Chapter- 7

E-LEARNING

1. Introduction of E-Learning
2. Scope and objective of E-Learning
3. E-Learning on Internet
4. Needs and Purpose of E-Learning
5. Economic Impact of E-Learning
6. Role of MTNL, ESCOM, AIRTEL, SATYAM Internet Services
7. Contribution of NIIT, NIMACT etc. in E-Learning
E-LEARNING

1. Introduction of E-Learning:

E-Learning is the convergence of the web and learning on all levels, whether it be elementary school, college, or business. Knowledge is now considered a competitive advantage and a company's most important asset. Many facts, figures, and forces behind E-Learning are not only causing excitement in boardrooms across the world but are also making Wall Street and the investment community take a closer look.

E-Learning is made up of several methods of learning, which are enhanced or facilitated by technology. As a component of E-Learning, web-based or online learning is likely to be the fastest-growing method for delivering education and training.

Mega trends in areas such as demographics, technology, globalization, branding, consolidation/privatization, and outsourcing will greatly affect the way we learn. These mega trends will affect all learning markets including early education, K-12 education, post-secondary education, corporate training, and consumer products and services. The dearth of skilled labor in the corporate world will only increase the need for E-Learning.

One of the biggest trends affecting the size of the E-Learning market is the astounding growth on the Internet. In the next three years, devices on the Internet are expected to grow from 147.4 million to 345.6 million. In the four-year period between 1998
and 2002, 223 million new users will be online worldwide. By 2002, 21.9 million more kids and 16.6 million more teens will be on the Web. Global online ad spending will reach $33 billion by 2004 and E-Commerce is expected to top the $1 trillion mark by 2003.

Many giants in the technology world are investing in and providing advanced products for and services tailored to the learning market. These companies, which are expected to make great inroads into E-Learning, include AOL, Yahoo, Microsoft, IBM, AT&T, Sun Microsystems, Oracle, and Harcourt.

The global education and training market is a $2 trillion industry, with $740 billion in the U.S. Approximately 10% of the $740 billion is "for-profit" business. The growth rate for the different education and training markets is projected at 10-15% but, at least in the corporate sector, E-Learning will far outstrip classroom training over the next few years, claiming almost half of the overall corporate training market.

Educational trends include home schooling, which is growing at 15% ($1.3 billion market). Ten percent of students are attending private schools ($2.6 billion market). The number of high school graduates is expected to increase 20% by 2008, while working adults represent nearly half of all post-secondary students.

Educational software was a $7 billion market in 1997 and is expected to grow by 14% over the next few years; $2.5 billion of the $6.1 billion supplemental educational materials market is sold to
consumers, and educational toys are the fastest growing segment of the toy market. All these trends seem to reflect both demographic and societal movements toward providing a better education for anyone who wants to learn.

In the lifelong learner market, self-help books grew at a 21% rate from 1993-1997, and 87% of people that go online do so to pursue information about a hobby or lifelong interest.

By 2003, corporate training will expand to $62.5 billion with $15 billion in outsourced training. Currently, small-to medium-sized businesses are being overlooked in the emerging E-Learning space but probably not for long. Nearly 60% of the workforce is employed by small- to medium-sized businesses and employees of these smaller businesses are more likely to turn to the web for training resources.

The most demanding role for Internet lies on the availability of products/services where the consumer led revolution has already made a considerable progress i.e. in the field of education. There are two scope of education learning – teaching and learning in other words training and educating. In an ordered education both has a role in a suitable proportion. The trained mind, having received basic information proceeds to flourish into self-learning and eventually understand with the ongoing process of exploration and discovery.

India having one of the most ancient culture and civilization has experience various ways of education system – *Vaideic system*,

(214)
Working-hour system, to the door system/ Distance education, value adding system/ Part time education to now days on the desk system/ E-Learning.

There have been tremendous developments in information and communication technologies, the world over, which have fuelled exchange of views, innovations and individual/institutional works. On the other hand, there are equally developments in theorization, innovations, reforms and research in the fields of learning. These are taking place within distance teaching and open education institutions as well as the formal mainstream systems.

My aim is to provide a focus for developing a system to effectively and efficiently introduce a premium quality based E-Education in Education sector. Which not just provide a forum for exchange, between the teacher and the student, of ideas, innovations, research outcomes, best practices, developments but also provide a developed way of communication and information sharing on regional/ national/ international level. The focus is largely on need and planning of E-Learning in education in our country.

India is fast emerging as an E-Learning hub. To cash on this trend, multinationals like McGraw-Hill, Digital Think, Skill Soft, Monterey, etc. are in the process of consolidating their operations in India.

India is likely to see dual benefits through this trend. Firstly, India will emerge as a hub for developing E-Learning software
as well as a major market for E-Learning tools. “In the Asia-Pacific, as price sensitive organizations cut back on their training investments, it will prove to be a big opportunity for us,” said a Tata Interactive systems spokesperson. The company provides E-Learning solutions to diverse sectors like steel, automobiles, cement, telecom and IT. Among its customers are Colgate-Palmolive, Citibank, GlaxoSmithKline, HP and Orange.

As the E-Learning market matures aim the US and Europe, established players in those markets are expected to start expanding their geographic reach and will look at the Asia-Pacific region for setting up more offices. The worldwide corporate E-Learning market is expected to reach revenues of $23 billion by 2005 growing at a CAGR of 25%. According to Nasscom analysts, there will be a significant shift in demand for E-Learning content. In 2000, IT content accounted for as high as 72% of overall demand generated primarily from IT Company.

Projects Related To E-Learning In India:

* Maharashtra Industrial and Technical Consultancy Services (MITCON)

The Maharashtra Industrial and Technical Consultancy Services (MITCON) initiated computer courses through E-Learning with 530 centres bridging the digital divide in rural areas and smaller townships in the interior locales of Maharashtra. Learners can register themselves at any of their E-Schools and access the course content.
either at these E-Schools, a cybercafe of their convenience, or at home. Another MITCON experiment in E-Learning is launching of E-Vidya in the Marathi language in the Maharashtra State, targeted to benefit more than 7,500 students.

**Online Distance Education:**

Sri Chandrasekharendra Saraswati Viswamahavidyalaya offer online distance education at undergraduate and post-graduate courses (Srinivasan, 2002). Instructional material is provided online and through a cable TV network (two or three days a week) in addition to sending assignments and so forth by post.

**The Virtual Campus Initiative of IGNOU:**

The first computer programme offered by IGNOU through the School of Computer and Information Sciences was Diploma in Computers in Office Management (DCO) in 1990. This programme consisted of 5 courses and compulsory practicals. It was stopped in 1999 because the course content became outdated as compared to the market trends and new technological developments.

Then in 1995, three more programmes were introduced: Certificate in Computing (CIC), Bachelor’s of Computer Applications (BCA) and Post-Graduate Diploma in Computer Applications (PGDCA). Out of these CIC and BCA are still continuing whereas PGDCA was abolished after 1996 because another programme Master in Computer Applications (MCA) was introduced.
In the year 1998 two programmes viz. Certificate in Network Oriented Computing [CNOC] (30 students) and Certificate in Web site Design Management (CWDM) with 169 students enrolled were introduced but were also stopped with effect from 1999. In the year 1999, IGNOU launched two prestigious programmes, i.e., BIT (Bachelor of Information Technology) and ADIT (Advance Diploma in Information Technology), in collaboration with Edexcel and Ministry of Information Technology, Govt of India, respectively.

As we know the main purpose of education is teaching, training and learning. The process improves the knowledge and skills, which in turn helps to uplift the social status of individual. Today when the people talk about education, the conversation unknowingly turns to a new type of education called “E-Learning”. Like everything else associated with digitization, automation and Internet, the term “E-Learning” has also became a buzzword to much hype. Nevertheless, the main concern of “E-Learning” is literacy of new kind.

Hence it is a new form of social interaction to acquire knowledge or bringing out the inner qualities.

