### The E-learning of Network Environment Huda Abdul alle Al amwee Al-Mustanseriy University, Iraq Computer science <u>E-mail:huda\_ros@yahoo.com</u> Adel Muhsen Aliwi Al-Mustanseriy University, Iraq E-mail: adel\_muhsn@yahoo.com

#### ABSTRACT

E-Learning has been providing courses online for educational institutions E-learning is one of the most important educational system .Today E-Learning challenges are greater than just bringing courses online, it is a way to create true Network Learning Environments. The Network Learning Environment in the Internet age applies new technology to a very old concept—that learning is more than classes and grades, It is about the learning that takes place in a vibrant community of people and resources. In the Network Learning Environment, any student, instructor or researcher can access any learning resource at anytime from anyplace. The power of the Network Learning Environment today is that it creates unlimited possibilities for students and faculty, far beyond the limitation of books, while most institutions are evolving toward the Network Learning Environment, dose? The NLE and lays out Blackboard's vision by providing solutions that will help educational institutions realize their goals.

Key word's: (E-learning environment, network, blackboard environment, electronic learning)

# **1-** Roots of the network learning enlivenment

Our current vision of a Network Learning Environment owes much to the work of pioneering groups like the National Learning Infrastructure Initiative (NLII), Internet 2 and the IMS Global Learning Consortium. During the Internet boom, leaders from groups like these called for new approaches to learning. They need a new infrastructure to serve changing of infrastructure that turns the teaching infrastructure on its head to focus on the learner, unlike today's infrastructure, which relies on highly individualistic institutions, a learning infrastructure will be national in its scope based on collaborative efforts among institutions that scale beyond the local level. The NLII went on to propose a set of characteristics for this infrastructure, many of which are now possible, or becoming of infrastructure that turns the teaching infrastructure on its head to focus on the learner, unlike today's infrastructure, which relies on highly individualistic institutions, a Learning infrastructure will be national in its scope based on collaborative efforts among institutions that scale beyond the local level. The NLII went on to propose a set of characteristics for this infrastructure, many of which are now possible, or becoming possible, as part of a Network Learning Environment:

- Learner-centered, not teacher-centered
- Pedagogically flexible
- Supportive of learning anytime and anywhere

• Active, not passive, student learning

#### First Step: A course-centered World

Education's initial steps toward E-Learning involved taking existing resources like course materials and making them available on the web. It was the same thing of other sectors which did it. First embracing the Internet, such as the early days of E-Commerce when businesses simply put their brochures online. At the time, Blackboard was created to serve as a primary contractor to the IMS Global Learning Consortium standard project. IMS is a consortium of universities and companies developing technical specie. Captions that will allow the technologies behind Network Learning Environments to work together. As the original contractor, Blackboard helped shape that early specie. Captions and remains the adopter of open leading standards Blackboard released its available software, Blackboard management tools, growing from 26.5% in 2002, 20.6% in 2001 and just 14.7% in 2000, alone, the Blackboard Learning System is the most widely used solution in the world, it has been platform for millions of users at thousands of institutions. Not only the most institutions taking the next step of single course management platform across campus rather than using another type of education such as "learning by using package". the solution of large address problem which's putting courses on line by institutions solved by the ways of choosing several options by matching size and the scale . Are using course management systems in some form, but many of them are now.

