

e-Learning: Challenges and Solutions – A Case Study

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Abstract. The concept Virtual Interactive Learning (VIL) or e-Learning has evolved significantly over the past few years. VIL represent an attempt to break away from traditional lecture-style delivery of education by reaching out and offering education to anyone, anywhere through online platforms open to all who have Internet access. This research paper focuses on the initiatives taken by a reputed management school in India towards conceptualizing and delivering of management education to working professionals through the VIL mode. Through an empirical study, the authors have tried to bring out the various challenges and concerns that the institute faced while running the VIL Programs over the years. This research is also intended to highlight the measures taken by the institute to combat the challenges, to ensure seamless delivery of the programs.

Keywords: e-Learning; web-based learning; online learning; virtual interactive learning.

Introduction

With advent of technology, e-learning has rapidly grown from being just another term or concept into a hard reality. It is now available in organizations in various forms – be it online learning, computer-mediated learning, blended learning, web-based learning, or mobile learning and they all have one thing in common, i.e. ability to use a device connected to a network. E-Learning is a concept that helps learners learn from the learning materials from anywhere, at any time and any liked pace in which they want to learn. It is a form of social learning, focused at answering the needs of learners. It is a tool supported by latest technology to make the learning process more flexible, innovative, learner-centered (Demiray 2010, Ozuorcun & Tabak (2012). It is a special method of collaborative learning process, conducted online through Internet technology where the teacher and the student are not required to be present at the same place at the same time (Yucel 2006). It is becoming popular during various spheres of life e.g. in higher education, industry and government organizations. Internet based instructional program uses the technology of World Wide Web to create a proper learning environment. As the new economy requires more and

more people to learn new knowledge and skills in a timely and effective manner, the advancement of computer and networking technologies are providing a diverse means to support learning in a more personalized, flexible, portable, and on-demand manner (Dongsong et al., 2004). The technology enables the education providers to update, share and distribute the learning resources. According to 'State of the Industry' survey conducted by American Society for Training and Development (ASTD), the percentage of companies using technology-delivered training increased from 8% in 1999 to 27% in 2004, and about 75% of the technology-delivered courses in 2004 were online (Sugrue B, Rivera RJ 2005). Newman and Scurry (2001) identified that over 1,100 institutions of higher education in the United States offer online courses. Symonds (2003) found that the Army also uses online instruction as a retention tool, with over 45,000 soldiers in 50 odd countries pursuing advanced degrees online.

Dimension of e-Learning

The extent of e-learning technology use in course delivery varies widely. The variations in the configuration of e-Learning offerings can be described through a number of attributes, as mentioned in below table (Wagner, N., Hassanein, K., & Head, M. (2008).

Table: 1 Various Dimensions and attributes of e-Learning.

Dimensions	Attributes	Meanings	Examples
Synchronity	Asynchronous	content delivery occurs at a different time than receipt by the employee	module delivered via intranet/internet or email
Synchronity	Synchronous	content delivery occurs at the same time as receipt by the Employee	lecture delivery via web cast, webinars, con-call and video-conferencing
Location	Same place	students use an application at the same physical location as other students and/or the instructor	using a GSS to solve a problem in a classroom
Location	Distributed	Students use an application at various physical locations, separate from other students and the instructor	using a GSS to solve a problem from distributed locations
Independence	Individual	students work independently from one another to complete learning tasks	students complete e-learning modules autonomously
Independence	Collaborative	students work collaboratively with one another to complete learning tasks	students participate in discussion forums to share ideas
Mode	Electronically only	all content is delivered via technology, there is no face-to-face component	an electronically enabled distance learning course
Mode	Blended	e-learning is used to supplement traditional classroom learning	in class lectures are enhanced with hands on computer exercises

The Docebo Report (2014) revealed that the worldwide market for self-paced e-learning reached \$35.6 billion in 2011. It also estimated that the revenues should reach some \$51.5 billion by 2016. With the aggregate growth rate of 7.6 per cent, several world regions seem to have significantly better growth rates. The report further pointed out that the highest growth rate is in Asia at 17.3 per cent, followed by Eastern Europe, Africa, and Latin America at 16.9 per cent, 15.2 per cent, and 14.6 per cent, respectively.

As far as e-Learning in India is concerned, As reported by India Today on 8th September, 2014, research indicates that the industry is set to reach \$1.29 billion

by 2018, while some highly optimistic sources claim that the market is much bigger, sizing up at \$40-60 billion by 2018. Regardless, it's generally agreed that with current annual growth rates of 17-20 per cent, the industry is poised for significant growth. Already, India is a major source of e-Learning content and development for the world market, thanks to our low-cost and highly educated workforce in higher education.