Basically E-Learning is the online delivery of information, communication, education, and training. E-Learning can be in offline form also like CD, DVD, etc. E-Learning provides a new set of tools that can add value to all the traditional learning modes-classroom experiences, textbook study, CD-ROM, and traditional computer
based training. It is characterized by speed, technological transformation, and mediated human interaction.

Simply we can underline the aims and objectives of “E-Learning” as:

Old-world learning models don’t scale to meet the new world learning challenges such as quick and up to date information, geographically scattered information. E-Learning can provide the tools to meet these challenges.

E-Learning will not replace the classroom setting, but enhance it, taking advantage of new content and delivery technologies to-enable learning.

With E-Learning we can empower learners as well as instructors.

Digital media provides a variety of contents and delivery vehicles for diverse nature of learners to meet their requirements.

2. Scope and Objective of E-Learning:

This new mode of learning promises to transform the experience of the classroom in a number of fundamental ways: by augmenting traditional textbook materials with online resources; lectures through the use of rich multimedia and interactive content; and by extending student discussions beyond the walls of the classroom via a wide range of new communications platforms supporting inter classroom collaboration. As human capital becomes the chief source of economic value, education and training become
lifelong endeavors for the majority of workers. **E-Learning** offers us potentially less expensive, more convenient, and richer ways of becoming educated, and of coming into contact with more diverse groups of fellow learners than ever before. For example, use of discussion forums or conferences bring learner and instructor to a common platform of divergent nature.

If we talk about Indian scenario, it is still doubtful to make **E-Learning** a useful media in our education programme. There are many obstacles. In our country, surveys show that the vast majority of population particularly teachers feel under prepared to use technology in the classroom. The fate of radio and TV as tool of educational process is better known to us with our past experiences of ‘Vidyalaya Karyakram’ and UGC country wide classroom programme respectively. Another approach to it is use of network using computers. But again many educational institutes are still without computer facilities or computer networking. Hence the benefits of “**E-Learning**” in **India** remain largely inaccessible for large numbers of students. But realizing the promise of “**E-Learning**” will require forging new kinds of government and private partnerships.

**4- Elements of E-Learning and their use:**

To take the better opportunities of “**E-Learning**” we have to know the tools and techniques associated with “**E-Learning**”. Some of them are:
4.1 E-mail:

E-Mail is the foundation for all forms of online learning and teaching. Although we are taking email in a casual way but still it is very highly appreciable tools of “E-Learning”.

For example, E-Mail based discussion forums play an important role in the E-Learning process. *Lis-forum* (moderated discussion forum)

http://www.ncsi.iisc.ernet.in/ncsi/services/lisforum.html is a good example of this, where library and information professionals share their knowledge with other people through E-Mail.

4.2 Real-time Conferencing:

It covers any form of online synchronous interaction. One of the simplest forms of real-time conference is online chatting. Here participants exchange typed messages with everyone having common interface. Others can see what a person is typing on the other side, all in real time. Each message is preceded by the name of the sender to identify who said what.

For example: Different messengers for instant messaging, such as Yahoo messenger,

MSN messenger. The instant messaging software provides interesting features for communication or sharing of knowledge. The use of File Transfer Protocol (FTP) gives it an edge due to which files can be transferred when the conference is going on between users.
4.3 Multi User Domains (Muds) And Multi-user Object : Oriented (Mods) :

These are an interesting category of real-time conferences (virtual conferences).

Specifically designed to facilitate group interaction. MUD/MODs allow many people to share a virtual world, usually set up as "rooms" containing objects, which can be viewed or manipulated. People can interact with others by sending chat messages as well as performing simulated actions. Here main features are:

* Real-Time Collaboration
* Interactive Data Sharing
* Instantaneous Communication
* Multi Location
* Share anything.

The excellent example for this is ezmeeting (http://www.ezmeeting.com). ezmeeting is a low-cost, no-maintenance document collaboration application. With ezmeeting, up to 32 people, on any Windows computer, can view, mark up, and comment on any document, together in real-time. With ezmeeting you don't have to ask. You DO, and everyone sees what you do as you do it. The comments you make, the changes you implement, the fixes are displayed on all participants' computers as they happen.
4.4- Desktop Video:

The most advanced form of real-time conferencing is desktop video system. A desktop video system is basically a chat system that uses video images instead of text messages. The video images (including audio) are captured by a small digital camera that is connected to the PC. These cameras are relatively inexpensive and can be connected to any computer (including laptops). Using software, that comes with the camera or is obtained separately, it is possible to connect to a server running a video conferencing program — or make a direct link with another person using their IP address for a two person video session (called a point-to-point connection).

5- Techniques of E-Learning:

With the interaction models learning has become student centered and it is more enhanced by E-Learning. The role of teachers changed from being primary source of knowledge and direction to facilitator of learning. With the advent of computer-mediated communications (CMCs), the interaction between students and instructor is enhanced. An explicit, five part model is used to guide tutor/student interaction in E-Learning. The model may be summarized as follows (Gilly Salmon, 2000):

1. Access and Motivation (These are prerequisite competencies for online participation.)

2. Online Socialization (Participants establish online identities and networking with other participants.)
3. Information Exchange (Participants exchange information with the E-Moderator and with one another.)

4. Knowledge Construction (Course-related discussions occur; interaction becomes more collaborative & fruitful.)

5. Development (Participants reflect and examine benefits from the system of Interactions that help them achieve personal or course-related goals, explore how to integrate computer-mediated communication (CMC) into other learning, and generally reflect on the learning process.)

In online classes, it is the role of the E-Moderator to guide students through an online learning experience where course content serves as a conceptual basis for continuing online interaction and discussions. The skills required to sustain this online interaction define the work of the e-moderator (Salmon, 2000).

Salmon also recognizes four issues as being critical to sustain appropriate levels of interaction and to help online students achieve successful outcomes:
* Appropriate numbers of online participants.
* The use of online time.
* Time and complexity.
* The development of online communities.

But all the above factors depend upon the aim and objectives of learning communities.
6. Essentials for E-Learning:

6.1 Interactivity And Participation:

The most important thing in E-Learning is to ensure that there should be a high degree of interactivity and participation. That means designing and conducting learning activities in such a way that it should result in engagement with the subject matter and fellow students. Coursework should focus on assignments and projects that are relevant and realistic in nature. It should involve plenty of opportunities for input from the instructor and fellow students.

The factor that strongly affects the amount of student interaction and participation is the level of instructor involvement. If the instructor regularly posts messages in the discussion forum or provides comments to students via E-Mail, this increases student involvement and participation in a course. So a cardinal rule of good online teaching is that the instructor must participate to get students to do likewise.

6.2 Feedback:

A primary task of the teacher is to provide feedback. In E-Learning, teacher’s feedbacks or comments are in E-Mail messages. They usually correct the original file submitted by the student and students can download it to see the comments. Ideally individual feedback is provided to each student, as well as group feedback. Group feedback can take the form of messages posted in a discussion forum or conference which summarize/synthesize the individual responses made on a given topic or activity.
6.3 Moderating And Facilitating:

**E-Learning** requires good moderating and facilitation skills. Moderating involves encouraging students to participate in discussion forums and conferences, ensuring that certain students don’t dominate, keeping discussions focused on the topic at hand, and summarizing/synthesizing the highlights of discussions. Facilitation means providing information that will help students to complete their assignments, suggesting ideas or strategies for them to pursue in their course work, and getting students to reflect on their responses and work.

6.4 Faculty Collaboration:

**E-Learning** offers many opportunities for student interaction and it also provide many possibilities for collaboration among teachers and students. Basically the following kinds of collaborations can be thought of:

* Teacher – teacher collaboration
* Teacher – student collaboration
* Student – student collaboration

There is no face-to-face interaction like traditional classroom hence nobody feels ashamed or hesitation to present his/her opinion. It helps to modify or correct once fault.

6.5 Student Evaluation:

One aspect of **E-Learning** process that often generates considerable concern for teachers is evaluation of student
performance. They worry that they will not be able to assess student understanding or participation properly. But this is a myth. Actually student evaluation can be done far more effectively online than in a traditional classroom setting because of the ease of creating online tests and other forms of assessment. Online tests can successfully hide students' as well as teachers' identity. So the biasness or personal inclination factors can be reduced to a great extent.

