

Egyptian E-Learning University: Case Study

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E-Learning Definition and Concepts

- The use of technology to create, deliver and facilitate learning, any time, any where.
- Using a technological means (Internet, Intranet/Extranet) to access and manage learning that supports and enhances the knowledge of an individual.
 - This includes: CBL, WBL, ...etc.
- Studies suggest that e-learning is as effective as classroom learning, but teaches more efficiently.
- Learning time can be reduced by as much as a third, often more.
- Experts agree that e-learning works best when it is blended with classroom learning.

Characteristics of an Efficient e-Learning

E-Learning should be delivered in an effective cost, be flexible and scalable. An efficient e-learning must include the following six critical factors:

1. Leverage in-place-network and computing infrastructure.
2. Integrate required collaborative and learning specific tools.
3. Support the main learning modes: self-paced (synchronous) and live (asynchronous) under a single, consistent, easy to use interface.
4. Include the management tools to provide a robust registration system, comprehensive assessment features, and system monitoring capabilities.
5. In content neutral for easy reuse of existing content or creation of new content.
 - Content must be easily sequenced into courseware by using appropriate tools.
6. Easily scales to support thousands or tens of thousands of users.
7. Incremental cost of ownership is dropped as additional users are brought on board.

E-Learning Advantages

E-learning has the following major advantages:

- **Access:** anytime, anywhere concept makes education and training more available to learners.
- **Cost:** Reducing education and training costs.
- **Efficiency:** Avoiding scheduling of classrooms and booking instructors.
- **Empowerment:** putting the responsibility for learning in the hands of learners.
- **Business:** Using fast, effective learning as a competitive edge.
- **Convenience:** Letting time-pressured students learn at the best time and place.
- **Content:** Increasing the scope of offerings.
- **Speed:** Responding to constant and rapid changes.

E-University Framework Applied to EELU

An e-university framework should consider the following principles:

1. Institutional Development and Organization.
2. Pedagogical Approach.
3. Technology.
4. Academic programs and Courses design.
5. Evaluation.
6. Management.
7. Partnership and Cooperation: National and International.

1. Institutional Development and Organization

An institutional model has been developed to reflect the following:

- EELU Mission
- EELU Policies
- EELU Goals
- EELU Sponsorship
- EELU Organizational Structure
- Marketing strategy

EELU Mission

- To provide high-quality education anywhere, anytime at affordable price and to produce industry ready knowledge workers.
- To create and continuously improve teaching and learning environment that is most effective and efficient to meet future needs of industry and society.

EELU Policies

- Admission: high school certificate or the equivalent, and the transferred students from other accredited institutions.
- Language of Teaching: English.
- Education System: based on credit hours.
- Scholarships: distinguished applicants and excellent students.
 - Fees may not constitute a barrier for students' access to higher education.

EELU Goals

- ❑ Enhance the quality of higher education using modern technologies.
- ❑ Participate in improving Egypt's higher education participation ratio by increasing total student enrollment.
- ❑ Provide its graduates with the knowledge and skills that ensure high employability, and provide opportunities for professionals to excel in their careers.
- ❑ Provide those, who are unable to attend traditional regular universities, with an opportunity to have university education.
- ❑ Establish a strong line of research in technology-related areas, and establish links with reputable research centers worldwide.

EELU Sponsorship

- A direct sponsorship and commitment from the Egyptian Ministry of Higher Education and the Cabinet are provided to support all the activities of the University.

EELU Organizational Structure

- ICT-supported environment for teaching and learning: Academic, technical, and administrative jobs.
- Jobs titles, objectives, descriptions, responsibilities, needed skills and qualifications.
- Newly created jobs related to the following entities are defined:
 - Information and Communications Technology Center.
 - Education Technology Center.
 - E-Courses Production Center.
 - Help desk Service.

Marketing strategy

- Present the concept of e-Learning:
 - Advantages and flexibility of this mode of learning.
 - Knowledge values which e-learning add to a student.
- Define the objectives of the university, its policies, and academic and training programs.
- Focus on the special educational services of the university which satisfy the educational needs of the society better than the traditional universities.

2. Pedagogical Approach

- **Instructional (Traditional)**
 - Lectures and lessons.
- **Constructivist**
 - Construction of knowledge.
- **Social Constructivist (Transformative)**
 - Collaborative learning.