# From Courses to Communities

E-Learning has matured, however, institutions have discovered that courses are important, that's just one facet of learning. In fact, they may be a fairly small part of the average person's learning career over a lifetime. The great challenge for E-Learning today is how to step beyond courses to incorporate all of the many other educational resources, both traditional and digital, into the online learning experience. How do we connect and integrate courses with libraries, research labs, advisors, peers, museums, alumni, parents, other institutions and the many other learning resources on campus off? What's and more, as these environments expand, how do we administer the resources, manage the systems and establish order in the volumes of digital materials multiplying throughout them? The answer is a Network Learning Environment that allow to any student or teacher to collaborate with educators, evaluate academic performance and access learning resources at any time to achieve their educational objectives. Advanced NLEs including ability to use by people and resources. people and resources not just at the home school, but at other universities and institutions as well, and to do it within an environment that students and faculty can readily master without the need to learn new software, interfaces or passwords for each task. Just as courses and course management have evolved rapidly to capitalize on the power of the Internet, so to have many other learning spaces and technologies, libraries, for example, that any one which focused on circulation, catalogue management and book inventories, now pursues goals such as electronic reserves and patron interfaces. Similarly, publishers are moving from hardcopy to software enabled content. Network Learning Environments connect courses, teachers, learners and researchers to all these other evolving areas or "nodes" of the network.

# **Course Evolution**

Ultimately, the result of these connections is that the very nature of what we mean by a "course" is evolving to match the strengths of the network world. Again, for comparison, consider how far E-Commerce has come from the days of simply putting brochures online to the entirely new commercial models enable by E-Bay, Priceline.com or Amazon.com. Spearheaded by leaders like the Center for Academic Transformation, this metamorphosis is well. (part of the Program ) selects 20 institutions per year interested in leveraging the capabilities of information technology to transform their academic practices. One example is the Emporium model which merges several nodes in a Network Learning Environment. In this course redesign concept, the computer lab is classroom. Students are led by the instructional software and get immediate feedback from the system on problems and assessments. Full-and part-time faculty and graduate assistants are on hand to provide help when needed. Students engage in active learning.

## 2-THE NETWORKED LEARNING ENVIRONMENT IN PRACTICE

So what do Network Learning Environments look like? What, do they help to bring for teachers, learners and researchers? In a true Network Learning Environment, different learning spaces, participants and modes are connected in new ways, supplied with new kinds of materials and supported by powerful applications, all with the goal of enhanced outcomes. Like the Internet, the Networked Learning Environment is a network of networks, a series of nested communities. Beyond the relationship of teacher to student as an elemental form, Networked Learning Environments expand outward to classroom, discipline of department, institution, national and international networks. Each of them contain Network Learning Environment, but each of them have apart of others, such as a full time student of one university who also takes courses at another. The more connections that can be make it richer and more powerful network.

## \*Key Characteristics of an NLE

Learning of true Networked Α Environment has five keys characteristics that separate it from the course-based on world of traditional E-Learning: ubiquitous access to learning resources, both people content. Network Learning and А Environment enables efficient, navigable repositories for content and other learning objects at the student, instructor, and organization and institution level. Users can exchange, store and update these objects easily without associating them with a course. In addition. NLE's support connections and access to learning resources at other schools, institutions, labs, museums and more. Anywhere access means more than just a student with her laptop anywhere on campus, it means accessing a learning resource. Wherever it resides—on a fellow student's shared virtual hard drive, in a department-wide content repository or in the library at another institution. A common user experience that seamlessly incorporates other learning applications. While it may be a while before we reach the full level of transparency that exists between web browsers and plug-in. For every single Network application, a Learning Environment has a common, customizes interface unit. As all of the common learning Third homegrown tasks. part and applications integrate seamlessly to core systems and reflect the look and feel of the institution's Network Learning Environment. Standards-base content from publishers, commercial developers, faculty members, students and colleagues at other institutions incorporate easily into larger frameworks. Assessment and tracking across the learning career, where course-based systems capably provide assessment. outcomes management and tracking within the context of classes, Network Learning Environments provide facilities for doing so across a set of classes, a semester, cycle,

