A MODERN 2.0 E-LEARNING PLATFORM IMPLEMENTED AT LUCIAN BLAGA UNIVERSITY OF SIBIU

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ABSTRACT: Our proposal explores access issues, availability and potential of e-Learning education in creating a modern learning environment as well as enhancing cultural understanding for both Romanian and foreign students at Lucian Blaga University of Sibiu. We argue that the use of e-Learning can be further extended to corporate training and other learning environments whose primary aim is facilitating knowledge, increasing access and enhancing cultural understanding and building mutual trust. Moreover it squeezes out the old-fashioned learning which is limited and constraint. Unlike that, a learner should be given a free hand with regard to selecting the course schedule. One should be allowed to learn just-in-time, on-demand. Moreover, he/she should have influence on the contents of the classes. Learning should be customized, initiated by user profile and demands. This is actually what e-Learning is aiming at.

1. INTRODUCTION

E-Learning defines the means of delivery of educational content through any electronic media, including the Internet, intranets, extranets, satellite broadcast, audio and video tapes, interactive TV, CD-ROMs, interactive CDs and computer-based training. It is expected to squeeze out the old-fashioned learning. In the old approach, a student is passive, pushed to learn. He or she is obliged to obey some rules denying when and where the classes take place and what their actual content is. Thus, the learning process is constrained and limited. Unlike that, a learner should be given (to some extent) a free hand with regard to selecting the course schedule. One should be allowed to learn just-in-time, on-demand. Moreover, he/she should have influence on the contents of the classes. Learning should be customized, initiated by user profiles and business demands [1]. This is actually what e-Learning is aiming at.

There are two communication technologies used for e-Learning: synchronous and asynchronous. The first expects students to gather face-to-face or use chats, video conferences, etc. The latter approach is characterized by using modern Web applications such as blogs, wikis or discussion boards as tools for sharing opinions or learned experience. All in all, both approaches support informal learning [2].

2. DEVELOPMENT OF E-LEARNING TECHNOLOGIES IN ROMANIA

After 1990, the role of Romanian universities has become crucial in (re)negotiating a new relationship with online and lifelong learners and in bridging the gap of social, age and educational disadvantage between intra-national and international communities of students. Distance education was the first to be introduced through state initiatives and to take account of all missing lifelong learning issues which concern all components and levels of education and training and includes non-formal and informal education contexts alike. This accounts for the lateness, occasional slowness and difficulty in the implementation of all educational segments, starting with early education, education in family, education through mass media, education for democratic citizenship, training in enterprises, initiation into ICT as well as developing modern learning technologies. Following the Soviet Union model – a model known for its extensive use of distance education for post-secondary studies in conventional universities, teacher training and polytechnic colleges as well as in a number of specialized distance teaching universities – correspondence education has been combined with face-to-face sessions in a "consultation model" so as to enhance distance education teaching and learning [3]. Furthermore, Romania has been catching up very fast in the last decade on ICT learning, as universities have been called to respond to ever new challenges, bringing not only new forms of technology-enabled education to learners of all ages, but also making sure these devices reach out and contribute to social cohesion and bonding. These efforts have characterized along a whole shift of paradigm in education, determined by flowing (interchangeable) roles, shared resources, virtual facilities and combined asynchronous teaching and learning processes. As a result, the emerging generations have better IT skills and competence, which make them more prepared to respond to the new national and international labour market demands and specializations. According to an EC Report, between 2000-2006 in Romania, the annual growth rate of graduates in mathematics, sciences and technologies was 5.5%, that is 1.1 percentage points above the European average rate (Preliminary Report of the European Commission in 2008, regarding education and training progress). For example, in 2003/2004, this annual growth rate represented 24.4% of the total number of Romanian graduates, which ranked Romania higher than other recently adhered EU member states such as Hungary, Poland, Latvia, Estonia, Slovenia, and even well above the EU average rate, 24.1% (Eurostat 2005) [5].

3. ROMANIA-CHINA RELATIONS

Against this digital knowledge background, in the last decade, Romania and China’s excellent economic relations have blossomed significantly due to the entrepreneurial model, which was initially based on identifying an empty niche in low-price consumer goods and setting up networks of “Chinese markets” and “Chinese shops”. This was first developed in
Eastern Europe and then replicated in other regions and represented the foundation on which Romania, a country with a comparatively small size and population, was to develop the capabilities to build a successful and fast-expanding trading relationship with the world’s largest market. To quote an example along this line, in 2002, the trade volume between China and Romania reached USD 0.753 billion, with an increase of 112.6% from the previous year. So far, there have been nearly 8000 Chinese companies registered in Romania with a total investment of USD 51.7 million, 0.6% of the total investment Romania absorbs from foreign countries. With this development, the demand for expertise in Chinese business and training in Chinese language and culture has increased dramatically over the last decade. A better knowledge and greater understanding of China has become thus crucial to increasing Romania’s competitiveness and capacity to take advantage of the potential of the Chinese market, with a mutual benefit and potential for parties, with China on the one hand and former Eastern bloc countries (more related in former ideologies than the rest of the European countries), on the other.

