e-Learning .....

Leading the Future

Mansoura School of Medicine
e-Learning Unit

by

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Main Topics

➢ **What is e-learning?**

➢ **The evolution of e-learning**

➢ **Traditional versus e-learning**

➢ **Why e-learning?**

➢ **e-learning Delivery Formats.**

➢ **Participants and processes of e-learning**

➢ **The global and regional status**

➢ **Our Medical e-learning Unit**

Learning Objectives

At the end of this presentation you will be able to :

- ➢ **Capture the main concepts of e-learning?**
- ➢ **Realize our institutional need for e-learning?**
- ➢ **Compare between traditional and e-learning**
- ➢ **Evaluate our current e-learning situation**
- ➢ **Apply the recent technologies in your teaching activities**
- ➢ **Feel the importance of gradual shift to e-learning**

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- What does "*e*" mean to you ?

  - **Electronic**

  - **Easy**

  - **Entertaining**

  - **Enlightening**

  - **Economical**

  - **Efficient**

  - **Educational**

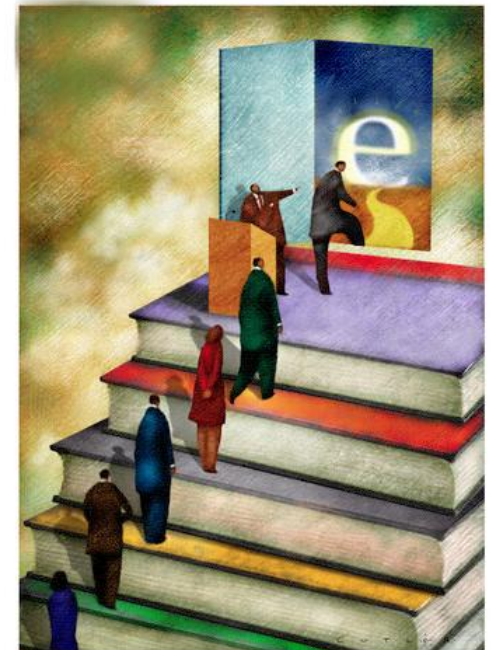Emerging

Eliminates Paper

Engaging

Evaluating

Empowering

- *e*-learning is…

    *e*ngaging, *e*ntertaining, *e*lectrifying learning that can be delivered

    *e*verywhere and *e*very time in an

    *e*xciting *e*lectronic format to the

    *e*lated and *e*nthusiastic students.

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- Hundreds to choose from;
- E-learning is:

*"Learning facilitated and supported through the use of information and communications technology (ICT) in a **structured instructional form**."*

Is the use of new multimedia technologies and the Internet to improve the quality of learning.

"It is the technology- based learning"

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Learning through a variety of media

- – World Wide Web
- – CD-ROM
- – E-mail
- – Chat rooms
- – Videoconference
- – Handheld computers
- – …..others

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education   training   information   technology

learning   knowledge
                              management

E-learning

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The Evolution of e-Learning

- Computer-based Training (CBT)
  - Mainframes (1970s)
  - Personal Computers (1980s)
  - CD-ROMs (early 1990s)
- Web-based Training (WBT)
  - Text-based (mid-1990s)
  - Graphical (late-1990s; low bandwidth)
  - Multimedia (2000+; high bandwidth)

| WBT |
| CBT |

1970　　　　1980　　　　1990　　　　2000

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Past
Instructor Centered

Future
Learner Centered

- Lecture
- Student -Listener
- Individual
- Instructor -Source
- Stable Content
- Homogeneity

- Facilitation
- Collaborator
- Team Learning
- Instructor- Guide
- Fast Pace
- Diversity

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Past

- "Central Nervous System"

- We used to use the book, managed by a teacher, store the knowledge in our memory, and retrieve them as required. It was an educational system of memorization and spoon – feeding of information.

Future

- "Digital Nervous System"

- The knowledge is downloaded. The teacher is a full-time facilitator to manage information and construct knowledge to deliver skills.