7 Conclusion:

The use of information technology has the potential to enhance student-learning outcomes. However, E-Learning can only contribute substantially to the improvement of institution's organisation if it is appropriately embedded in powerful and interactive learning environments. The challenges are substantial. The effective use of IT in the learning process can best be achieved by taking an integrated approach to change involving the examination of pedagogy, curriculum and organizational structures within the community. Integral to this are well-articulated IT policies, the provision of appropriate access and adequate time for teachers and access to high quality professional development. From the above discussion, we can easily say that E-Learning is not a myth.

It is a reality and certainly it is going to influence the educational system in its own pace in near future.
8. Some useful resources:
3. **Homework** Central. [http://www.homeworkcentral.com](http://www.homeworkcentral.com)
5. Training & Development Community Center. [http://tcm.com/trdev](http://tcm.com/trdev)

9. References
6. [http://oubs.open.ac.uk/e-moderating/extracts.htm](http://oubs.open.ac.uk/e-moderating/extracts.htm)
3. **E-Learning on Internet:**

E-Commerce stands for Electronic Commerce or business on internet, i.e. business linked with internet. E-Commerce is the means of earning money on internet with less times one can do E-Searching about E-Banking, E-Shopping or any other service, while sitting at home or in office. E-Business, E-Mail, E-Banking, E-Marketing and E-Advertising, E-Shopping, E-Learning, all these activities are the parts of E-Commerce which commonly known as trading through electronics means.

Today we have need of more knowledge and E-Learning is a part of commerce. Internet in this field is our close friend and provides us several opportunities to studies, research scholars and businessmen, regarding educational and commercial subjects. In the present era of communication technique, E-Learning is a source of getting information on any of the comprehensive subject. We all read the newspapers from the latest newspapers and the news throughout the world. It is internet.

Thus provided with an internet facility on a computer, one can get high quality education, while sitting in the home-office and store needed information in the computers as per requirements and use it at any time. Anyone use can readily be need from newspaper/magazine of the choices.

The services of internet in the field of Learning are really remarkable. We have come to know various Learning, through internet.
Infact, the Internet has changed our lives and the standard of living. Today we are getting knowledge of several types, essential in the human life, it is internet.

**Impact of the Internet on Learning and Teaching**

**4. Needs & Purpose of E-Learning**

Learning is the act or process of developing skill or knowledge. Modern, web-based learning and computing provides the means for fundamentally changing the way in which instruction is delivered to students. Multimedia learning resources combined with CD-ROMs and workbooks attempt to explore the essential concepts of a course by using the full pedagogical power of multimedia. Many Web sites have nice features such as interactive examples, animation, video, narrative and written text. These web sites are designed to provide students with a "self-help" learning resource to complement traditional textbook.

In a few pilot studies, [Mann, B. (1997) Evaluation of Presentation modalities in a hypermedia system, Computers & Education, 28, 133-143. Ward M. and D. Newlands (1998) Use of the Web in undergraduate teaching, Computers & Education, 31, 171-184.] compared the relative effectiveness of three versions of hypermedia systems, namely, Text, Sound/Text, and Sound. The results indicate that those working with Sound could focus their attention on the critical information. Those working with the Text and Sound/Text version however, did not learn as much and stated their
displeasure with reading so much text from the screen. Based on this study, it is clear at least at this time that such Web-based innovations cannot serve as an adequate substitute for face-to-face live instruction. Stoll (1999) in his book, High Tech Heretic: Why Computers Don't Belong in the Classroom and Other Reflections, Random House, 1999, argues that schools should use funding to improve real education rather than invest in computer technology and rely on telecommunications for education. Furthermore, he indicated that the computer was often a crutch that diverted time and resources from programs taught students to think and evaluate information. Online learning education does for knowledge what just-in-time delivery does for manufacturing: It delivers the right tools and parts when you need them. However, developing online learning is typically an intense process, which should take much of the faculty development time.

The Java applets are probably the most phenomenal way of simplifying various concepts by way of interactive processes. These applets help bring into life every concept, from central limit theorem to interactive random games and multimedia applications.

The Flashlight Project develops survey items, interview plans, cost analysis methods, and other procedures that institutions can use to monitor the success of educational strategies that use technology.

In The knowledge corporate world setting, it might be true that two-way communication is not always something they need
to have in order to get done with what they are doing, but sometimes one-way audio with optional two-way or with chat is sufficient. Whereas in university environment, the expectation is a lot higher and they require two-way communication in order to have the right level of interaction with students.

The impacts of the Internet on teaching and learning are highlighted in the following section of this site. In summary, a Web-based learning class is more effective learning experience, since the learner is participating in learning process and receives individual attention. Though the instructor and the learner are at different locations, this participation in learning is by itself a positive learning experience. The Web-based learning atmosphere allows more effective interaction between the students and instructor. Therefore, it can be effective as traditional classroom learning environment where the space, seating, etc., could be inadequate.

**The Cost-Benefit Issues:**

Since the dawn of the Internet age, boosters have predicted the end of leafy college campuses as schools go virtual. The miracle of the Internet was supposed to let great teachers reach any student, any subject, any time, and anywhere.

Rapid technological advancement may produce problems and challenges for educational institutions when their products and services are rendered obsolete virtually within a short time-horizon. The Web-teacher who has properly learned his/her craft will have
transferable skills and knowledge perfectly adaptable to the emerging technology. The benefit of having transferable knowledge in such a volatile marketplace is readily apparent. It is insurance for survival of the Web-based courses. The Web sites have high dynamic rates of birth and death. The Internet is a graveyard of Web sites who tried but failed to keep up with the contents that the visitors really need from them. Many got on the Web very quickly once it was clear that many new sites were choked with flow and did not have any useful and interesting information. There is certainly a power in the Internet communication, development, and delivery of intellectual materials via this medium we are mastering in our educational institutions. The effective and efficient Web-based teaching/learning is just getting started and survival is the test for quality assurance.

The Internet is affecting the twin disciplines of knowledge management, and content management. Knowledge management is the thinking process of converting information to useful knowledge, while the content management is the published information. The author of a Web site must provide the efficient content management, and the visitor who uses a Web site must have the mental ability for an effective knowledge management. The authors need to learn more about the contents alongside the usability of their sites.

Online education is growing too fast to track. It is predicted a widespread shortages of qualified online teachers. However, educational institutions can train and capitalize on the talent of their teachers who may have retired from the traditional setting.
The rapid growth of information, coupled with the ability to exchange it more rapidly among more people than ever before, is creating a new environment for education. Many universities are negotiating for their standing as the de facto source of scholarly knowledge in new environment.

Hundreds of universities of every sort have been putting some basic courses up on the Web, using sometimes pedestrian software. And students seem to think they're Okay. Community colleges and regional universities that have slowly, organically moved into the online arena — doing their old job in a new way — have succeeded where the flashy business types and big-time private schools have not.

Today, the web-based course offering continues to grow, however, much of the momentum has slowed, and realizing the enormous costs of launching efficacious courses' online. Programs that are pedagogically sound but not fiscally sound may not be endorsed by the administration because of financial strain to the organization. Conversely, the faculty whom it represents will not endorse programs that are fiscally sound but not pedagogically sound. The main approach is to develop or maintain programs that are pedagogically and fiscally sound.

The administrators are focusing on cost-effectiveness in which educators can deliver their intellectual materials whole targeting this transformation in teaching/learning. However, one may ask: What
are the driving factors behind technology-based changes in teaching and learning? How does institutional culture fit into the picture? Do they have the necessary resources? Student-fee structures have always been unfair often, when online students live hundreds of miles away, must pay fees for campus services become a source of considerably greater discontent? The main concern is in targeting the transformation of learning/teaching through technology while reducing the cost.

On the other hand, the new state and federal policies, advances in services to students, new costing of technology methodologies, evolving accreditation and quality assurance issues, new E-Learning projects and new institutional practices.

