREASING ACCESSIBILITY:

At present people feel that the world has become a small village because one can talk to anyone, enter into any library, discuss on any academic problem, share any idea, seek any information which is not commonly available etc. This shows that one has an access to every nook and corner of the world. All this has been made possible due to the invention of the internet.

# (7) INFORMATION TECHNOLOGY AND RE-SEARCH AND DEVELOPMENT:

R & D (Research and Development) is quite common amongst industrialists, but people working in universities and research organization, like prl, hpl, drdo, isro, iisc, etc. Are mostly conducting researches which may be fundamental research and or / applied research. The universities are hardly getting any funds for carrying out research. Majority of universities do not have linkage with industries. Therefore, industries don't have funds the research activities in the university. The identification of research problem planning and carrying out can be done by pooling the wisdom of all research member of team through the use of internet.

#### (8) INFORMATION TECHNOLOGY AND VIR-TUAL UNIVERSITY:

With the increase in population, traditional universities and colleges could not give admission to all those who poses minimum eligibility and desire to continue higher education. To cope with the problem open universities and distance education departments were established. The facilities also were in sufficient.

In the age of high technology people thought of establishing a university on internet which has all good features of any real university and able to eliminate all limitations of real universities. such as: number of students, courses subjects combination, holding of examination only once in annual system and with rigid schedule, unilateral in methods of teaching, poor quality of infrastructural material etc. such a university is called virtual university. The students can belong to any country, speak any language, may be rich or poor, etc. can be beneficial from virtual university.

## 9) INFORMATION TECHNOLOGY AND HU-MAN RESOURCE DEVELOPMENT:

The progress, growth and development of any nation depend up on human and material resources. The full exploitation and use of material resources for the benefit of mankind depend to a great extend on human resource. The material resource of any country is not unlimited but the human resource can be unlimited. The properly trained man power can only help us in proper utilization of the available material resources. It demand that database of trained man power has to be developed without which the progress, growth and development of any nation is not possible and if is so, then the speed will be slow. At present, database of neither human resource not material resources are available with the development of information technology, it is possible as well as feasible to have a database of human and material resources.

The database can be utilized to find those areas very little or no trained man power is available. Not only this, even one can predict area-wise requirement of trained manpower on a stipulated time. Having done this, it will be possible to monitor the process of development of manpower.

#### (10) INFORMATION TECHNOLOGY AND DIS-TANCE EDUCATION:

Due to explosion of population, information and more demand of higher education, the traditional colleges and universities are not in a position to provide admission to all those who wanted it. It compelled planners and administrators to think of an alternative mode of providing quality education to all those who wanted it. The correspondence departments set up by different universities. Due to this, the distance education and open learning concepts were floated and different universities.

The audio conferencing are possible. The age has started networking of different universities. On the completion it will be possible to share all available resources for imparting the quality of education to far distant places. Such a state has been possible only due to the development of information technology and its availability all over the globe at a reasonable cost. The information technology can be utilized for planning and managing resources, examination, teaching –learning process, curriculum development admission, etc. More efficiently that what as being done today.

## (11) INFORMATION TECHNOLOGY AND TO-TAL QUALITY MANAGEMENT:

The utility of any system depends to a great extent on its quality. The higher education is also a system. It points out to the fact that there is a need to bring desirable changes in the higher education system namely, input, process, output and feedback. The various inputs of higher education are: the students, teachers, curriculum, infrastructure facilities, etc. The information technology can help in maintaining the total quality of the system. For example, the curriculum can be designed by updating the information through the use of internet.

To maintain the quality of higher education, Universities Grant Commission has set up the NAAC, whose purpose is total quality management. NAAC may ask larger experts to give their opinion about the university after visiting the website. Chat facility is also available on internet. The experts may use this facility to seek any clarification, if need be. It reflects that information technology has potentiality to help in total quality management continuously which otherwise many be very difficult.

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#### **CONCLUSION:**

Information Technology emerged on the western countries in making a powerful impact even on the developing countries.

Impact of information technology on the socio-economic development is a matter of great discussion and great concern to all the nations in the world.

However the future of information technology and its economic and social consequences are as yet unclear.

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