To meet such increasing demand, several Confucius Institutes were set up in Romania, the first of which was established in 2006 at Lucian Blaga University of Sibiu, in cooperation with the Beijing Language and Culture University (BLCU) China. It was intended to strengthen educational cooperation between the two countries, support and promote the development of Chinese language education as well as increase mutual understanding between the peoples of Romania and China. Very soon, it became clear that multilingual e-Learning contexts can successfully enhance communication and appreciation of intercultural differences which can break down barriers, build trust and strengthen relationships, open horizons and yield tangible results.

4. E-LEARNING SOLUTIONS AND DESIGN AT LBUS

At Lucian Blaga University of Sibiu, the number of incoming foreign students is increasing every year along with a fast growing availability for new modern e-Learning technologies; in this context, we argue that with an ever larger number of foreign exchange students who wish to take up Business and Cultural Studies (in Romanian) all the while soaking up Romanian culture and civilization and an increasing number of Romanian students accessing our university’s e-Learning platform on the other, a reconsideration of intercultural interactions and learning dynamic processes has rendered participatory e-Learning more adequate and better equipped as a learning technology for the newly formed communities of foreign and Romanian learners (who are close in digital knowledge and Internet accessibility).

In mixed study groups of various sizes and ages, split in two faculties and on different schedules, e-Learning technologies are apt to bring foreign and Romanian students alike to a common learning environment where classes are not only to be monitored by facilitators, but also constantly shaped anew.

With adequate equipment and professional monitoring, we maintain that this new engaging model of learning can be further extended multi-cultural training with slight alterations for a differently focused curriculum and architecture of web course design.

5. PRESENTATION OF THE LBUS E-LEARNING PLATFORM

The shift from former education institutions and processes, toward diverse learning opportunities that are more process and outcome oriented, has been at our university gradual, constant and accelerating. In the following, the technical data on the most recent e-Learning system implemented at our university show why and how this new engaging modern learning technology can better serve all learners, particularly the new Chinese community of learners.

In 2010, through the European Structural Funds, the POS CCE Sectorial Operational Program funded and assisted Lucian Blaga University of Sibiu in the implementation of a complex e-Learning platform with a view to increasing regional development through a more open and flexible education system. The immediate aims were the improvement and diversification of educational services as well as increasing access for traditional and non-traditional students, irrespective of prior training, money availability and regional distribution; achieving a better and closer learning output monitoring, overcoming traditional education barriers of face-to-face teaching and learning by introducing participatory e-Learning; and last but not least, enhancing and diversifying participatory e-Learning activities, etc.

This e-Learning Platform is based on Workplace Collaborative Learning, an IBM-standard tool for online personalized E-education resources. The system has its own relational database (WCL database) – where the entire courses’ materials are kept and which also stores info on users, courses and settings for both Learning Server and Delivery Server [6]. It is linked to the university’s student management database (UMS database) from where it takes the necessary information about the student and teachers so that it will be to generate authentication information for them. The course packages have to be created in a SCORM compliant format and then uploaded on a FTP Server. The Workplace Collaborative Learning service is the meeting place for all our university’s e-Learning services. It is built on top of WebSphere Portal Server which is a foundation of course offerings with enterprise portal capabilities that enable you to quickly consolidate applications and content into role-based applications, complete with search, personalization, and security capabilities. It sits on top of WebSphere Application Server which offers valuable options for a fast and flexible Java application server runtime environment and enhanced reliability and resiliency. The WebSphere Application Server hosts a dynamic web application that requires web tier clustering and failover across multiple application server instances.

The Workplace Collaborative Learning, which provides workspace and communication facilities, such as: document libraries, Wikis, blogs, forums; an Instant Messaging Server and Virtual Classes, which facilitate chat among users as web server through the IBM Lotus Sametime Platform, as well as virtual class environments, such as: whiteboard, online presentations, desktop sharing, polling, course chat sessions, audio/video communication; and a Content Developing Instrument, which allows content to be developed and get uploaded on the e-Learning platform. The system is thus meant to provide an integrated set of collaborative instruments (web conferences, chat rooms, forums for discussions) in addition to
traditional teaching and learning activities so as to make up in range and availability for what they lack in (individual) participation and complexity [9].

**IBM Lotus Quickr** is team collaboration module meant to help in accessing and interacting with the people, information, and project materials. It is a platform offering a rich set of features, such as team spaces, content libraries, discussion forums, and wikis, enabling team collaboration. It allows organizing and sharing documents and information with team spaces, content libraries, team discussion forums, wikis, and connectors. It reduces "inbox bloat" by providing a central, shared way to share attachments and large files [10].