For example, the impact of class size is of concern to all parties involved on Web-based learning/teaching. It takes 2 or 3 times as much time to teach an on-line course as a face-to-face course. An on-line course that works for 10 or 20 students may be impossible with 100 or 200 students. With face-to-face courses where the students are met simultaneously, the repetition in providing student feedback may be much less than in asynchronous teaching. Thus, on-line teaching may not scale as well as face-to-face teaching.

**Itemized Factors to Optimize the Learning Environment:**

What is the best we can do to optimize the conditions for the instructor, and the learner? How do you maximize learning in a short amount of time and still emerge with a deep, internal body of knowledge?
It Works If You Work On It: Unlike Web-based courses such as Information Systems, where the medium is the message, the first question to ask is whether the context determines the nature of the knowledge to be learned? This is an important question, because different sets of contextual practice related to the knowledge in question need to be acquired in order for learning to be successful. Computer competency is becoming as necessary in the modern workforce as writing competency, and it is necessary for educational institutions to adopt computer literacy requirements for their students. Since the University of Baltimore was the first school to offer all-online accredited Web MBA, I had to make fast and important decisions, such as how to begin, how to operate, and how to make E-Learning successful and enjoyable. In creating the Web sites in both courses, it was beneficial to see what is taking place on the WWW. I've devoted a considerable amount of time, searching the Web and collecting reliable relevant information (which was available at that time) and then published a few articles for professional journals entitled, such as, "Statistics on the Web".

Although the content of my course is the same, the means of delivering are different. Launching headfirst into Web-based instruction is not for the timid. Many are jumping on the "bandwagon" and using Web based materials in their teaching, but just how effective are the efforts? If you can't teach better with technology, don't use it! Merely using Web-based materials in the classroom or assigning
URLs for supplementary reading may not be an effective use of these materials. There must be forethought and careful planning in order to make this a meaningful experience for the educator and the student. Traditional Education emphasizes learning content; learning the "what." The information age, however, requires people who are competent learners, who understand the process of learning, the "how." Although I believe that real learning occurs in a social context because of the quantitative-based contents of my courses, my courses have not much use of the Chat Room. I feel from my own point of view and my own standards, my first online teaching experience was a success. I am glad to share my conscious findings with my colleagues who may wish to teach via the Web. My experience is based on teaching two particular courses to some groups of students; therefore, one must be careful in making any generalizations.

In the very near future, we will be a "learning society" in which education is universally accessible, and lifelong learning is promoted among young students and working adults alike. To learn is to face this transformation.

**Learning and Teaching Style:** I would like to insist that most parts of my courses required a particular learning style known as learning-to-learn. The effective and efficient learning style for these courses is doing your homework assignments on a regular weekly basis and learning from your mistakes whenever I provide feedback to measure the effect.
The teaching material and teaching style must reflect the change in the real world, which students may not know because they have not been there yet. Unfortunately, some instructors are still using their well over 10-years old lecture notes. Adding to this problem by doubling the difficulties for students, some instructors are devoting not some but most of class time for students presentation and group work. The instructor does not want to lecture most of the time. A few do the extreme opposite "I know, you don’t, I’m going to tell you." Some instructors may buy a reputation by many false means such as giving good grades to all (sometimes all A’s), not giving any exams/test or projects.

**Satisfying the Needs of Your Student:** The following items are proven useful to student’s learning process:

1. **Know each student’s level of knowledge of the prerequisite(s) topics:** Give them your prepared questionnaire to fill in without writing their names on it. Analyze the data and update your lectures to meet their needs.

2. **Provide an overview of the course material in the first lecture.** Ask them to write a 2-page essay what this course is about. This assignment required reflections from students, motivates them, and increases their interest about your course.

3. **Assign, collect, and grade homework on weekly bases.** This enables you to find the weak spots of each student. Ask students to re-do the needed parts for a “full credit”. If in the second
attempt still some students have problem, then give him/her the solution set, together with a few word of encouragement to revise and resubmit for a few points credit.

4. Put aside one class for review and students preparation for the midterm examination and one for the final. This review session encloses putting together the topics they have learned every week to the wholeness of the material they have learned. Provide also a past sample exam to do as part of their homework.

5. Prepare a “My response to the last class questions” in writing and distribute. This reinforces and encourages students to ask good questions. It also helps if any student missed your last week lecture. You may like to put this collection of good questions on the course Web site under FAQ. This page also enclosed a section titled “How things can go wrong” which contains all common mistakes students made during weekly homework and their exams. This will be helpful for their later review and learning from their mistake not to repeat it.

6. In your midterm and final exams you may put some open-ended questions such as, “What are the three most significant topics you’ve learned up to know” Ask them to write a short paragraph for each.

Evaluating Your Success: Have Your Student Learnt It?

Web-based courses are being used either as credit or non-credit, While the use of these means of knowledge delivery may offer many
advantages about developing more independent learners, there are also information handling skills which students must acquire.

As a new online moderator you will need to know how to carry out online the everyday activities of a teacher: how to build relationships with and between your students, how to encourage participation, how to start and stop discussions, how to deal with the shy, the dominating, the aggressive and the just-plain-awkward. I do encourage you to re-interpret your skills in terms of the new medium and to identify where online teaching can make a unique contribution. A teaching portfolio is a tightly written, reflective document, summarizing an instructor's approach to teaching and learning, and providing evidence of significant endeavors and achievements in teaching. It is relatively easy for an instructors to make a case for his/her effectiveness as researchers, but it has not been so easy to justify effective teaching. Having a teaching portfolio can:

* Help demonstrate your understanding of professional issues associated with effective teaching and learning and support this with documentary evidence;

Assist in self-evaluation and professional development. The credibility of the case you present in a portfolio depends largely on how well you link claims about effective teaching practice to evidence. The evidence you select and present should make the task of judging competence or excellence both straightforward and reliable.

Self-Assessment for Continuous Improvement in Instruction: We all
have high expectations of what Internet can do for our education institutions. While we all agree that E-Learning offers great promise, we must be certain how to achieve it. Clearly, if we don’t set our sights high, we could fall significantly short of our goals.

I do consider the following items as important factors for continuous Improvement in my teaching:

* Throughout the semester, information (objectives/content/assessment) was clearly given.
* Student was able to locate and use suggested resources.
* The various components of the unit were clearly linked to one another.
* Activities in my course enhanced my students' range of knowledge and skills in the content area covered.
* The professor presented material clearly at the level I could understand.
* The professor appeared enthusiastic about the material being presented.
* The professor used techniques that stimulated my interest in the content being covered.
* The professor assisted students learning by being available for discussion/questioning/clarification.
* The professor appeared to be well prepared. That is, the professor as a source, providing messages containing the relevant knowledge of the field.
The types of assignment set, seemed appropriate. This provides a good channel of communication between the student and the teacher.

Written comments on material returned were helpful, informative, and returned in a reasonable time. The feedback is used as a means to measure the effect of online learning and teaching.

The professor displayed good skills in methods of communication.

The methodology and tools used facilitated the learning process.

The professor taught me to think for myself. The student as the receiver of the knowledge, understood the material.

The professor demonstrates confidence in his knowledge, well informed on technical and professional advances and his role as a teacher.

**Clarity in Expectations:** Goals and feedback must be unambiguous; otherwise, it is hard to manage your course.

**Integrity of Transactional Distance:** There must be a commitment to the integrity of transactional distance. The instructor must use effective strategies to increase dialogue interactively. However, the instructor must adapt to minimize the engagement on personal matters. Otherwise, there is a point at which the dialogue about personal matters takes over, and the original learning objectives are compromised. The other problem might be that a very few students took over the dialogue, and turned it into a monologue.
Continuous Evaluation for the Quality: The logical role of the professor has changed. Instead of evaluating the available texts and selecting the best, it is necessary to sift through a huge volume of possibilities and recommend the most legitimate. Even the most diligent scholar is unlikely to be able to read even a small fraction of the available material in his or her specialty. This is one reason that the traditional publication process still exists although the review process is done via Internet. The blind review process still serves the purpose of separating the valuable from the useless.