major or learning career. E-Portfolios, for example, allow students and faculty to carry their accomplishments from one school to another or even into the job market. Increasingly under pressure to show consistent evaluation methods, institutions can manage and document progress across their programs and departments in multiple customizable, role-enhanced wavs. А environment that supports student-centered learning and instructoroptimized administration. Networked In а true Learning Environment, individuals become the center of processes based upon their role, Students, for example, become the center of the learning process as predicted by the NLII through features such as customize interfaces, adaptive release of content and E-Portfolios. Meanwhile, Instructors benefit from the wealth of tools and services is to their efficiency increase and reduce administrative time. For example when a student or teacher is also a researcher, collaborative tools enable team projects from the chemistry lab to the writing center, the access and participation in a robust knowledge-sharing network. When it comes to connectedness, the true Networked Learning Environment is able to become active and produced through relationships, both real and virtual. It's one thing to say that it is possible to search learning repositories at other schools, quite another to pathways, instructions get the and permission to do so. As more schools enable their NLEs, the meta-network grows, but each requires consistencies and communication channels with the others. If you build it, they will come, but will they speak the same language?

# \*Achieving Transformation

The good news is that we want to build network-base services, and we've done that. They impact in every aspect of the institution and institutional life. Each semester in many schools are reach to the point where they are transforming teaching and learning in many ways, where E-Learning impacts every aspect of academic life, the courses represent center of the model which is being replaced by a culture that seeks to connect a community of people resources around student-centered and learning. Institutions are exploring entirely new teaching. learning and research interactions. These include lifelong learning opportunities, access to learning content anytime and anywhere, and the ability to collaborate with global consortia. The 2003 NLII Review put it this way, "Research tells that learning occurs best in an us environment that is resource rich. It should support active and collaborative learning; incorporate authentic, real world problems; provide ongoing and assessment. Fundamentally, learning is about moving from a state of disequilibria and into a state which we are searching for new in resolutions. new meanings, and new connections. about It is making connections..."

As far as many institutions are going up, there is more coming to the Network Learning Environments than can be seen today.. What Internet Bulletin Board user in 1992 could have foreseen belongs or streaming media? They were unthinkable without the web's environment. Projecting out, one can picture Network Learning Environments that are seamlessly integrated with library E-Commerce systems or that offer federated searches across other schools, consortia, corporations and government research libraries. Just as the Internet exploded in applications and uses with the creation of the web, E-Learning is about to experience a similar transformation as more and more schools transition from the limited course-centered view in order to

introduce their own interconnected Network Learning Environments.

## 3. A COMPREHENSIVE E-LEARNING SOLUTION FOR THE NETWORK LEARNING ENVIRONMENT

At Blackboard. we have built a comprehensive E-Learning solution that recognizes the challenges, requirements and institutions rewards for which build Network Learning Environment. While there are many independent products on the market for managing courses and portals, Blackboard constructing has deliberately focused on developing a complete solutions. family of The Blackboard Academic Suite provides a common platform for all of the essential interdependent features, functions and services that make a true Network Learning Environment. The only solution for enabling true Network Learning Environments, the Blackboard Academic Suite is a unit. Solution that maximizes the independent strengths of three best-of-breed applications: the Blackboard Learning System, the Blackboard Community System and the Blackboard Content System. For institutions building their Networked Learning Environments one step at a time, these applications available are also independently. Rather than learning to use multiple applications, students and instructors become familiar with one application in the Blackboard Academic Suite, they easily master all Blackboard applications. As a single platform, it saves dramatically on the data and application integration costs that are needed when purchasing standalone solutions, as well as reducing maintenance and training costs.

#### **3-1 The Blackboard Learning System**

We can define the system which's enable the instructor to create and manage course content by using publisher content evaluating performance and communicating with students.

### **3-2 The Blackboard Community**

System is the system which Enable institution to connect users online with academic communities, deliver target content to diverse user groups, incorporate E-Commerce into the learning experience and take advantage of other features that enhance learning, campus life, outreach and branding

### 3-3 The Blackboard Content System

helps institutions manage to grow volumes of content that are being created and shared by instructors and students. In addition to content management functions are features for E-Portfolios, virtual hard drives, E-Reserves ...etc.

