E-School and E-Universities

Sambhav Jain*
Sohail Ali**
Anurag Joshi***

*Student, SVITS Indore
**Student, SVITS Indore
***Assistant Professor, SVITS Indore

Abstract

From technology that helps homebound students "attend" school remotely, to resources that connect students with speech and occupational therapists online, new therapy delivery models are transforming how millions of students are receiving special-education services worldwide. E-learning and 'edtech' are currently huge buzzwords in education, as the tidal wave of the internet and the digital revolution, already firmly ensconced in our homes and businesses, marches voraciously on into our classrooms and universities. From class blogs and school e-twinning schemes to scholastic 'apps' and online courses, education is going electronic. For those who have yet to experience the e-learning revolution, there is a treasure trove of rich benefits and exciting advances just waiting to be discovered, but some believe that there are also major pitfalls that must be carefully avoided.

The Paper "E-School and E- Universities" will try to give new vision to the Education System of the country and would help in enhancing and enriching the Quality Education for the country.

Introduction: The first step in technological evolution took a few tens of thousands of years: fire, the wheel, stone tools. And now paradigm shifts take only a few years' time. The one exponential trend people have heard of is Moore's Law, pertaining to the accelerating rate of computers and electronics. Every two years, we can place twice as many transistors at the same cost on an integrated circuit. They work twice as fast because the electrons have half the distance to travel, so the speed of computing doubles every two years. E- Learning refers to online education of any kind, whether it's an independent online institution, a university or school that has integrated online courses or coursework, or simple courses that you pay for and work on at your own pace. Eschools Management System a range of customizable features into one versatile software suite delivered through a state-of-the-art WebTop interface and designed to meet the demands of all members of a school's community. E-Schools Management System is a Web based system that can be used on internet as well as on intranet. It's a Role based application to generate On Time Reports.

Need for E-School Management System: e-Schools Management System is very Cost Effective, Easy to implement, fully Configurable & Customizable as per requirements. E-Schools Management System is fully featured for Teachers to Mark student attendance, View student Attendance based on month, date criteria, class wise, student wise etc. Mark Student Mark, View marks with auto grade, e-Schools Management System is a Web based system that can be used on internet as well as on intranet. It's a Role based weightage calculation. It is a comprehensive web-based School Management Software. It is designed for better interaction between students, teachers, parents & management. This management software very gracefully handles all the requirements for easy school management.

The software being web based can be accessed from anywhere in the world, which enables the students, teachers, parents & the management be in touch with each other at all times. This software has been developed exclusively for simplifying school management procedures. Considering large demand from various school managers this work was undertaken. The parents of students are very busy now days, this school management system helps the parents monitor their children from anywhere. They can check their children's academic performance from a remote location.
Using this school management system the users can see the student's class attendance in various formats, day-wise, monthly attendance, session or total attendance.
Marks or report card can be viewed or added, report cards generated, merit list, highest marks etc.
Assignment's & homework's can be viewed or posted using this software.
This school management system also has in-built exam software, which can be used for hosting online exams or tests.
Time table software is also included with this school management system which creates time tables for various classes, teacher's time tables. It effectively handles the teacher's substitution which is a very gruel some task for school administrators.

Comparing E-Schools in India at Global Level: A crucial benefit of online learning is that it will facilitate doing business in the developing world. It should therefore become central to the international strategies of higher education institutions. There already exist numerous free portals for lectures and coursework from top-quality institutions which are accessed from all over the world. China also engaged in this. The next step is turning this into a degree-delivering business model for the providers – one that will be welcomed by those governments in developing countries that face enormous problems in HE participation levels.
There is already a boom in online education in India. According to Bloomberg Business week, the online market generated $200m in revenue in 2008, and was expected to reach $1bn by 2010. Subjects that are particularly IT-friendly and crucial for India's economy, such as computer science, engineering, marketing and business administration, are particularly popular. Online delivery is also a response to one of the main problems facing Indian higher education: the lack of quality academic staff almost everywhere.