3. Technology

- Technology is central to most of the functions of an e-university.
- Stability of the system and the scope of the support given to the users are critical.
- Services must always be there when users need it, i.e. 7/7 and 24/24.
 - Students, teachers, and tutors expect to be supported anytime based on their own schedule.

3. Technology (cont.)

An infrastructure planning must consider the following:

- Network Infrastructure.
- Hardware/Software Infrastructure.
- Video Conferencing.
- Virtual Classrooms.
- Technology Training.

4. Academic Programs and Courses Design

- Choice of programs and courses.
 - Feasibility study
- Staff development: training program.
- Quality Assurance and Accreditation: High-quality programs.
- Course Development Methodology.
- Undergraduate Programs.
- Research Centers.
- Continuing education and Training programs.

Course Development Methodology

- EELU follows a five–phase course development methodology. These phases are:
 - Course Planning.
 - Course Production.
 - Delivering and Tutoring.
 - Evaluation of Teaching and Course Materials Effectiveness.
 - Course Revision.
- An e-course delivery policy is to have 3A courses: study Anytime, Anywhere, At your own pace
- copyright policy

Undergraduate Programs

EELU offers the following undergraduate programs:

- Computer and Information Technology.
- Business Administration.
- Mass Communication.
- Languages and Translation.
- Economics and Political Sciences.
- Engineering and Technology.
- Education.
- Law and Legal Studies.

Research Centers

- To support graduate studies and to have a liaison with the industry, EELU creates two research centers:
 1. Center for scientific and technological innovation.
 2. Technological incubators.

Continuing education and Training programs

- Focus on professional continuing education and training programs to meet the needs of wide variety of adult learners and organizations.

5. Evaluation

- **Assessment of learners:**
 - Computer-based exams versus paper-based.
 - Centralized versus decentralized.
 - Same exam in a specific time versus different exams in different times (students may be in different time zones).
 - Supervision policy.

5. Evaluation (Cont.)

- **Evaluation provided by students to the following:**
 - Content.
 - Instructor.
 - Learning environment.
 - Learning Resources.
 - Course Design.
 - Technical, Academic and Administrative Support.

6. Management

- The organizational structure must consider the following areas and domains:
 - Academic Affairs:
 - Quality Assurance and Accreditation.
 - Administrative Affairs:
 - Remote students and staff.
 - Response within certain time limits.
 - Students Services and Affairs:
 - Instructor
 - Tutor
 - Technical Staff

Academic Staff Training

A training program has been developed to the academic staff on different tracks:

- Teaching Skills and Learning Theories.
- Instructional Design.
- Technology–Rich Classrooms.
- Technology–Based Assessment.
- E-Learning Fundamentals.
- Research Methodologies.
- Digital Resources and Research Skills.

Administration Process

- A process and the corresponding procedures regarding the registration, students support, teaching and learning, assessment, ... are developed.
- An automated University Management System (UMS) is developed to support all the administration activities with the university. The UMS components are:
 - Registration
 - Financial Affairs (Payroll).
 - Human Resources.
 - Purchasing and Stock Control.
 - Library
 - The UMS can be accessed locally through the University LAN and/or remotely through the University Portal.

7. Partnership and Cooperation

- A national infrastructure for e-learning is recommended to:
 - Optimize the use of the resources of all partners involved.
 - Exchange experiences.
 - Build capacity of staff through collaboration on joint activities.
 - Accredite and recognize credentials.
- Operating outside a local or national boundaries, an important concern related should be raised to the following issues:
 - International quality assurance and accreditation.
 - Recognition of certificates and qualifications.

Conclusion

- EELU adopts a learning/teaching model based on an e-learning model and supported by an e-university framework.
- EELU enhances the quality of higher education by:
 - Applying information and communication technology in a distinguished education model.
 - Expand the number of higher-education students without having to increase the physical universities campuses.
 - Expand the number of students each professor can handle without compromising quality.

Conclusion

- EELU adopted learning and teaching model facilitates:
 - Transition from teacher-centered pedagogy.
 - Quality assurance.
 - Flexible studies opening for more continuing education and life-long learning.
- Applying an e-university framework:
 - reduces costs for students by enabling them to stay where they live and work.
 - facilitates mobility and joint study programs.
 - facilitates mutual recognition of competence.
 - reduces the sense of isolation many traditional distance students experience.
 - reduces the high drop-out rates associated with distance education.



THANK YOU