Quality Assurance as a Measuring Tool and Decision Procedure: Unfortunately, in some existing web-based courses the asynchronous communication is inadequate in both the turn-around time, and the lack of psychological connection between the learners and the teachers. A Web-based course provides new challenges for a student regarding interactivity with the teacher and other students. There must be a Quality Assurance (QA) process for all components of a Web-based course such as, hidden question within the notes, assignments, feedback, computer-assisted learning, and exams. The QA provides a measuring tool for these components and promotes a decision procedure for allocation of resources for creating an effective learning community.

The following are a few items for considerations while doing the QA process:
* **Organize:** This good housekeeping ensures less confusion. Organization brings mental clarity and order.

* **Systematize:** This focuses on efficient and effective methods.

* **Sanitize:** Eliminate any junk files and maintain a clean and virus free environment.

* **Standardize:** Students must be given sufficient information about all aspects of the learning process.

* **Sustain:** This requires self-discipline to maintain a good practice of the above items.

**Readiness to Start:** Make sure each individual student has the preparation needed to enter the course. You might ask each student to fill in a Questionnaire Form. For example, for a statistics course, knowledge of Algebra is required. To make sure every student has a necessary understanding of Algebra, I first give them a test for diagnostic purposes. Then, I work closely with a few of them for a week, to bring their knowledge to the required level. This is done by me, (not by any tutors), prior to starting the main course.

**Giving Them Credit:** Don’t expect virtual students to do something you ask them to do without promising to give them some credit for doing it.

**Understand Student’s Needs:** Understand students’ feelings and experiences. Communicating by E-Mail may make it harder to convey feelings such as concern. Prompt replies to questions at least shows we are paying attention. “One size fits all” seems to be bad advice. There are great differences among individual students.
Web-based Teaching Is More Time Consuming: Teaching on the Web is not really about distance learning. It is a new kind of education and a new way of learning. The teacher has to be available everyday. Students expect instant response. For each course you are teaching, you should expect spending much more (two to three times) amount of time compared with face-to-face teaching.

Giving Them Choices: Student must have a variety of possibilities from which to choose. I tried to give more flexible assignments, giving the students choice of the site to review. More motivated students pick the “harder” assignments and feel challenged by them.

Trusting You: Students must feel comfortable enough to set aside the defensive shield.

A Challenge to Teach Virtual Students: Match the abilities of the students to the task. When you’re not in the classroom, you miss the glimmer of awareness in students’ eyes. It’s difficult to tell whether they are getting the subject or not. If you don’t give them enough stimulation, they will get bored; if we apply too much they will feel overwhelmed. As every student is different, it seems the best approach is to give a variety of options. Again, the Internet can accommodate a variety of students better than videotape, but it’s an exponential increase in investment in producing the materials.

Humanize the Topic: Learning process and product must have personal value to the student. Otherwise, on-line work is extraneous or even a distraction. I experienced this at first, but now I
build the materials and tasks within the teaching framework and the assignment structure.

**Partnerships with the Learners:** To Educe means to bring out a potential existence. Education, therefore, is a process of intellectual growth. The biggest impact of the Internet is to change the point of view that education is something can and should be delivered. Education comes from learning, not teaching. The world's best teachers are not repositories of knowledge, but skilled navigators who lead young minds to discovery and understanding. Learning is about reinventing the wheel, and may all learners have the opportunity to do so. The educator is merely a midwife in this process.

The concept of Web content management systems removes the Webmaster bottleneck and put subject matter experts in charge of content creation by learners' interfaces that turn students into content contributors. Learning on the Web requires partnerships. People learn best when they learn in context. It requires partnerships between teacher and individual student, between the course and the relevant business discipline.

**Hard Choices for Teacher and Easy Ones for Students:** Teachers have to make choices before starting on new technology. New technologies can be seen as a means of linking students with each other or with you. The following questions are relevant to success of the teachers who create content for the course Web site by adding appropriate metadata to that content:
* Are students familiar with the topic or not at all?
* Does the learning process give the students the choice of choosing the resources?
* Has the professor taught the topic before?
* Has the professor published any articles on this topic before?
* How much time is available? Is there only one author or is there a team?
* What is the level of complexity of the content?
* What skills and experience are students expected to have?
* What resources are available for development?
* What is the expected life of the materials?
* What is the size of the class?
* What media may be used?
* What existing resources can be used?
* What opportunities will there be for interaction with learners?
* What will be the balance between resources directed at developing resources for learners and resources directed to supporting individual learners as they study?
* What will be the balance between resources directed at initial development of resources and resources directed at ongoing maintenance and enhancement of the course?

Core Items for Teaching Effectiveness Evaluation:
When evaluating Web-based course, one may get bogged down in the container and lose sight of what should be the real focus of the
contents, and its interactivity. The following list identifies some characteristics of effective, interactive Web-based learning to help you sort the best from the rest.

1. The professor made it easy for me to know the standard of the work expected.
2. The professor motivated me to do my best work.
3. The professor made a lot of comments on my work.
4. The professor gave me a reasonable amount of time to understand the work I had to learn.
5. The professor seemed to understand difficulties I might be having with my work.
6. The professor normally gave me helpful feedback on how I was doing.
7. The professor was good at clearly explaining new ideas.
8. The professor asked me questions just about facts.
9. The professor made the content of the unit interesting.
10. The professor made it clear right from the start what she/he expected from students.
11. Overall, I was satisfied with the performance of this professor.

**Technological Aspects and Issues:** One may provide the following Online Questionnaire to the students within the first few weeks of semester to for any opportunity to improve and/or modify the technology aspects of the course.

(248)
A Typical Online Questionnaire for the Technological Concerns:

Good relationships are built on mutual understanding. When students can use the course site to get the targeted information they require, they are more likely to be in touch with the instructor on a more regular basis. That kind of interactivity promotes stronger relationships and deeper bonds between the students and the instructor. The following paragraph highlights the process of collecting feedback from my students to improve the course Web site intellectual materials, and its structure to fit the needs of your students:

Tell me you think of your course Web site. By filling out this form you are helping me to improve my services to you. If you didn’t find what you want, or are dissatisfied in some way with the course site, or would like to see a resource added, or would like to tell me what you did like or just want to give some feedback. The form contains important components of the course site, and I will take your comments and feedback into consideration to improve it.

It Is Hard to Get Teachers to Discuss and Expand on the Material for Online Students: Direct communication is a key element to the online learning success. In many instances, unfortunately, the teachers write course guides for online courses and there is hardly, if at all, any involvement of teachers with students. Often when authoring course guides, teachers tend to make itemized lists of points or restate verbatim what the students’ textbooks have already stated.
There must be interactions between the teacher and individual student for building a community of learners. Having the course material online is not the essence of online courses, but the energy that flows into it, throughout the semester. This energy is the enthusiasm of the teacher to care, motivate, and make sure student understand the material for themselves.

Some of my readers may even say, “It is hard to get teachers to discuss and expand on the material for online students.” I do agree with you, it’s an unfortunate environment, however, there are remedies for overcoming this fault, by means of asking the teachers the following two questions:

a. How do you know for sure that your students understood the material you’ve assigned?
b. You do not want to find out, say at the of time period, that most of your students are left behind. How do you make sure each individual student’s progress is adequate?

To enforce communication among teachers and students, I believe, the frequent homework assignment as I have already outlined on this site, is a must. Homework assignment and feedback from the teacher could be used as one of the performance measure factors for the teachers. An enthusiastic teacher changes problems into challenges.

High Tech and High Touch: Because the instructor cannot see their students he or she must maintain a high level of
engagement. While lecture and other types of information dumps have their place, encouraging students to introduce their own experience and reactions is critical to the success of the online course. It helps to keep the training “high tech and high touch”. Setting up an environment in which students may participate and share using multiple outlets, students stay involved and are motivated to come back to you.