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Traditional versus E-learning

Traditional Learning

- Teacher Centered
- Single Media ⬅
- Isolated Work
- Information Delivery
- Factual-based Learning
- Bricks & Board
- Push approach ⬅

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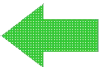
e-Learning

Student Centered

Multimedia

Collaborative Work

Information Exchange

Skills-based learning

Technology-enabled learning

Pull approach

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Traditional versus E-learning

	Traditional	E-learning
Place limits	Go to University	Education comes to you
Role of teacher	Sage on the Stage	Guide by the Side
Organization	The Pyramid	The Network
Decision Making	Theory Driven	Data Driven
Strategy	Top-down	Bottom up
Style	Rigid	Flexible

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Traditional versus E-learning

	Traditional	E-learning
Univ. and Class	Local	Global
Time of Education	Learning up to 23	Life-long learning
Use of Technology	Automate traditional	Reengineer systems
Instruction	Mass production	Mass customization
Assessment	Quarterly…..	Real-time
Source of Strength	Stability	Change

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✓ **What is e-learning?**

✓ **The evolution of e-learning**

✓ **Traditional versus e-learning**

Why e-learning?

e-learning Delivery Formats.

Participants and processes of e-learning

The global and regional status

Our Medical e-learning Unit

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Why e-Learning?

The facts

- **Students have changed.**

- **Knowledge as a competitive tool.**

- **Evolution of education theories.**

- **No life-long employment**

- **Information overflow.**

- **Technology revolution.**

- **Globalization.**

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The facts

ICT was the fastest growing technology during the last decades.
Internet has reached 25% of the world's population, faster than any other innovation.

Innovation	Years
Electricity	45 years
Telephone	35 years
Television	26 years
Radio	22 years
Cellular	13 years
Internet	7 years

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- **The technologies being used in today's online instructional environment as :**

  - **Multimedia (formats, protocols, portable devices,…etc)**
  - **streaming audio,**
  - **streaming video,**
  - **instant messaging,**
  - **hand-held and wireless technologies, and**
  - **peer-to-peer file sharing.**

New Internet versus Old Internet - The Emergence of Broadband

INTERNET 2 (Israil, Katar)
- Local wireless
- Private networks
- Satellite
- Wide Area Wireless