# **4-** AN open community of practice is the key

Since the definition Network Learning Environment is defines as a connective Environment the first duty of a platform must be its ability to communicate, a true Network Learning Environment is an interactive community with an infinite increasingly potential for efficient connections. Only Blackboard can bring that vast community together through an architecture designed specifically for open standards, open architecture and open content channels.

#### \*Open Standard Educational

Institutions construct their highly personal Network Learning Environments on the Blackboard Academic Suite platform using a variety of tools, some of them which are developed in house, some created in collaboration with peers and others **licensed**  from commercial providers. In fact, the most interesting sources of re- usable learning technologies are college and university developers who work every day with faculty across many different disciplines, these technologies must easily integrate with the core of Network Learning Environment platform that is why Blackboard has been integrally involved in standard work since our earliest days as the primary contractor for IMS. To build true Network Learning Environments

, the need of finite multiple authentication systems in a way That is transparent to the user.

## **Open Content Channels**

While a Network Learning Environment must operate seamlessly with various application which's called Open Content Channels it is the knowledge created and exchanged through those tools and channels that is the focus point of learning In addition to working on content- and repositoryoriented standards projects such as SCORM and Merlot, Blackboard focuses on three primary content issues to ensure institutions will have a Versatile environment for learning.

• Blackboard is integrating publisher content into the Network Learning Environment in order to enable advanced, interactive, software- enabled content. In fact, major education publishers and content providers have developed more than 2,500 digital course supplements(Course Cartridges) for Blackboard environments.

\*Blackboard is focusing on Library integration, library budget resources are increasingly focused on expanding collections to showcase the growing volume of scholarship and research coming out of educational institutions. Blackboard is working to integrate library content into the Networked Learning Environment so that a wider community can . and, share and reuse these valuable learning resources.

\* The Content management is one of the most pressing challenges for institutions, both to address today's digital content explosion and tomorrow's need to connect isolated content stores. Our strategic focus in this area is creating the discovery channels and making the content capable of operating seamlessly in a Network Learning Environment.

# 5- CONCLUSION

In this paper we have laid out our view of where institutions are going on their e-Learning journey and how we can help them reach their destination. I am really excited about the unlimited educational possibility for teachers and learners that a true Networked Learning Environment can create. We at Blackboard are working very hard to build solutions that enable these powerful environments for the educational experience. As we pursue this goal, we often consider the question of whether one can ever "really" reach the destination of a true Networked Learning Environment. After all, many of the best mission statements are those that are never quite achievable, even as they define a clear objective against which progress can be measured. Frankly, I have concluded that the question is not the right one to ask. Surely, with the capabilities of the Internet always changing and the imagination of educators always expanding, the idea and shape of a true Networked Learning Environment will continue to evolve at a rapid pace. But just as there is no such thing as achieving "full" education or "full" knowledge, it serves us best as a goal on the continuum. Indeed with the benefit of suite-based technology, , architected to be open and extensible, and a growing body of

standards driving increased interoperability, we are well on our way. In my opinion, the basic principals of any science must be provided by teacher to the student, and the best use of NLE is to explain the applications, of these basic principals, to extend the recognition of students and gave them wider view

## 6-Referance

- [1] GARCIA U.C.,SOLER.S.BEJAR J .,HALL T. :"improving learning tools by means of cooperative Agents Technology" Spain 2002
- [2] Matthew Pittinsky "The E- Learning Environment" Chairman and Co-Founder, Blackboard Inc.2004
- [3] STANER G., "Nowadays Technology in Higher Education", The southwest Leadership Academy Arizona 2003
- [4] Ali Yousef Jawarneh "Moving Elearning to M-learning" Philadelphia Unversity, Jordin 2005
- [5] <u>k12events@blackboard.com</u>. "Upcoming Blackboard Events for the K–12 Community"2004.

[6] Gottfried Vossen " building A service

platform for electronic Learning "

University of Muenster .2005