The e-Learning platform has also an electronic archiving module, for storing documents – mainly courses, catalogs, scientific notes, papers, etc.

Another aspect which the e-Learning platform is covering is internationalisation. As the platform is bilingual – Romanian and English, it is easy for foreign students use it.

6. PARTICIPATORY E-LEARNING

This e-Learning system at LBUS, a provider of institutional services geared towards a better collaboration and communication between students, teachers and administrators can be additionally complimented and enhanced by participatory e-Learning via the Internet. This is the learning framework for such newly emerging learning beneficiaries at our university, primarily because what may act as a deterrent, the use of Romanian as the language of teaching, is thus completely removed and replaced by English, the common, universal web means of communication. In the common cyberspace of active learning, all cultural barriers of communication in this model are broken down. With growing economic, social, political and cultural availability and fewer IT knowledge constraints, e-Learning platforms and technologies allow for more participatory room and scope in the classroom. In this way, students will be the authors of the content of the assigned courses in the online meeting rooms.

7. SERVING OUR STUDENTS BETTER; DIVERSIFIED AND PERSONALIZED MEANS

Traditional e-Learning technologies and distance education opportunities continue to increase worldwide due to growing digital knowledge and almost universal Internet access. Despite such arguments that emerging online technologies have widened the digital divide instead of reducing it, since access to the Internet is required [4], we hold that our university e-Learning platform in combination with active and participatory consumption-based learning technologies – such as online photo albums, blogs, wikis, podcasts, e-books, YouTube videos, virtual worlds, wireless and mobile computing – are apt to bring newer avenues for our university’s students. Empowered foreign and Romanian learners alike are granted thus more choice and self-determination in their own learning. For mixed foreign and Romanian student groups, taking up either Cultural Studies or Business Programs, regular class participation can be more successfully replaced with weekly participation in online courses and webinars, tidbits and shared online video (You Tube and Teacher Tube), all of which are better adjusted.
to enhance the interactive and collaborative learning. Traditional methods only are no longer equipped to deal with such groups primarily because of the inter-cultural component embedded in the learning activity for which such modern e-Learning activities provide immediate solutions and affordance in these modern times. Undoubtedly, developing inter-cultural relationships and improving inter-cultural trust via such learning technologies are conducive to a long-range and long-term effect on social and economic links between our university and other countries and, if used in combination, the e-Learning system is more adequate to accomplish this due to the openness, common sharing and curiosity fuelling all virtual visitors; teachers can be thus more thoughtful and can act as effective online instructors as well as business negotiators who do no longer teach but moderate, coach and assist students in the learning process of knowing each other’s culture. Connectivity, social knowledge and participatory learning can be enhanced in consultation and browsing sessions of Wikis, Wikipedia and Wiki-books combined with Networks of Personalized Learning (e.g. language learning, tutoring). Traditional classical participation is reflected only in the combination of article readings, verbal and written reactions to ideas, observing demonstration tools or videos, discussions of culture-specific ideas, tidbit rankings, simulations of business environments, synchronous session attendance, in fact, a mere combination of quantitative and qualitative elements.

8. ADVANTAGES OF PARTICIPATORY E-LEARNING

The participative e-Learning model envisions a self-driven learning, where the content of the course is updated no longer only by the teacher, but also by the students.

Self-driven learning has a number of interpretations from motivated students in a prescribed and dependent study through student generated study material and learning path. The former suggests an environment dependent learning with a high level of directed study, whereas the letter is more self-guided learning where students are able to develop the topic, timeline, pace and place of learning.

Participatory e-Learning offers new opportunities for learning by creating new and exciting ways to engage these students in the learning process and use what they have in common: digital knowledge. Active engagement strengthens learning whereas traditional forms of learning have proven much less able to engage learning. Likewise, the particular advantage of participatory e-Learning for foreign incoming students is that it empowers them to control their own learning in terms of when, where and, above all, how they learn. Both Romanian and Chinese learners will have thus full freedom to access, sequence and repeat their learning materials outside the constraints of their course on and off the LBUS Platform.

9. CONCLUSIONS

e-Learning and Participatory e-Learning allow for a radical change of the relations between the higher education institution and work organization, students and teachers, development of telework, organization of space as well as lack of need to develop new schemes for accreditation of prior learning for incoming ECTS credit students. Additionally, this also represents a strong point in our argument that such a combination of learning technologies can be extended to corporate training for business practices. From a technological point of view, this indicates a shift from mass media to knowledge media which empowers individuals, not just as consumers, but also as co-producers of information, knowledge and culture. In corporate training sessions, focused on specifics of inter-company or multinational scope, such learning technologies are apt to lead to the foreign trainees’ better integration within the Romanian business-learning environment. At our university, (participatory) e-Learning technologies in the classroom prove to be the current mutually beneficial model that allows for better cultural scope and outreach, outsourcing more and diverse learning environments throughout the country and region.

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