Bandwidth Doubling every 6 months

CPU Power Doubling every 18 months

1200

1000

800

600

400

200

0

1995   2000   2005   2010

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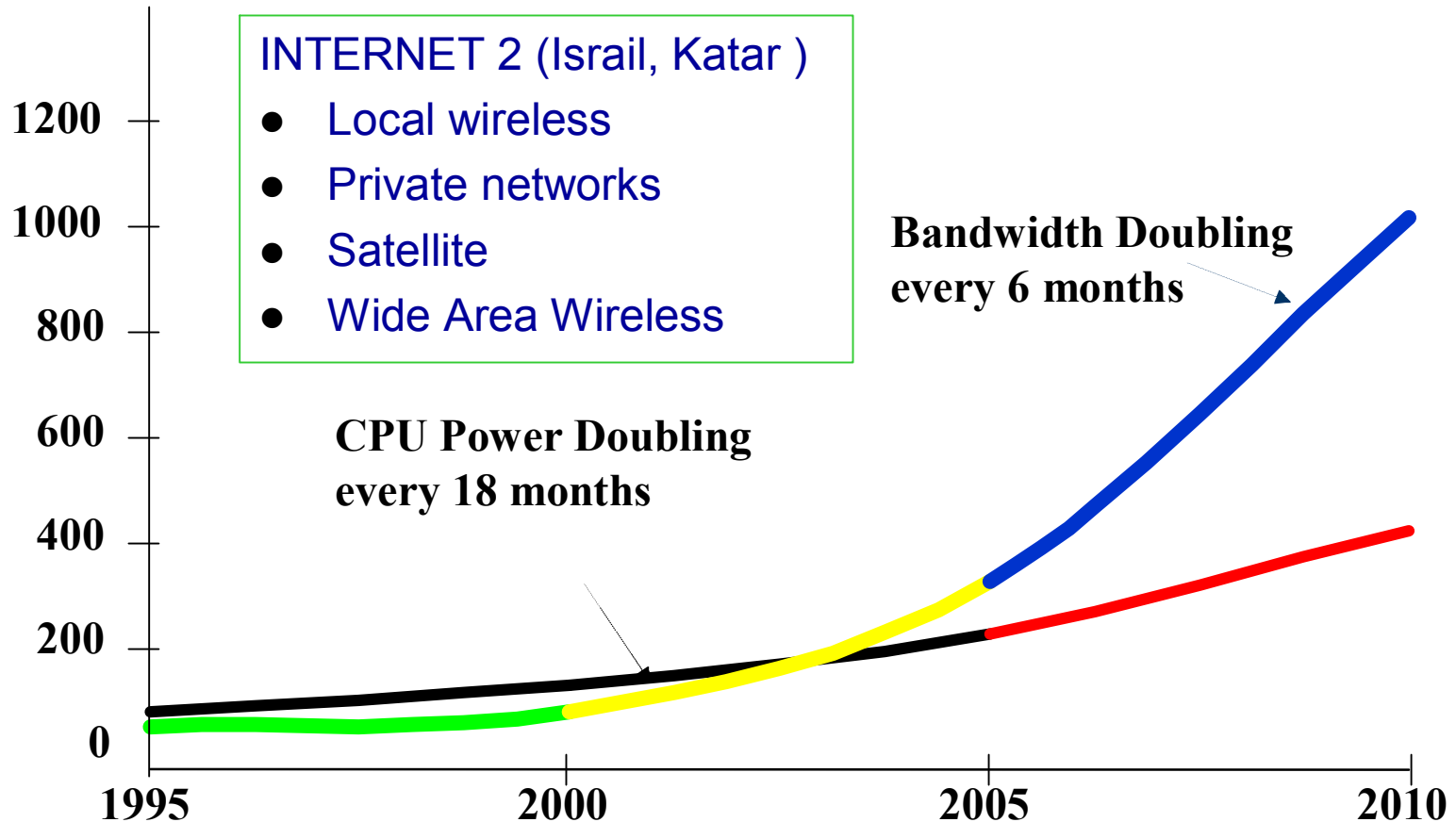
- **Graduates are exposed to new information in one year than their grandparents in a lifetime.**

- **Memorizing facts will have lower value, than utilizing information for decision-making.**

- **Multi-career.**
- **Change of career.**
- **Lifelong learning.**
- **Just-in-Time (JIT) learning.**
- **Career development: learning by the corporate**

The benefits

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e-Learning Delivery Formats

Classification according to time factor and who Leads the learning?:

- ## Who Leads?
  - Instructor-led.
  - Student-led (self paced).

- ## What Time?
  - Synchronous (real-time).
  - Asynchronous.

Who leads ?

	Synchronous	Asynchronous
Student	Student-led Synchronous	Student-led Asynchronous
Instructor	Instructor-led Synchronous	Instructor-led Asynchronous

What time ?

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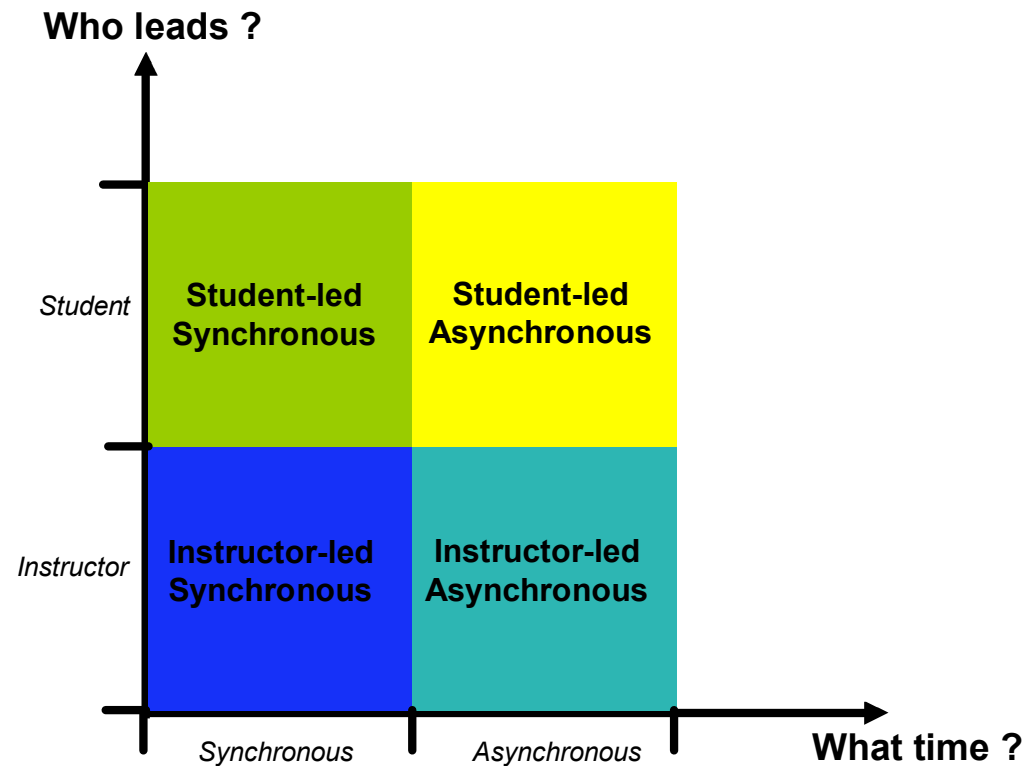
Blended Learning