The present paper aimed at tracing the evolution of e-Learning initiatives by a reputed management institute in India for the benefit of working personnel and to identify issues and challenges in this endeavor.

History of the Institute

XLRI, Xavier School of Management is a leading B-school based in Jamshedpur, Jharkhand, India. XLRI being, India's first management school was set up by Jesuit priest, Fr. Quinn Enright, S.J in 1949 where management and trade unions courses were offered, initially. Gradually, a two year full time program was set up in industrial welfare in 1953. XLRI is acknowledged as the oldest B-school in the world along with Harvard, Wharton and ESCP by Economic Times, India 2015. Fr. Enright visualized XLRI to be a partner in the liberation and development journey of the independent India with a vision of "renewing the face of the earth". Over the years XLRI has developed its own identity. The hallmark of this identity is, not to walk on the beaten path but to strike new routes and not to benchmark but to be benchmarked. This enterprising and pioneering spirit can be witnessed throughout the history of XLRI. The programs include a full-time two-year post graduate program in Business Management, Human Resources Management and Global Management, General Management (full time) program for fifteen months (PGDM-GM), doctoral fellow programs (FPM), executive fellow programs (EFPM) and many executive education programs. XLRI features consistently among the top business schools of the country. In 2014 XLRI was ranked No. 1 among Private business schools in India by Outlook India, India Today, The Week and Business Today.

Virtual Interactive Learning Initiatives

XLRI Jamshedpur has been the first-ever Institute in India to have successfully propelled in the direction of Virtual Interactive Learning, delivery in 2001-02. "Working professionals / executives who cannot come to XLRI Jamshedpur to learn business and management studies, why can't we go to them, in their cities to educate them?" was the question, that had been answered in the year 2002, with the inauguration of the first Postgraduate Certificate in Business Management (PGCBM) batch with 250 students through Hughes Communication India Ltd, as the technical partner.

Gradually XLRI moved on to offer couple of long duration programs like the Postgraduate Certificate Program in Human Resource Management (2003), Postgraduate Certificate Program in Logistics and Supply Chain Management (2007), Postgraduate Certificate in Sales and Marketing Management (2007) and Postgraduate Certificate Program in Retail Management (2007).

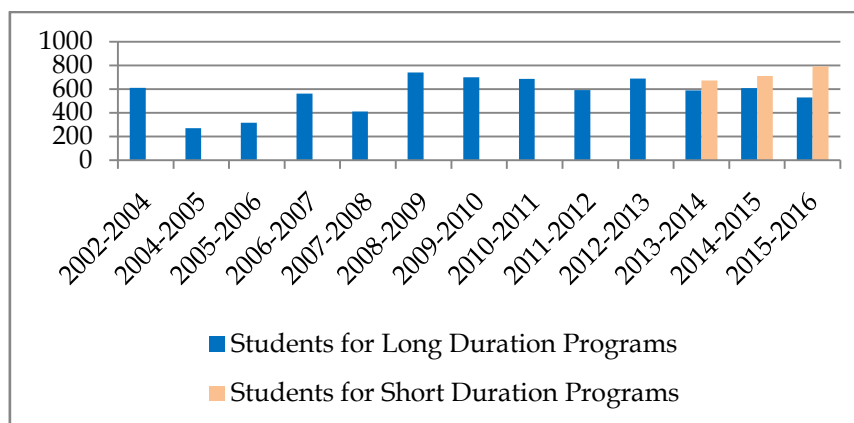


Figure: 1 Enrolled Students over the years.

The one Year Virtual Interactive Learning (VIL) programs are challenging courses that demand focus and dedication because of the curriculum design and teaching platform. Professionals with at least two years of work experience post their full-time graduation (10+2+3 format or equivalent diploma) degrees are eligible for admission into these programs. Selection is through personal interviews where academic and professional background along with Statement of Purpose (SOP) is taken into consideration. The program has been designed to expose participants to relevant trends and practices in business and management. In conjunction with its technical partners, XLRI has created a virtual learning environment, one that allows students from various cities across India to interact with the faculty, to learn from them, and to gain their quest for higher education through these long duration programs.