The demand is there and there can never be enough classrooms. How is Kapil Sibal, the Indian Minister for Human Resource Development, even going to start approaching his 30% target for gross enrolment ratio by 2020 without online learning? Broadband is spreading in India and China. There were 400m internet users in China in 2009, and more people have access to the internet through cheap smart phones and tablets. The Aakash tablet developed by IIT Rajasthan and Data Wind of London sells for $35. The price is subsidized and Sibal said the government aimed to distribute 10m of them to students over the next few years.
Online learning can also address the relative lack of flexibility in Indian higher education. Shiv Nadar, an Indian billionaire who has spent $400m on education charities, including a university in Uttar Pradesh, cites as a reason for his philanthropic work his frustration with the rigid structure of the system: 'I was never allowed to do anything cross-disciplinary. Why can't an engineering student learn physics?'Despite the messiness of the legal and regulatory environment in the sector, many foreign providers have managed to partner with Indian universities and grab a share of the online market. In 2007 Carnegie Mellon University tied up with Shri Sivasubramaniya Nadar College of Engineering in Chennai to offer IT courses. Cornell

University has partnered with South Indian service provider Easy Educate to offer courses in finance, management, and human resources.
A safe indicator of potential growth in an industry is the amount of money it attracts from venture capital funds: $74m was invested in Indian education companies in 2007. Some Indian companies are even competitive at the global stage, such as Indian Math Online, which targets secondary education students in India and the US.
As for China, it is telling that the share prices of companies specializing in online delivery are booming. Kaplan Open Learning has identified three reasons why there will be significant growth in online education in China over the next few years: 'the expansive and rural geography of the country, the high competition for fewer enrolment places (comparable to the UK or US, at least), and recent government-stimulated incentives to ensure compulsory learning for all'. 12.2m people used online education in 2007 according to Market Avenue, a 25% increase in one year. The size of the market quadrupled from RMB 10.6bn in 2004 to RMB 40.5bn in 2011. And there is huge potential for growth, as foreign providers have only recently entered this vast market. The University of Massachusetts became in 2008 the first foreign university approved to offer online courses and degree programmes in China. China and India are the fastest growing markets, but are not the only ones. South Africa and Brazil are also on the rise. Universities that will manage to enter successfully the global digital market over the next few years will have an advantage over those that hesitate to take the leap. Mergers between universities are likely, particularly in Europe and the US. Leaders in the online niches might be the first institutions to dodge the consequences of technological disruption in higher education and be the first truly global universities.

E-School Features:

The e-School web service package is designed in a way to provide services at a minimal cost which is sustainable and a low cost solution for Grassroots School & Colleges unlike any commercial service at market value.
At the moment, under e-School Service one can get a full website with a minimal cost including designing and uploading of the content.
However, if the need for a School & Colleges is more than just a website, such as e-commerce, shopping rack, or any such service, that could be offered on cost to cost basis.
Also, the website would be offered in any Indian language, and while the content preparation is responsibility of the School & Colleges, the gradual update mechanism and the system would be provided to School & Colleges after the first time readiness of the website. There would be user manual on how to maintain and manage and update the website.

The Salient features of e-School programme are:

- A lucrative cost effective functional web platform and content management system.
- A sustainable and scalable platform for information communication, outreach an networking.
- A fundraising gateway to attract benefactors.
- An easy to maintain web portal in any desired local language.
- Ownership of unique domain names, URLs and personalized email addresses.
- A bottom up content creation mechanism.
- A collective platform to exchange knowledge among School and Colleges.

- A content exchange platform for all stakeholders to know developmental information,
    - View/Take Attendance.

E- University Management System: It is important for education providers to impart personalized attention to students and at the same time work towards expanding the institution beyond existing boundaries. e University Management System is the best solution. It takes the responsibility of proper administration on its shoulders and help the faculty and staff to concentrate on students' development.
The university management system is well integrated division wise as well as departmental wise. It is a web based automated module that works towards handling the daily activities. In this system all the modules are custom made for each university. As the size and functionality differs in every university, the system is modifies accordingly. There are separate planning and scheduling modules to make the yearly, monthly, weekly or even daily plan and time table. There are course modules, HR modules, Placement Modules, Alumni Module to manage the activities of universities. The system also offers various modules for the students benefit like forums, online exams, online articles and information.