**Dialogue and Knowledge Sharing with Your Colleagues:** Knowledge management and peer-to-peer enthusiasts share a common desire to realize the true potential of Internet course delivery. Establish dialogue among other faculties to make sure your course is relevant to what students are learning from other professor. This knowledge sharing aspects among faculty enables students to see the place of your course within the program they are pursuing. For example, every course in your MBA program is, without exception, about making good decisions in a particular aspect of business, from accounting to marketing. For example, Economists like to refer to their discipline as the science of choice. And they often use the definition “a set of principles for allocating scarce resources among competitive means” All courses in your MBA program, might possibly seem to you as pieces of a sculpture scattered around. I know that you have immeasurable longing to see the whole. Your course must bring together what belongs together by means of a unification, and integration with other courses.
Students Are More Than Your Customers: Question: What makes a restaurant experience at one establishment more pleasant and attractive to a customer? Answer: Delivery of timely, quality, personalized service. The same applies here for the educators. Technology helps us to deliver more personalized, timely service to students. It's the definition of quality for existing and coming technologies that we need to define. What is quality education in today's global society? What is quality use of technology in educational delivery? I do advocate individual mentoring. You should allow "jumping in". This brings about the needed trust and effective communication in mentoring your students.

Teacher as a Facilitator of Learning: Although the Web does not provide any novel pedagogic strategies it allows students to assemble coherent sets of media rich resources very easily. Meanwhile the role of teacher evolves from teaching of knowledge to being a facilitator of learning.

Educating is not a problem in search of a solution, but a matter of teacher and students trying to do things together that were intrinsically difficult; Teach & Learn. However, students in front of computers are as likely to be entering a state of 'entropic mindlessness' as anything else — I've had an experience, but where is the learning?

Teacher and Student Are One: An important principle in teaching on the Web is that a good test of whether a student has
learned the material or not is whether this student is able to successfully communicate it to others. Since we measure teacher performance in much the same way, the emphasis here is on having the student identify him or her self as “a teacher” early on in taking your course. In fact, after having some experience, you will realize that the teacher and student are one.

**Student’s Active-engagement Process Defines Success:**

Students will work in an active learning setting known as the collaborative learning environment. To accomplish this, I will pair you with another student to provide you with immediate support. Communication is a vital aspect of any distance learning program and it is especially true with this one. That is—so that you don’t feel isolated. You won’t be, and I don’t want you to feel like you are.

Since humans have evolved to speak face to face, it takes more brainwork to adapt to new forms of communication. With the phone, for instance, we can hear but not see, so our brains have to work harder to communicate. E-mail is a step worse, since we can neither see nor hear. Current study shows that e-mail takes five to 15 times longer to get the same message across compared to speaking face to face. Therefore, having a live person that students can talk to during the office hours is proven to me to be very effective in learning. The single biggest advantage in online learning programs is interactivity they offer, even with the instructor and the learner at different locations. This participation in learning is by itself a positive learning
experience. The Web-based learning atmosphere allows more effective interaction between the students and instructor. Therefore, it can be effective as traditional classroom learning environment where the space, seating, etc., could be inadequate.

As a new online moderator you will need to know how to carry out online the everyday activities of a teacher: how to build relationships with and between your students, how to encourage participation, how to start and stop discussions, how to deal with the shy, the dominating, the aggressive and the just-plain-awkward. I do encourage you to re-interpret your skills in terms of the new medium and to identify where online teaching can make a unique contribution. To enforce communication among teachers and students, I believe, the frequent homework assignment as I have already outlined on this site, is a must. Homework assignment and feedback from the teacher could be used as one of the performance measure factors for the teachers. An enthusiastic teacher changes problems into challenges.

**Student’s Preparation for Taking Online Courses:**
I’ve observed that, some students enrolled in online courses have difficulty adjusting to the new environment. While others actively participate, e.g., in discussions boards. And the third group somehow is lagging behind. A preparation process can overcome these difficulties before taking any online course. This may include orientation sessions, efficient time managing skill, staying focused, etc.
Interactivity Is a Must: Students will enjoy the course more if they are able to complete the tasks. Interactive online materials can give the student more rapid feedback than when work is turned in on paper and the evaluation comes back in a week.

In interactivity, what I seek is "what's going on in the student's head", in the dialogue between 'what I already think I know' and 'what I am trying to understand at this moment with the help of these resources'. If the computer can facilitate this, then hooray. But let's face it; books have facilitated this dialogue for the 'mentally engaged' student for centuries! The problem we have always faced is that you can't see that interaction taking place in the student's mind, so there are no guarantees; and how do you get the mental engagement in the first place? It can be a cop-out to assume that interaction with a keyboard is a visible sign of mental engagement and interaction.

Whenever interactivity concept implemented effectively, the result is a self-evident. As in a real classroom, one can automatically feel a connection to the teacher, even without meeting in person. The learner is able in expressing his/her feeling of excitement in learning, or perturbed about something he/she has done wrong.

How to Promote Teacher's Interactively with Students: The Internet has brought about dramatic changes in interactively and knowledge development, but extended educators should promote the same kind of interactively, discussion, inclusion, etc. in print media. One way of motivating students and instructors to get actively involved
in learning and teaching respectively is to have a few hidden questions within each weakly lecture note. Students are responsible for those questions too. These hidden questions are open-ended type, and not exercises. I find this approach effective in promoting interactively with online students.

Knowledge Sharing with Students: Incorporating student knowledge sharing into the design of our computer mediated learning environments also allows us to create true online communities in which students communicate outside the boundaries of the classroom. Only the learning resources must be delivered that bring about the desirable results such as focused learning, diffused learning to open your students' minds to new ways of developing thinking-for-themselves.

**Anatomy of Online Courses:**

The content of an online course is usually identical to the on-campus classes, but the delivery method is different. Instead of attending weekly on-campus sessions, students take the course as an Asynchronous Learning experience which means learning from anywhere at anytime using your own computer. Instruction will be delivered via Web pages, and e-mail.

Most likely, students will use the discussion forum for class communication. They are encouraged to raise questions and to respond to one another. The instructors also have online office hours, during which they will be in their offices and available by phone, fax, and for “live” discussion in the forum.
The instructors also arrange a “Student Orientation” session, during which you will learn how to study effectively and efficiently for the Web-based courses, prior to taking their course.

To succeed in a Web-based course, students should be motivated, and self-directed. The following are the minimum required items to complete the course work at a distance successfully:

* Seriousness: Online classes aren’t for goof-offs who seek easy credits. Virtual students should expect to spend at least as much time on homework as those in traditional courses.

* Self-Disciplined: It is up to students to budget their time and keep up with assignments. They must create — and stick to — their own schedules.

* Self-reliance: The ability to independently solve problems or research information is needed. Questions can be answered by e-mail, but that takes time.

* Careful Reading Skills: Because classroom lectures are replaced primarily by written words, students need to be careful and slow-thoughtful readers.

* Computer Skills: Students must be comfortable using computers and the Internet. That includes e-mail, Web browsing, downloading, and word processing.

Online learning enables you to extract information from different types of resources anytime, anywhere.
No one need be ashamed of what he or she does not know or how long it takes to master new information. Learning on the Web can be nonjudgmental and self-paced. Using advantages of this technology to expand learning opportunities is particularly crucial, because we live in a time when learning is becoming a necessity not a luxury.

5. Economic Impact of E-Learning:

With E-Learning you are able to offer anytime learning, at learners pace, and that too at substantially reduced cost compared to conventional training. You don’t have to bind by geographical limitations while rolling out a new training program and you can monitor the progress of all the trainees without moving from your seat.

All learning theories assert that human interaction is vital to learning. With advent of collaborative or blended E-Learning this potential drawback is also overcome. Trainees can communicate with the trainer or with each other using tools like chat, audio/video conferencing, discussion boards, and e-mails.

When big schemes demand huge amount of people to be trained in less time, the classroom can struggle to survive. E-Learning can provide some engaging and effective choices. When organizations undergo rapid modification and expansion, E-Learning can tap the requirements of training in less stipulated time.
For ‘number friendly’ people, here are some facts to make E-Learning’s case more promising:

* 40% of every dollar spent on training is spent on travel costs.
* For every $1 spent on training, there will be $30 in productivity gains in 3 years.
* 50% of employee skills become outdated in 3 to 5 years.