The curriculum and schedules are designed to accommodate working professionals, with classes being held over the weekends or after regular work hours. The pedagogy is a mix of case studies, assessments, assignments and group projects, ensuring that students gain an all-round insight into the subject at hand. Students are provided with the learning materials, either in the form of books or e-resources prior to the commencement of the courses. Communication with the students is through a dedicated Academic Information Systems (AIS) where relevant details along with examination dates, grades, resources etc. are updated which intend to ease the life of the students. Classes are held across cities in India, with students retaining the flexibility of attending classes wherever they are without hampering their personal and professional life. One of the technical partner, that is, Hughes Global Education India Limited (HGEIL) has created 88 classrooms/study centers and the other, Unified Collaboration Services (UCS) has created 43 classrooms/study centers in different locations across India.

Campus Component and Graduation Ceremony are the integral parts of the Programs. Every student has to attend campus classes for five days and imbibe the culture of the Institute. Certificates are awarded to the students during the Graduation Ceremony, which is held at the XLRI Campus.

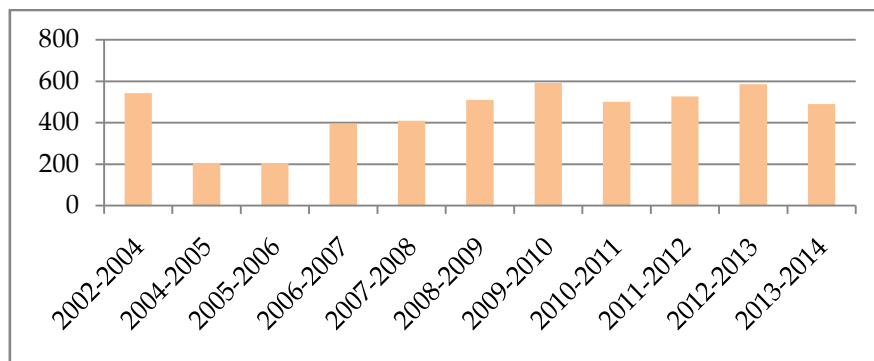


Figure: 2 Number of Graduates.

Over the years, the careers of around 5000 working professionals have been shaped and enhanced by the dint of quality learning and knowledge, gained through this medium. Thirteen years of market dominance, speak volumes about the acceptability of the programs and reach. The institute keeps on reviewing and redesigning the course content based on the industry inputs and participants' feedback.

The technical partners played a pivotal role for the successful delivery and offering of such programs. The technical collaboration over the years grew stronger in numbers and its services. From HGEIL (2002), to Reliance Communications (2005), UCS (2014), Tech Mahindra (2015), Talentedge (2015), NIIT Imperia (2015) and ICICI Direct Center for Financial Learning (2015), all have outgrown the expectations of the participants. The technical partners have helped to create an environment that resembles the regular classrooms, with students able to interact among themselves and with the teaching professors, asking and answering questions.

The constant up gradation of technologies, have provided the opportunity to cater to the ever changing need of the students. HGEIL, formerly known as Hughes Communication India Ltd. (HCIL) is an advanced platform that combines the critical aspects of verbal and visual communication - two-way video and audio synchronized with rich content, collaboration, discussion groups, application sharing and live interaction. The communications platform reaches large numbers of people in real-time. Live sessions become highly intuitive and effective, as video and rich interactive content are delivered directly to the desktop of the student. Very small aperture terminal (VSAT) is a communications technology that enables reliable two-way transmission of data via satellite. The platform is a scalable application that combines quality video with two-way audio and data transfer to enable live delivery. It offers live collaboration tools such as application sharing, whiteboard annotations, discussion groups, chats and guided browsing.

On the other hand, UCS offers the unique high definition video conference based technology. The experience, delivered over a 50" HD LED TV provides a simulation of real time classrooms, unprecedented in the Indian executive education space.

Apart from imparting education through the online/virtual mode, the upgraded technologies have helped the Institute to deal with the strategic challenge of participants' retention and engagement. The initiatives to engage the participants towards the program have been enhanced through hosting couple of contests, celebrating the years of 'our VIL Journey virtually', interactive sessions by faculty, alumni and industry experts and through social medium (Facebook, LinkedIn, Twitter, You tube).

Time, being the major constraint in today's era, has compelled the corporates and individuals to go for accelerated programs which demands less time. To serve this need, we have designed and offered couple of short duration, e-Management Development Programs (e-MDPs). Initially, a short duration program was designed and delivered for the employees of Nigeria. To continue with the legacy of such programs in India, the Institute has designed and delivered short duration programs in specialized areas and domains such as Human Resource management, Human Resource Development, Corporate Finance, and Strategic Management. These short duration programs are run in collaboration with several technical partners which offer a comprehensive direct-to-device or direct-to-desktop education suite with real-time interactive and participative virtual classroom sessions. It's beneficial for the participants as it offers them flexibility and eases out learning, from anywhere.