Advantages of University Management System:

- User friendly, browser based
- Multi-tier architecture
- Drill down and Tree View query support
- Easy maintenance of transaction log

3 Reasons for E-learning in Universities

The value proposition for e-learning in universities has three dimensions:

1. Enhanced Learning/Teaching: Stronger Professor and Student relationships via out of classroom communication (blogs, podcasts, discussion forums, IM) Online, searchable and shared learning materials including assignments, lectures and media-rich content that is accessible anytime anywhere Individualized assessment, diagnostics, and teaching.

2. Increased Organizational Efficiency: Relieve Administrative overhead: Deliver and hand in assignments online, less time spent grading, automated course registration and management. Automated testing and grade tracking in addition to cheating control, e-polling in lectures, improved attendance (virtual), accurate communication of deadlines/changes via student course calendar. More time spent teaching, less time spent managing

3. Reduced Running Costs: Reduction of costly and power-hungry computer labs with laptop student purchase programs and Wi-Fi infrastructure. Institutional growth and enrollment through online courses that can reach outside of campus and even globally e.g. an Open University model.

Who makes e-learning work?

Faculty members are the single most important stakeholder in e-learning in a university – they will make or break any e-learning deployment. They sit at the fulcrum-point between administration and students. They typically do not care about university IT issues – focused on research and academic outcomes. To make e-learning successful, Faculty must be engaged from the very beginning ensure both early-adopter and pragmatists are involved Need grass roots thought leaders in each department for 100% adoption. A Full-time faculty support person/consultant (usually instruction designer/technologist – well versed in pedagogy and technology) will accelerate adoption. Provide reasonable material/financial rewards to faculty that embrace the system. Hold course design contests that recognize faculty members that spend the time/effort needed to move a course online.

Impact of e-Schools on Teaching: According to a survey done There were strong similarities between the areas where lecturers used e-learning and where they perceived it to be effective, with the most commonly reported impacts being on planning, preparation and sharing materials with lesser effects on aspects of the teaching-learning interface and the smallest impacts on administration and management or efficiency. For instance, around three-quarters of lecturers considered that they were able to prepare for teaching, through researching and creating materials, more effectively as a result of e-learning. A smaller proportion (around two-thirds) felt that they were more effective in presenting information in front of the class and in making course materials available to learners due to e-learning use, with around a half believing they were more effective at developing learners' understanding. However, just over a quarter felt they were more effective at tracking learners' progress, and only one third felt that e-learning had assisted them to save time.

Impact of e-learning on learners: There were also similarities between lecturers' use of e-learning and their perceptions of its impact on learners. The majority felt that e-learning had helped learners become more effective at creating visual presentations, presenting written work and researching topics. Seven out of ten thought e-learning had helped make learners more effective at reinforcing their knowledge, half felt that learners engaged more effectively with the subject in the classroom and nearly half felt that learner motivation had increased because of e-learning use. E-learning was less widely noted to have made learners more effective in working in collaboration with their peers either inside (37 per cent) or outside (35 per cent) the classroom. Use of e-learning had a positive impact on some aspects of learners' ability to independently manage their own learning. Just over half of respondents felt that learners were more effective at working independently as a result of e-learning, and a similar proportion said that learners were better able to work at their own pace, and contact staff with queries. However, fewer felt that learners were more effective at catching up on missed lectures, organizing their work, or submitting work on time. The findings indicate that the majority of lecturers perceived an impact on some aspects of both their own, and their learners', teaching and learning experiences as a result of e-learning. However, they were more circumspect in their assessment of the impact on retention and achievement. One-fifth of lecturers said that retention had increased due to e-learning and just under one third felt that achievement had increased as a result of e-learning. On the whole, most respondents to the survey indicated that they were confident in their use of e-learning to plan and prepare lessons, to communicate with learners and to teach in front of the class. However, fewer indicated that they were confident using e-learning to track and monitor

learners' progress. Overall, lecturers were positive and proactive in their attitude towards the role of e-learning in supporting their teaching practice. Around three-quarters felt that they could readily identify opportunities for using e-learning and a similar proportion said that they were enthusiastic about its use. Moreover, there appears to be an expectation that e-learning would be used in the majority of colleges. Nearly nine out of ten lecturers said that senior managers in the college expected lecturers to use e-learning and just over half felt that learners expected e-learning use. E-learning appeared, nevertheless, to be regarded as complementing other aspects of teaching practice, as nine out of ten lecturers said that it was only one useful tool.

