E-LEARNING: USIU’s EXPERIENCE

Gerald W. Chege, Ph.D.
Assistant Professor, Information Systems & Technology, United States International University

COL Training Workshop, Pan Afric Hotel

23rd Nov 2006
Content

★ Introduction to DE / E-Learning Paradigms
★ USIU Experience
★ eMBA Plan
★ Platform Choices
Introduction

Distance Education

★ **Distance education** / distance learning, is a field of education that focuses on the pedagogy, technology, and instructional systems design that are effectively incorporated in delivering education to students who are not physically "on site" to receive their education.

★ Instead, teachers and students may **communicate asynchronously** (at times of their own choosing) by exchanging printed or electronic media, or through technology that allows them to communicate in real time (synchronously).

★ Distance education courses that require a physical on-site presence for any reason including the taking of examinations is considered to be a **hybrid or blended course or program**.
Types of Distance Education Courses

- Correspondence conducted through regular mail
- Internet conducted either *synchronously* or *asynchronously*
- Telecourse/Broadcast where content is delivered via radio or television
- CD-ROM where the student interacts with computer content stored on a CD-ROM
- PocketPC/Mobile Learning where the student accesses course content stored on a mobile device or through a wireless server
Online Learning and e-Learning

- **Online Learning and e-Learning** – terms describe the application of ICTs to enhance distance education, implement open learning policies, make learning activities more flexible and enable those learning activities to be distributed among many learning venues.
  - Makes learning materials available on-line with access from anywhere usually through the internet
  - Enables sharing of ideas (discussion forums, chat rooms) and course management
  - Enables posting of assignments, exams, and allows students to submit assignments online.

- **Virtual Education** – includes aspects of online / e-learning but goes somewhat further.
  - Is largely web-centric but does not necessarily limit itself to learners outside a conventional classroom.
  - Uses multimedia, delivers content, and enables a high level of interaction among learners, content, teachers, peers and administration both synchronously and asynchronously.
USIU E-learning Experience

The Early Days

- Started as an experiment in 2003 using WebCT (by Dr. Meoli Kashorda)
- One faculty devoted time to develop graduate materials in accounting (took one semester)
- **Incentive Model**: One course release per e-learning course developed (or cash equivalent payment).
- Was slow to take off
- Supplemented face-to-face meeting in classroom
- Students accessed class notes and assignments, performed group discussions, chats & submitted assignments online
- Instructors marked contributions in discussions, No. of accesses to notes + assignments
Basic Infrastructures

★ E-learning server;
★ E-learning Platform (e.g. webCT, Blackboard, Moodle, Claroline)
★ Connectivity to internet (for external users)
★ E-Learning HR Technical support (mounts courses / creates /manages users accounts / supports faculty)
Challenges

★ ICT literacy in faculty (e.g. low literacy in Sch. of Arts)
★ Resistance to change
★ Time needed to develop content

Solutions to Challenges

★ Introduction of “e-policies” by management
  ★ Email replaced memos (no more pigeon hole memo announcements)
  ★ LCDs availability in classroom (all classrooms now have LCds) - encourages faculty to have power points.
  ★ PC availed to each faculty member’s office
★ Availability of books with ready teaching materials (=> can use in classroom & Post in E-Learning environment)
Current Status

- WebCT continues to be the platform
- Annual licence $5,500 for 1,500 seats (1 student = 2 courses = 1 seat)
- Popular with faculty & students
- 229 courses currently on WebCT (graduate & undergrad)
- Students access notes, perform group discussions, do online exams (not widely used), submit assignments (with deadline cut-offs).
- Many course-texts have accompanying teaching materials & conversion/mounting on WebCT is easy.
- Need to create students user accounts on platform
USIU eMBA

This is an effort to implement MBA distance education via an on-line delivery system.