It is the "integration between e-Learning and traditional learning"

can be categorized into Four Levels:

Traditional

Learning

e-Learning
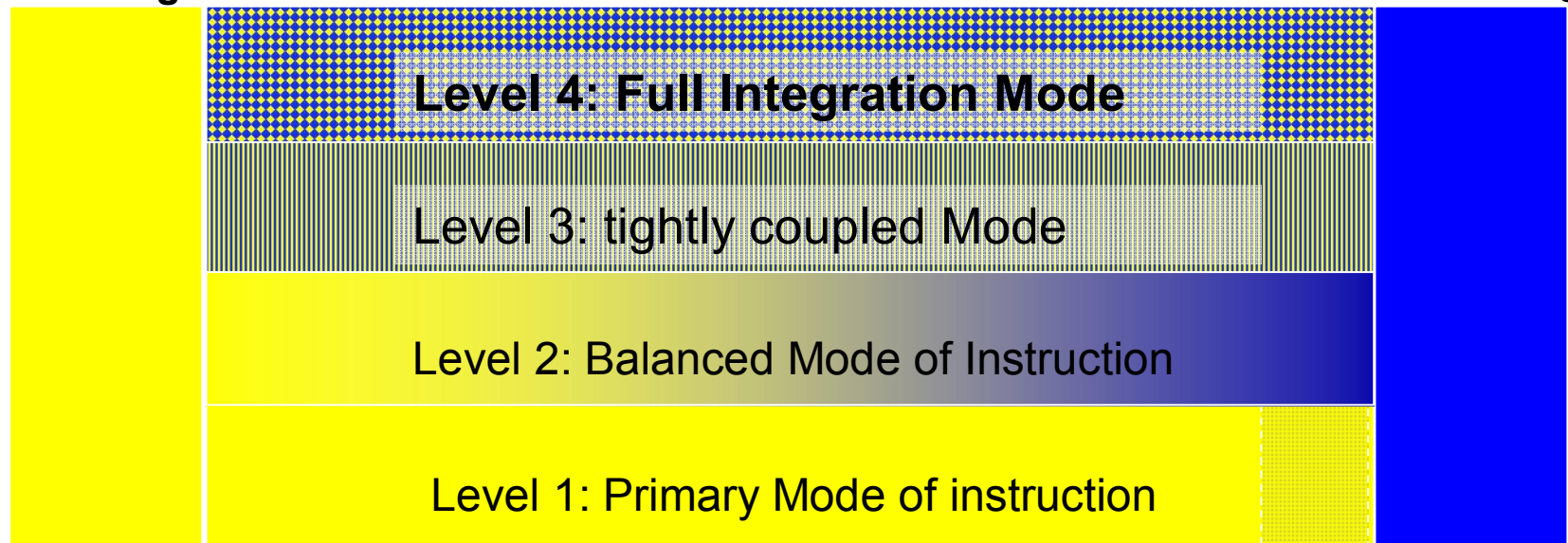
Level 4: Full Integration Mode