Today's dynamic business environment is competitive, far-reaching, transcending boundaries whilst seamlessly connecting economies across the globe. Pursuit of excellence in academics, personal values and social concern has been the goals of XLRI and the students truly share this vision. As a consequence of the academic rigor at XLRI, it strives to shape thoughtful leaders who will create value for their organizations and their communities without compromising on their professional and personal lives.

Issues and Actions

It is true that the institute could run the programs successfully for more than a decade. However there are certain issues and challenges faced by the Institute in conducting these programs. They are as follows:

- Institute Interface

Residential programs have the advantage to portray and radiate the culture and heritage of the Institute whereas the virtual /online programs do not get the scope to portray the culture and heritage for their students to inculcate. To address this issue, the institute has designed the campus component, where the students get a chance to visit the campus to get the experience and opportunity to imbibe in the culture and heritage of the Institute.

- Faculty Interface

Unlike residential programs, professors prefer the generic mode for case discussions over live and corporate specific cases through the virtual mode. The concern area for the professors is the usage of advanced technology by the students, in the form of smart phones etc. as recorders where the lectures/discussions of the professors are recorded /copied, may lead to copyright issues. To address this issue the Institute stopped using unpublished cases of the professors concern, and started using licensed cases like HBR to avoid the legal

implications and serve the students with the most sought after cases, for their better understanding.

- Designing the learning content and pedagogy

The traditional form of education has the scope to study student's behavior (like reaction, understanding and acceptability etc.) and design/re-design the pedagogy and contents whereas for online/virtual education the scope is limited which intends to reduce the quality of online pedagogy and curriculum. This issue is addressed through regular participants' feedback. Using this input learning content and pedagogy are reviewed and redesigned.

- Interpersonal connect with the students

The culture at XLRI promotes a friendly atmosphere among the professors and students which is difficult to replicate through the online / virtual mode. To address this issue, professors and academic and non-academic personnel contact details are made available to the participants. They can interact with them through e-mails or phones or forums. The campus visit adds to the idea of building the rapport among students and professors through one to one interactions.

- Assignments and Tests

Assignments/projects through online mode may tempt the students to indulge in unfair practices whereas the traditional form of education encourages the students to work and report the progress made and review periodically. To address this issue the bars to evaluate the assignments have been raised by the usage of software named "Turnitin" to scan assignments which compels the students to work for the assignments. Third parties are deployed, along with the installation of proper surveillance cameras to keep a strict check on the way students are appearing for their assessment tests. Of course, the student's manual clearly defines unfair practices and appropriate punishments.

- Dependence on the technology

With online/virtual mode of education, students are bound to depend on technology which may affect the quality of program delivery. Connectivity, system failures can be termed as some of the challenges related to technology. As a remedial measure, the institute migrated from the technology of VSAT for online education to VC and now to web based technologies which reduces the challenges to a great extent, if not totally eradicates it. Students facing technical issues during the sessions are also given the opportunity to avail the archives (recorded sessions) for their perusal.

- Time Management

Online education gives the scope to procrastinate, hence the students can learn only through proper time management whereas the traditional form of learning provides very little scope for the students to procrastinate as there is a possibility of constant follow-up. Scheduling of multiple assessments and assignments at regular intervals infused the sense of responsibility within the students to work on deadlines.

- Isolation

Virtual mode of education brings in isolation among students as they are remotely located, taking up sessions and misses the classroom environment and experience of peer discussions etc. Incorporating compulsion for students to attend the online sessions by introducing a mandatory component for

attendance [Technology in the form of pop ups at regular intervals along with tapping the Log in and Log out time of the participants is used to maintain the attendance logs] and group assignments and projects are introduced to help the students interact with their peers, and share their experience.

- Study materials

Soft copies of the study materials are uploaded in AIS for the benefit of the participants. In addition to soft copies of the study materials, the participants are given printed text books. Sending the printed material to all participants across India on time is a challenge. A long term contract with a courier company helped in resolving this issue.

- Natural calamities

Natural calamities such as like heavy rains affect the quality of online delivery of the programs. Upgraded the technology from VSAT to Internet based technologies reduced the concerns to some extent.

Conclusion

Though the Institute took specific actions based on the issues cropped up time to time, it is always possible that students will have some issues given the large number of students spread across India. Therefore, it is always desirable to have a dedicated team of academic and technical personnel with the traits of good communication, both written and oral, a passion to serve the executive students with compassion coupled with sincerity and honesty. The timely redressal of participants' grievances would help in the long-term success of the program.

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