Access to e-School: The majority of lecturers who were surveyed (three-fifths or more) said that they had sufficient access to e-learning resources to plan, prepare, share materials and communicate with learners. However, around half said that the access that they and their learners had to e-learning resources in the classroom was insufficient. Most of the survey respondents were satisfied with the support provided in relation to technical support and training. However, they were less satisfied with the reliability of equipment and, even less satisfied with the time provided to incorporate e-learning into teaching and learning. Factors associated with the impact of e-learning There was limited evidence of a direct relationship between lecturers' and learners' reported use of e-learning for a range of purposes, and the end-point achievement, retention and quality of teaching outcomes in the institutions as a whole. Although such outcomes were more closely associated with background and contextual factors at college level, there was evidence that achievement in a college was higher where lecturers used e-learning more frequently for preparation and research for teaching. The extent and nature of learners' reported use of e-learning was associated more with their lecturers' attitudes and use of e-learning than with background and contextual factors.

Pros:

Engaging Young People: The new wave of exciting online learning programs and educational games has brought teaching into children's own territory like never before. Rather than associating school with boring essays and dusty blackboards, pupils are finding ways to learn whilst having fun, in the online world with which they are already familiar.

Social Media: The use of social media in education has been particularly successful in engaging and exciting young people about learning, allowing them to share and play with their peers and to use sites like Myspace and Facebook to set up and collaborate on projects in an exciting and immediate forum.

Education for All: The movement of education to the internet has opened up a whole new realm of opportunities for students of all ages and backgrounds, from all over the world. Suddenly anybody with an internet connection can attend a series of world-class lectures at Harvard University using video streaming, whilst online universities and degrees invite pupils from the most isolated backgrounds to study alongside their peers. Thanks to education technology, the opportunity for students from economically disadvantaged backgrounds to self-educate has increased exponentially.

Worldwide Learning: The opportunity for young people to engage with other schools and students across the world has opened up a hugely rich insight into the lives and customs of different cultures and religions, providing a diversity of experience hitherto unimaginable in the

school classroom. E-twinning allows profitable and exciting links to be formed between schools from different countries, sharing information about completely different cultures, lifestyles and traditions.

Sharing Resources: For teachers and educators, the introduction of personal learning networks and sites like twitter and web 2.0 have enabled the beginning of an exciting worldwide network. Here education resources, tools and ideas can be shared and spread at the click of a button.

Cons

Getting Left Behind: There is a risk that the boom in online learning and education technology has shifted focus away from traditional teaching methods and classroom practice. While the advantages are enormous, there is also a risk that the injection of money and attention in one direction may leave a vacuum behind. Not all education takes place online, and it is important that we also continue to value and develop our offline teaching practice, to support those educators working in a more traditional environment.

A New Generation: It has been difficult for some older or less techno-savvy teachers to get on-board with the new media wave in education, with fears that their lack of experience with computers may leave them out in the cold and facing criticism for their 'old-fashioned' teaching methods. It is vital that governments and schools provide training and support to induct teachers into new e-learning programs and train them to use education technology effectively.

Expensive Electronics: Many well-funded schools and colleges have reported exciting strides in e-learning and fantastically successful conversions to digital courses and iPad-only lessons. However it is important to consider the dangers of excluding schools in more disadvantaged areas, where tight budgets and over-full classrooms make it impossible for pupils to benefit from access to the same kind of modern technology. In many inner city state schools in the UK, pupils still share old and faulty computers between a whole class, a far cry from the slick e-learning success stories of pupils using brand new laptops to bounce blue-ray questions and answers across the classroom.