Level 3: tightly coupled Mode

Level 2: Balanced Mode of Instruction

Level 1: Primary Mode of instruction

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Participants and processes of e-learning

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The Three Participants in e-Learning are

Producer(s) ———▶ **Host** ———▶ **Learner(s)**

Host Server

Create - Develop

Deliver

Producer(s)

Learner(s)

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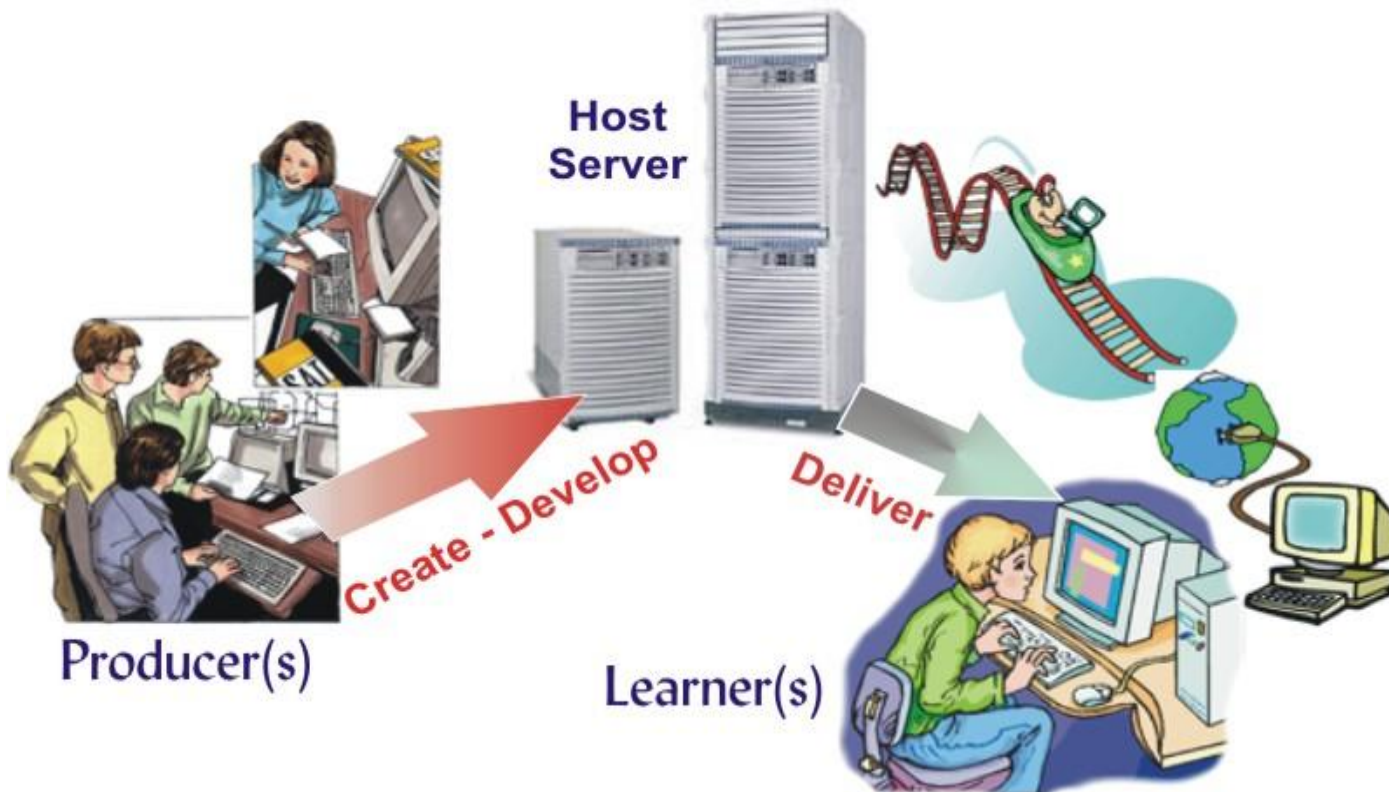
Participants and Processes

Producer

Producers create eLearning

- **Designer**
- **Author**
- **Writer**
- **Illustrator**
- **Photographer**
- **Animator**
- **Videographer**