Source: Merrill Lynch “The Book of Knowledge”

However, E-Learning is not be all and end all to every training need. It does have limitation like up-front investment in IT infrastructure and content aggregation/creation, and your employees may have cultural issues while accepting E-Learning as a preferred mode of training.

* Cost effectiveness
* Scalability
* Compatibility
* Simple to use
* Integrated authoring
* Hosted/Managed Option
* Manage classroom and online session
* Synergizes business processes

Very soon the effectiveness of E-Learning would be comprehended in most of the corporations due to the ever-escalating growth in the number of E-Learning community; the day is not far-flung when E-Learning would invasion the classroom training. After a
dip stick check we came across that apparently, E-Learning results in a recognizable rate of information retention – with students demonstrating a 60% faster learning curve than those in instructor led classes.

E-Learning covers a broad set of applications including online training and education e.g., internet and intranet, computer-based training eg, CD-rom and digital collaboration. It can provide major benefits to local government at a time when the need is greatest. Also the massive amount of training expenditure is cascaded.

When big schemas demand huge amount of people to be trained in less time, the classroom can struggle to survive. E-Learning can provide some engaging and effective choices. When organizations undergo rapid modification and expansion, E-Learning can tap the requirements of training in less stipulated time.

* Good content with reliability.
* Change will be the primary driver of E-Learning in organizations, at both strategic and tactical levels.
* Today the E-Learning market has grown from 500 million in 1999 to 14 billion in 2005.
* Learner remains in control.
* Classroom will be challenged as the dominant form of learning delivery in the very near future.

Never the less in the ever changing paradigm of business scenario, where human capital has become so vital and critical issue:
the E-Learning industry would mount in growth, as it would undoubtedly; provide cost benefits to the contending entities.

Indian companies like Tata Interactive, NIIT are becoming more sophisticated, growing larger front end teams and making acquisitions in their key markets. NIIT bought out Cognitive Arts and now Tata Interactive recently announced its acquisitions of 2 European companies, Tertia Edusoft AG and Tertia Edusoft Gmb Local E-Learning companies in the US and Europe have been tom-tomming their advantages over Indian companies as being their sensitivity to local cultural issues, proximity to clients and reliability. These differentiators are fast eroding away with every new acquisition made by an Indian company. And to take on this new threat from Indian vendors, we can now expect US and European vendors to set up their own production facilities in India or buy out smaller Indian vendors. Case in point being the recent acquisition of Maximize Learning by US based Techbooks. Other players to have set up shop in India are Element K (in Chennai), Accenture (has Accenture Learning in Bangalore), GE Global (divested by GE in 2004 to General Atlantic Capital Partners & Oak Hill Capital Partners), IBM (has IBM Training Services in Bangalore) and smaller players like Inspired eLearning.

It’ll be interesting to watch and see if tier-II companies like Brainvisa and Hurix (who up until 2004-2005 were clocking about 4-5 Million USD in revenue as compared to the 20-25 Million USD being clocked by Tata and NIIT for the same period.) will use VC
funds to make acquisitions or be bought out by large US/European/South Asian companies.

5. Economic Impact of E-Learning:

The HE sector has for a long time been beneficial in supporting FE practitioners and learners. How frequently used are opportunities to utilise the subject expertise and research at higher education as a resource to make learning at Level 3 more engaging and challenging? The precisely targeted and skilful use of the internet as a teaching resource can draw learners into a global learning context. Thinking locally is no longer an option. Interaction between learners through video conferences can create a ‘buzz’ among learners for some time after the session has finished. The use of technology does not replace traditional delivery skills, but adds to the tools that classroom practitioners should have available to them.

Increased access and variety in modes of delivery are, however, only one side of the equation. We also need innovation - the drive to find ways of addressing future as well as current needs. Centres of Vocational Excellence (CoVEs) could be researching and piloting innovative teaching, learning and support techniques that take advantage of the opportunities made possible by technology to change the face of learning. Adult and community learners have a requirement for flexibility that can only be met by mixing modes of delivery, allowing them to access parts of their course materials online. Imaginative schemes to encourage disaffected learners to return to
learning and to find satisfaction in learning have been, and are being, devised through the use of mobile technology.

**Future Trends of E-Learning:**

As we approach the halfway mark of the new millennium’s first decade, the nature of the Internet, and just as importantly, the people using the Internet, has begun to change. These changes are sweeping across entire industries as a whole and are not unique to education; indeed, in many ways education has lagged behind some of these trends and is just beginning to feel their wake.

One trend that has captured the attention of numerous pundits is the changing nature of Internet users themselves. Sometimes called “digital natives” and sometimes called “n-gen,” these new users approach work, learning and play in new ways.

They absorb information quickly, in images and video as well as text, from multiple sources simultaneously. They operate at “twitch speed,” expecting instant responses and feedback. They prefer random “on-demand” access to media, expect to be in constant communication with their friends (who may be next door or around the world), and they are as likely to create their own media (or download someone else’s) as to purchase a book or a CD.

The manner in which this new generation of users is changing markets is captured evocatively in a document called *The Cluetrain Manifesto*. First posted online in April 1999, the document begins with the declaration that “markets are conversations” and

(263)
continues with a redefinition of the relation between producer and consumer. "Markets are getting smarter, more informed, more organized... People in networked markets have figured out that they get far better information and support from one another than from vendors." Jay Cross, writing in the same vein, talks about the "augmented learner" and the "hyper-organization".

In learning, these trends are manifest in what is sometimes called "learner-centered" or "student-centered" design. This is more than just adapting for different learning styles or allowing the user to change the font size and background color; it is the placing of the control of learning itself into the hands of the learner.

"The changing demographics of the student population and the more consumer/client-centered culture in today's society have provided a climate where the use of student-centered learning is thriving". Learning is characterized not only by greater autonomy for the learner, but also a greater emphasis on active learning, with creation, communication and participation playing key roles, and on changing roles for the teacher, indeed, even a collapse of the distinction between teacher and student altogether.

Taking this approach even further is George Siemens's Connectivism. "We derive our competence," writes Siemens, "from forming connections... Chaos is a new reality for knowledge workers. Unlike constructivism, which states that learners attempt to foster understanding by meaning-making tasks, chaos states that the meaning
exists—the learner’s challenge is to recognize the patterns which appear to be hidden. Meaning-making and forming connections between specialized communities are important activities.” Readers of Douglas Rushkoff’s Cyberia will recognize a similar theme as knowledge-working is no longer thought of as the gathering and accumulation of facts, but rather, the riding of waves in a dynamic environment.

The breaking down of barriers has led to many of the movements and issues we see on today’s Internet. File-sharing, for example, evolves not of a sudden criminality among today’s youth but rather in their pervasive belief that information is something meant to be shared. This belief is manifest in such things as free and open-source software, Creative Commons licenses for content, and open access to scholarly and other works. Sharing content is not considered unethical; indeed, the hoarding of content is viewed as antisocial. And open content is viewed not merely as nice to have but essential for the creation of the sort of learning network described by Siemens. Numerous writers, even, have called for what is often referred to as the “open society.” Tapscott, for example, writes about “the transparent burger” and “the naked corporation.” Mougayar tells us that “the future organization is an “open corporation.” And in a widely popular online essay Rob Paterson asked, “Is not the new “big idea” of our time to disintermediate the institutional middleman and to enable direct relationships? Are supermarkets eternal? Do we need factory
universities to learn? Is our health dependent on a doctor? Is the news what we see on TV?".

In short, the structures and organization that characterized life prior to the Internet are breaking down. Where intermediaries, such as public relations staff, journalists or professors, are not needed, they are disregarded. Consumers are talking directly to producers, and more often than not, demanding and getting new standards of accountability and transparency. Often, they inform the productive process itself, and in many cases, replace it altogether. Passive has become active. Disinterested has become engaged. The new Internet user may not vote, but that is only because the vote is irrelevant when you govern yourself.

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In the absence of any formal body like NASSCOM the Indian eLearning Industry is virtually devoid of any official figures or statistics. All pointers to the size of this industry are mostly guess estimates. The Learned Man! recently attempted to put together the
pieces of this puzzle. Relying upon information provided by friends through this industry an accurate image of the true size of the industry came to light which is represented here through this chart.