Collaborating with an e-learning consultant (HMS – eCornell partners)

**Strategy:**

- Training of Subject Matter Experts (SME) on the methodology & tools of course development (e.g. graphical, dynamic and audio visual aids)
- Course analysis & documentation (roadmap for content, tools and components to be used)
- Technical setup (platform), interface, website design and integration of admissions/accounts.
USIU eMBA Content Development 
(by SME & Technical Support)

- **Lecturer Notes** - Capture Text
  - Proof Reading, Text Conversion, Configure & Upload

- **SME Recording**: Transcribing, Voice Recording, Editing & Mastering
  - Convert, Configure & Upload

- **Still Content** - Demonstrations, Graphs, Flowcharts
  - Convert, Configure & Upload

- **Multimedia**: Animations, Simulations, Audio Visual
  - Convert, Configure & Upload

- **Evaluation Tools** (exercises, assignments, quizzes, exams)
  - Configure & Upload
MIT OpenCourseWare

★ **MIT OpenCourseWare** - is an initiative of the MIT to put all of the educational materials from its undergraduate and graduate-level courses online, *free and openly available to anyone, anywhere, by the year 2007.*

★ MIT OCW is a large-scale, web-based publication of MIT course materials. The project was announced in 2001.

★ Currently, more than 1,500 courses online;

★ Content includes: *homework problems and exams* (often with solutions) and *lecture notes, interactive web demonstrations* in Java, *complete textbooks* written by MIT professors, and *streaming video lectures*. The initiative has encouraged other institutions to make their OCWs freely available (e.g. CMU, Berkeley, John Hopkins)

★ E.g. China, Japan, Taiwan, India translated MIT OCW into local languages
Local institutions can start with OpenCourseWare
Faculty can supplement their materials with OCW (wide range of courses covered e.g. MIT OCW sample below)

- Aeronautics and Astronautics
- Anthropology
- Architecture
- Athletics, Physical education and Recreation
- Biological engineering
- Biology
- Brain and Cognitive sciences
- Chemical engineering
- Chemistry
- Civil and Environmental engineering
- Comparative Media Studies
- Earth, Atmospheric, and Planetary sciences
- Economics
- Electrical engineering and Computer science
- Engineering Systems Division
- Foreign languages and Literatures
- Health Sciences and Technology
- History
- Linguistics and Philosophy
- Literature
- Materials science and Engineering
- Mathematics
- Mechanical engineering
- Media Arts and Sciences
- Music and Theatre arts
- Nuclear Science and Engineering
- Ocean Engineering
- Physics
- Political science
- Science, Technology, and Society
- Management
- Special Programs
- Urban studies and Planning
- Women's Studies
- Writing and Humanistic studies
Platform Choices

Popular platforms include Blackboard, WebCT, Moodle and Claroline.

★ **Blackboard 6.2**
  ★ Need to purchase licence
  ★ System requires either SQL Server 2000 on Windows 2000 Server or Windows 2003 Server, or Oracle 8 or 9 on Sun Solaris 8 or 9 or RedHat Linux.

★ **WebCT Vista 4**
  ★ Need to acquire a licence
  ★ System requires Microsoft SQL Server 2005 on Microsoft Windows 2003 or Oracle 9.2.0.6 (SE1, Standard or Enterprise Editions) on Solaris 9, Microsoft Windows 2003, or Red Hat Enterprise Linux 3.0 ES or AS.

★ **Moodle 1.5.2**
  ★ Freeware under GNU licence
  ★ The system supports either MySQL or PostgreSQL databases. The system requires only one database and can coexist with tables from other applications.

★ **Claroline 1.4:**
  ★ Freeware under GNU licence
  ★ The system requires a MySQL database.
All the platforms support the following functions with varying degrees.

- Discussion Forums
- File Exchange
- Internal Email
- Online Journal/Notes
- Real-time Chat
- Video Services
- Groupwork
- Self-assessment
- Student Portfolios
- Course Management
- Instructor Helpdesk
- Online Grading Tools
- Student Tracking
- Automated Testing and Scoring
- Authentication
- Course Authorization
- Registration Integration
- Hosted Services
THANK YOU