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INFORMATION TECHNOLOGY AND ITS IMPACT ON COMPUTER EDUCATION

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ABSTRACT:

Computers are playing an important role in the information age. They deeply impact in many areas, undoubtedly, in the area of education to improve the quality of learning as well as teaching. Various resources and technologies have been used to improve the quality of the education system. Prospective teachers, as well as teachers inservice, must aware about the impact of computers in the field of education as well as their subject area to make learning effective. This will help teachers to know the integrated technologies helps in their classroom teaching. This paper will



discuss the various usages of computers which make effective learning as well as a teaching process.

KEYWORDS: *Computer, education, learning, teaching, technology, developments.*

INTRODUCTION

When we throw a pursuant glance over the history of mankind, we observe that, the past three centuries were dominated by a single technology i.e. the eighteenth century was the only period of great mechanical systems accompanying the industrial revolution. The nineteenth century was the age of engine systems and the 20th century was the age of key technology of information gathering, processing and distribution. And that is the reason why, this era desires a special mention due to the large number of discoveries and inventions that have been

taken place. In order to replace the existing technology with a new inventions one. the and discoveries are being upgraded day by day. Hence, the western countries have contributed substantially to the introduction of new technology as compared to the developing countries. The efforts made by them are more systematic with more dedication. which finally has resulted in the fester development of new products. For the purpose of improving the quality of products and services, the advanced technology is getting absorbed in different segments, which leads to a better standard of living. Consequently, for the industries in developing countries like India,

die percolation of new technology is proving to be a 'boon'. . Computer-aided processes and manufacturing operations are the latest technology of transfer of learning. The new technology based on the computer-aided computer-aided designs, manufacturing and networking for their design and manufacturing, facilities are being used successfully by 3 many of the Indian large scale manufacturers such as Bajaj Auto, Anonymous (2008), Telco and Reliance Industries. The entry of new technologies in many of the leading industrial houses has been possible due to the liberalization of the Indian economy. Automation and new management

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techniques based on computerized Management Information System (MIS) took the place of the old organizational systems and traditional method of operations, and as a result, drastic and continuous changes are being initiated in managerial thinking, in both the private as well as public sector, organizations. The quality of work-culture improved rapidly due to the easy entry of multinationals in the country. Nowadays, in the day to day functioning of such organizations a systematic approach is adopted. The Indian manufacturers changed their approach because of the introduction of TQM, ISO 9000 etc. They became more conscious about quality and consumer oriented. The ISO 9000 procedure gives a greater emphasis on computerization and MIS. On retaining the ISO 9000 certification, the companies that were previously managed by merchant type practices now started functioning in a computerized way. The graduates of Arts and Science faculties coming out of the Indian Universities are not skilled enough to be employed in die rising information technology sector, as the present Indian under-graduate and also post-graduate curriculum hardly contain the information technology related papers. So now it is necessary for the Universities and Colleges to think about how much computer knowledge is required by a person to get a job. The first year of the curriculum offal the undergraduate courses should include a compulsory course in computer applications containing a concept of hardware and software; spreadsheets database networking, Internet and e-commerce. So, in order to increase the level of efficiency of manpower, undoubtedly it is essential to develop and implement information technology based courses and the competitive human resources should be created globally by the functioning of an 'IT' with substantial curriculum. The exponential growth of information that characterizes modem business makes the need for learning more important than ever. But the sheer volume of what we have to learn and the speed at which we must learn it can be daunting. Anonymous (2008), So much so those old models of learning acquisitions are failing us To meet this challenge we require new thinking about how to acquire knowledge and skill, and how to deploy learning resources that cope up with the knowledge economy. Learning and training are often taken up as synonymous; but they are not. Training is the way where the instruction is conveyed and it learning, which is our internal way of processing information into, I knowledge. But since there are many ways we can learn, and effective learning strategy must transcend training. Some dictionaries equate learning with activities such as training or, i - education. Others use broader cognitive viewpoints like "acquired wisdom, knowledge, or skill," or scientific-sounding behavioral definitions such as "a modification, of behavior as a result of experience." While all of these definitions are useful, we can go further to define learning in a way that works in the context of organizations and businesses. In business, learning is a means to an end. Generally speaking, that end is an enhanced workforce performance, which in turn reflects its value in better products and services, at lower costs, and a more competitive posture in the marketplace, a greater innovation, and improved productivity, increased market share, etc. In the context of business, learning is the process by which people acquire new skills or knowledge for the purpose of enhancing their performance. Companies want sales-people to learn new selling techniques so that they can improve their sales-results, which go right into the business's bottom line. A hotel wants its desk clerks to learn more about customer-service so that they can be more helpful to the guests, and as a result, the hotel can increase occupancy rates and solidify brand lovalty. The independent plumber seeks to learn a new way to repair burst pipes so that he can do the job more quickly and thus handle more customers in the same amount dative. Investment houses want their stockbrokers to learn r i more about investment strategy so that they can presumably provide a greater level of client service, while the firm can increase the amount of assets it has under its management In each case, learning enables an individual or a group of individuals to work faster, better, and smarter so that they and their organizations (or employers) reap business benefits. We have traditionally relied on training as the 'default' approach to facilitating and improving performance, and 'instruction' as the specific process that makes training work. Training/instruction is; used when it is , It necessary to shape learning in a specific direction to support learners in acquiring a new skill or to utilize new knowledge in a specific way or to a specific level of proficiency, and perhaps within a specific time frame. Airline pilots are trained to be sure that they can demonstrate all the skills and competencies necessary to operate in airplane safely and efficiently before anyone flies with them. Surgeons are

trained because of the grave consequences that might result if they practice their craft without certification of their skills in advance. The police are trained not only because society needs to be sure they are skilled, but also to be sure that they employ their skills appropriately in situations where life mid death decisions are to be made in a split of seconds. Customer care representatives are trained to respond appropriately to customers every time technical experts are trained to fix infrastructure, or systems of problems quickly so as to run the business smoothly. Training can be delivered in many ways - in the classroom, over the phone, through a computer via satellite, to name a few. (Levin, 2005)