6. **Role of MTNL, ESCOM, AIRTEL, SATYAM Internet Services**:

**MTNL:**

The Role of MTNL is solving the problems of the human beings in different areas. Mahanagar Telephone Nigam Limited is always active. The company is also adding four lac lines each in Delhi and Mumbai. The company has the Board of Directors and they keenly look the performances, done by the company.

Through the company faces troubles in some sectors. For example, Broadband penetration in India is low because of a combination of low awareness, poor last mile connectivity. Lack Lustre E-Learning and value added applications and the relatively high telecom points out that WIMAX will increase the demand for Broadband particularly in unwired areas where the infrastructure for Broadband delivery is not in place. In wired zones cable and DSI will continue to dominate because of better cost structures. Company's every step is for the betterment to the people.

**ESCOM:**

Escom is solving the problem of Educational and Technological aspect. It is used for Economical purpose and To correlate the business and industry. The modern people has believed new technology for better than old technology.
AIRTEL:

Airtel is ever active in its role. The Government of India thinks global and is very determined to connect Indian farmlands to the Western World by developing India as a global sourcing base for fresh foods, be it fruits or vegetables.

No doubt, Airtel company and its management, taking deep step in the mobile services day by day. It is used in the E-Learning.

SATYAM:

Satyam has wide and broad scope in the field of computers and to aim of the company to provide sufficient facilities to the customers through internet at low rate, so that the poor people to get more benefits. Satyam's network spans 55 countries, across 6 continents. Satyam's reputation is great in the field of computers. The role of Satyam earned its market position in the several countries of the world.

Satyam internet services in E-Learning are highly admirable over 28,000 dedicated highly skilled IT Professionals, and work in developments centres are in India, the USA, the UK, the UAE, Canada, Hungary, Singapore, Malaysia, China, Japan and Australia and serve over 469 global companies, including over 156 fortune 500 corporations.

In fact, Satyam is a leading global consulting and IT services company. Its contribution in the field of E-Learning changed the life of the people. Satyam is really Satyam.
7. Contribution of NIIT, NIMACT etc. in E-Learning:

Contribution of NIIT

Global Learning Solutions for individuals, Enterprises, Schools and Colleges

For Individuals:

1. GNIIT for IT Careers.
2. Programs for Engineering and IT students.
3. Degrees in Alliance with Universities.
5. Cats for IT Professionals.
6. Career Edge for IT Skills for Non IT Careers.
8. Board exam preparation Solution.
9. SWIFT for Internet and IT Literacy.
10. Netvarsity for online Learning.

For Corporations: Enterprise Learning Solutions

1. Instructor - Led and C-Learning Training in IT and Soft-skills.
2. Advisory Services.
3. Custom Content Development.

For Colleges and Universities:

2. Custom Courseware Development.
3. Learning Delivery, Hosting Services.
4. Learner and Faculty, Support Services.
5. Student Administration.
6. In-Computer IT Programs.

For Government & Private Schools:
1. Integrated Solutions for Computer Education and Computer aided Education for K-12 Learners.
2. IT Integration Solution for the School System.
3. IT as an Education Transformation Tool.

Alliances with Global IT Majors:
1. Intel, Microsoft, Oracle, Sum-Total, Thomson Prometric.
2. NIIT at a Glance.
3. Assessed at SEI-CMM Level 5.
5. Corporate Social Responsibility Initiatives.
   (i) World Computer Literacy Day.
   (ii) International Women's Day.
   (iii) Bhavishya Jyoti Scholarships.

Awards and Acknowledgements:
1. Award for Excellence in innovative HR Practices from Delhi Management Association and Watson Wyatt.
2. World, the Global Human Capital Consulting Company.
3. Ranked amongst India's top 50 Most Trusted services brands by Economic Times Brand Equity Survey.

5. Angelz Asian Visionaries and Leaders, Singapore award for NIIT Chairman Rajendra S. Pawar for his.

6. Unparalleled contribution to the IT industry.


8. Advisor to help it become hub of knowledge based economy.

9. Dewang Mehta award for innovation in IT for NIIT Chief Scientist Dr. Sujata Mitra from Indian Government's.

10. Department of IT.

11. Ranked as the 16th largest global IT training provider by International Data Corporation (IDC) USA.

12. Top Training Company award 2003-04 from leading IT industry magazine, Data quest.

13. National Computer Literacy Excellence Award by the President of India for five Schools using NIIT's.


15. Among the top 20 companies in the training outsourcing industry as per training outsourcing com.

Global operations include Training networking:

1. America - Columbia, Mexico, Peru, USA.

2. Europe - Kazakhstan.

3. Asia - Bangladesh, China, India, Indonesia, Sri Lanka, Turkey, Vietnam, Malaysia, Nepal, Philippines.
4. Middle East - Bahrain, Iran, Oman, Qatar, Saudi Arabia, Yemen.
6. Australia/Oceania - Fiji.

National Institute of Management & Computer Technology (NIMACT):

National Institute of Management & Computer Technology (NIMACT) was established as a centre of excellence in management education. Through the initiative and support of eminent personalities and intellectuals who have rich varied and profound experience in the field of Management and Computer Technology.

To keep abreast of the latest developments in business and industry. Teams of teachers work in close-co-operation with various government institutions and industry.

With the globalization and liberalization of the economy, it has become the need of the hour to launch several branches of the institute in different parts of the country in view of the vast scope of employment opportunities in the field of Management with Computer application. Nodel centres are spread all over the country for equipping the youths not only with core and functional subjects but also with advance knowledge of management and its application meant for growing modern business houses.

NIMACT programme combines the highest academic standards in management and computer technology with a knowledge
of the demands of organisations, both public and private domestic and international to meet current and anticipated needs.

**Objectives:**

The institute aims of training students respond competently and confidently to the economic, social and organisational challenges arising from a rapidly advancing technology, a shifting economic base and global market place and to enhance the capabilities of organisation through research and consultancy.

National Institute of Management and Computer Technology (NIMACT) was established as a centre of excellence in management education, through the initiative and support of eminent personalities and intellectuals who have rich varied and profound experience in the field of management and computer technology. It made a modest beginning with one and two years diploma courses in different fields of management with computer application in 1995 and now providing the environment necessary to facilitate advanced learning for actualizing the managerial potential of its course participants.

To keep abreast of the latest developments in business and industry, teams of teachers work in close co-operation with various government institutions and industry.

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NIMACT's programme combines the highest academic standards in management and computer technology with a knowledge of the demands of organisations, both public and private domestic and international to meet current and anticipated needs.

Courses:

* Contact us
* Regular course
* Chat
* Courses
* E-Mail
* Details
i) Diploma in Business Administration and Computer Application.
ii) Diploma in Accountancy with Computer Application.
iii) Diploma in sales and Marketing Management with Computer Applications.
iv) Diploma in Personnel Management and Industrial Relations with Computer Applications.
v) Diploma in Computer Programming and System Management.
vi) P.G. Diploma in Business Administration with Computer Applications.
viii) P.G. Diploma in Marketing and International Marketing, Mgl with Computer Applications.
ix) P.G. Diploma in Accounting and Financial Mgt with Computer Applications.
x) P.G. Diploma in Computer Application and System Management.
xi) Bachelors' in Information Technology (BIT).
xi) Diploma in Information Technology (DIT).
xi) Master in Information Technology (MIT).
xiv) P.G. Diploma in Information Technology (PGDIT).
xv) P.G. Diploma in Telecom Technology (PGDTT).
xvi) Diploma in Electronic Commerce (DEC).
xvii) P.G. Diploma in Electronic Commerce (PGDEC).

**Short Term Courses:**
i) Window based Office Applications.
ii) IT enabled Accounting.
iii) Internet Website Design.
iv) Visual Programming.
v) Programming with Oracle.
vi) E-Commerce and its application.
vii) Web Server Administration and Advanced Applications.
viii) Medical Transcription.
ix) Linux Professional Course.
x) Data Warehousing and Data Mining.
xii) Systems Application.

xi) Call Centre Management.

xiii) Web-page Design.