Distractions and Dangers: Whilst the internet provides a plethora of exciting and informative educational resources, it is also rife with less school-friendly distractions and even dangers. The temptation to slip off onto social networking or online gaming sites may make classroom control a challenge, and the ever-present threat of adults with ill-intent must always be considered. And alongside the meteoric rise of e-learning, internet bullying has sadly soared as well. Tight control of electronic parameters by teachers and parents is important, but can be difficult to enforce, and internet safety must always be a top priority.

Impersonal Teaching: With a lack of face-to-face contact may come a severing of the bond between teacher and pupil and the human connection that is so important to successful learning. The dangers of some pupils slipping off the radar or going unnoticed by a teacher in e-learning have been well documented and it is vital that face-to-face engagement and traditional teaching methods continue alongside new technologies. The new opportunities and resources presented by education technology are enormously exciting, but it would be a great shame if our excitement about them caused us to lose the valuable personal educational techniques built up by teachers in classrooms over the past decades.

Conclusions and Implications: In a context of overall positive attitudes, on the part of lecturers, towards e-learning, the research findings indicated that there were some possible barriers and enablers to e-learning use in further education. These included:

• Having an ethos and environment within an institution through which lecturers can improve their confidence, see the potential for e-learning, and have a positive attitude towards its use, could contribute to increasing its use among lecturers and, in turn, learners.

• Ensuring that lecturers have sufficient access to e-learning resources to use in the classroom, in addition to outside class, could be a key enabler in developing lecturers' confidence in the use of e-learning and increasing its use at the teaching and learning interface. In turn, increased use by lecturers could lead to an increase in the use of e-learning in this way by learners.

• Providing sufficient support for lecturers, particularly in terms of providing enough time for them to develop and embed their use of e-learning in their everyday teaching practice, could be a key enabler for increasing the use of e-learning in FE and supporting the achievement of intermediate outcomes, such as the development of learner understanding and independent learning.

Successful preparation for online learning is not significantly different from classroom preparation. As with any new concept, however, it is important for an instructor to communicate how existing practices integrate with a new concept (in this case, learning online). High dropout rates are not a function of the online learning environment - they are a function of poor course design, lack of instructor familiarity of the environment, and learner preparation. Preparing learners to learn online is perhaps the greatest skill that we can offer. In an era of "lifelong learning", skills for acquiring knowledge play a greater role in success than do knowledge concepts (as they often cycle to obsolescence).

The impact of e-school in higher education is understood from the enhancement of the student-centered learning paradigm. Using educational technologies evoke a new relationship within the educational elements of the triangle of learning (teacher-student-content), which now are link with technologies as providers of synchronous and asynchronous communication and knowledge construction. In addition, educational technologies have the ability to transform the educational practices, not only by creating new spaces and educational contexts increasingly diverse, influential and critical, but also by combining e-learning practices with face-to-face contexts (blended-learning).

The greater or lesser quality of e-school, and the process of knowledge construction itself, depends on many complex factors that we introduced as diverse criteria in this chapter. Beyond the interactivity and dynamism allowed by multimedia devices, it remains still necessary the figure of the teacher, mainly in the designing phase. The characteristics of resources and applications that encompass e-learning are not sufficient to guarantee effective learning, since it depends, primarily, on the quality of the interactions provided between the student and the content, and between the stakeholders (teachers and students). E-Learning Report's recommendations and strategies will generate a constructive, responsive environment where University instructors will receive the support they need to use e-learning. Students will also participate in learning environments that prepare them not only for success as lifelong learners, but also to become leaders who dare to discover. The E-Learning Report provides a foundation

for a process to continue to review and improve our learning environment by the full engagement of the University community in an ongoing effort to examine the issues, explore the emerging technologies, and determine the priorities.

References:

- OXBRIDGE ESSAYS BLOG : Dated 5th August 2011 in Education News
- Yahoo Answers with Source : http://www.coggno.com/
- Kineo : A global workplace learning company , City & Guilds Business
- THE OBSERVATORY on Borderless Higher Education , Newsletters ,
- Borderless Report November 2011
- http://eschool.emsme.in/eschool-features/