ROLE OF COMPUTERS IN EDUCATION AND TRAINING

Computers are generally goal for educational activity, which requires significant interaction, as for example, games and simulations. Hence, instructional software should be highly interactive. Interactive learning environments are called Intelligent Tutoring Systems (ITS).

Due to their interactive capability, Computers are well-suited to provide Individualized and self paced instruction; the students can decide their own learning pace, rather than being constrained by the pace forced by the instructor or the rest of the class.

Computers are particularly good for explaining complex processes and interactions, through the use of animation and graphics, and possessing the capability of changing the values of parameters and observing the effects.

Computers are well suited for teaching problem solving and decision-making skills for example video is good for showing real, dynamic sequences, and printed matter is best of representing a lot of text or graphical information. Thus, computer screens should not be designed, to reassemble printed pages, and animation should not be employed as a substitute for video sequences.

Computers should be "seamlessly" integrated into the general educational process. The presence of die computer interface should not be an irritant to learning, by requiring considerable effort in utilizing it.

Triangular student-computer-teacher collaboration and cooperation, with the involvement of teacher as a mentor or guide, is essential for achieving optimal learning.

Conventional education confers the ability to access and cross-reference huge amount of data and information as passive reference source, while CAL has the capability to deliver Al-controlled education which tailors itself to the learners' needs and learning styles.

REVIEW OF LITERATURE

D.N. Sansanwal, (2000) This article published in University News, November 2000 volume 38 & 46 authored by Mr. D. N. Sananwal. He says that teaching at higher education: mostly, concentrates on giving, information, which is not the sole objective of higher education. S.N. Kulkarni (2001) NCST the unemployment market is growing fast. A peculiar scenario "too many people chase few jobs" on one side and on the other too many jobs but no people. This is basically due to improper quality of students produced by computer training institutions who are "Semiliterate" because they do not know how to apply the knowledge. Most of the students joining computer training institutions 26 have no professional qualification hence computer potential is bigger in computer industry, computer courses do not mean job. Kishansinh Gohli, (2001) ITT New Delhi and published in Journal of Technical Education stated that the quality in technical education is a multidimensional concept which should embrace all its functions and activities such as teaching and academic programs, research and scholarship, staffing, students, buildings, facilities. Antony Stells (2009) The article written by Mr. Antony Stells in University News April- 2001 has stated that in order to improve the quality of higher education in ' our country the University Grants Commission (UGC) has been making efforts for the last many years some of which proved fruitful, whereas a lot of areas still need improvement or attention. Srlnivsan K (2014) In his article Mr. Srinivsan K. mentions that due to increasing demand for software personnel and less equipped computer training education and training institutions/centers, companies have no other alternative, but to depend upon its own training programs to fulfill the requirement. Computer education and training institutes/centres do not have facilities and infrastructure to provide training which will really produce a usable product, whereas a formal segment can do that but they are very few in numbers.

OBJECTIVES OF THE STUDY

- 1. To study the working pattern and management styles of the selected computer education
- 2. To understand whether and if at all there exists a certain disparity between the knowledge imparted by the various computer education and training centers and the requirements of the industry and also the reasons for the prevalence of such a gap.
- 3. To evaluate the working of the selected computer education and training centers with regard to their performance in providing quality education and the various methods of training and placement activities.

STATEMENT OF THE PROBLEM

During the informal discussion with the concerned authorities of formal and non-formal computer training institutions it was brought to the notice of the researcher by them that there is a great need to study the functioning of these centers; many of them rightly stated their experiences with regard to difficulties faced by them while handling the routine as well as critical situation.

NEED AND SIGNIFICANCE OF THE STUDY

The shortage of qualified manpower continues to increase day by day, even though the University and DOE make a lot of frantic efforts along with the private institutions. A large number of unemployed, so called personnel are hunting for jobs and at the same time there is an acute shortage of well trained personals, in this corporate world.

SCOPE OF THE STUDY

Computer training is provided in the small scale, corporate, formal and non-formal sector. There is no uniformity in the training provided by them and quality is not maintained both in the formal and non-formal computer education and training institutes/centers to improve the performance of the computer education and training mstitutions/centers.

RESEARCH METHODOLOGY

Research Methodology The research methodology is the basic framework action plan adopted in carrying out the research. Appropriate statistical techniques will be used for collection, analysis and interpretation of the sample data. The steps involved are:

Formulation of the questionnaire through consultations, feedback and survey methods

Mapping the Questionnaire to the research objectives

Testing of the Questionnaire

Preparation of the sampling plan

Expressing and representing the sampling plans in detail for preparation of the effective database for the sample collection.

CONCLUSIONS

Computer and its related technology have completely revolutionized our lives. Now, information technology is important in every walk in life. Undoubtedly, computer and information technology great impact in our education system various technologies have been used to improve the teaching and learning process. Information technology makes our education system interested and effective. Students can learn better without getting bored and frustrated. This paper presents the current scenario of information technology based education system.

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