Author and integrate components. **Transfer** the eLearning product to the Host

Server

Hosts serve up eLearning

Over a Network (LAN or WAN)

- **Public Institutions**
- **Private Sector organizations**

Locate, download and experience the eLearning

Learner

Learners access eLearning

- **Student**
- **Reader**
- **User**
- **Worker**
- **Consumer**

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Participants and Processes

What do they Need?
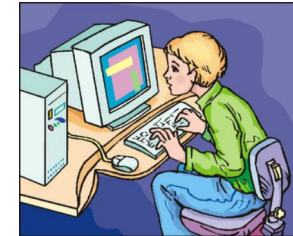
Producer		**Server**		**Learner**
• Multimedia Workstation	**Hardware**	• Network Server	**Hardware**	• Computer
• Internet Connection (Broadband)	**Connection**	• High Speed	**Connection**	• Internet Connection (preferably Broadband)
• Authoring Software • Media Preparation software	**Software**	• Web Server software	**Software**	• Browser and Media-players

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- Traditional Teaching is a must in undergraduate studies of practical disciplines like medicine.

- Hands on Experience is crucial

- Blended Learning "Mixed" is an optimal choice "Traditional + e-Learning"

What is going on around us ?
(Globally, Regionally)

.net,
n

The e - World

- More than 6.25 million people will learn online at colleges and universities in the 2008-2009 academic year, a number that could double by 2012.

- In 2007 the U.S. represented over 60% of e-Learning market. Europe is the second largest with a share of less than 15% .

- 93% of European Universities Plan to Expand Their Use of E-Learning Over the Next Two Years

- Estimated $560 billion market for online learning by 2010

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The Arabic World

Good Indicators in Egypt

- Internet Connectivity is everywhere

- Hands-on experience will be real through the National e-L committee formed in SCU with huge funds

- Distance Learning Programs in MU

  - M.SC in Environmental Engineering

- Virtual courses are offered by Egyptian MOE

- MU has about 16 e-Learning courses

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The National E-learning Center

Where is our Mansoura School of Medicine from all that ?

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وحدة التعليم الالكترونى

الرسالة

تطبيق أعلى معايير الجودة في استخدام أحدث تقنيات التعليم الطبي على المستوى المحلى والدولي وتطوير خبرات الطلاب وأعضاء هيئة التدريس التعليمية من خلال تكنولوجيا المعلومات و قيادة النهضة في برامج التعليم الالكتروني بالجامعة

الرؤية

أن تكون الوحدة هي الأبرز و الأكثر حيوية و فعالية و منافسة لمراكز التعليم الالكتروني في الجامعات المصرية ومنطقة الشرق الأوسط وصولا إلى الاعتماد الدولي

الأهداف

- نشر ثقافة التعليم الالكتروني بالكلية و الجامعة.
- خلق بيئة تعليمية طبية حديثة من خلال تقنيات الكترونية جديدة مع التنوع في مصادر المعلومات والخبرة.
- إكساب الطلاب وأعضاء هيئة التدريس المهارات اللازمة لاستخدام تقنيات الاتصالات والمعلومات في التعليم الطبي.
- التحول التدريجي إلى النظم الإلكترونية في عمل المقررات الدراسية عبر إعادة تصميم هذه المقررات إلى نمط إلكتروني تفاعلي.
- تأسيس مبدأ التعلم الذاتي والتدريب المستمر مدى الحياة.
- إنشاء موقع الكتروني للوحدة على أعلى مستوى من التصميم و الفعالية و باستخدام أحدث التقنيات.
- تطوير الموقع الالكتروني للكلية لينافس المواقع المثيلة محليا وعالميا.
- إنشاء و تطوير النسخة الالكترونية من الدوريات الطبية للكلية.
- إنشاء أكبر مستودع للوحدات التعليمية الطبية الالكترونية.
- دعم البرامج الأكاديمية والعلمية بالكلية من خلال تكنولوجيا المعلومات.
- وضع الخطط الإستراتيجية لتطوير أنشطة الوحدة بما يتواءم مع المعايير العالمية.
- العمل على وضع الضوابط اللازمة لضمان الجودة النوعية في جميع البرامج التعليمية والتدريبية.
- الانفتاح والتعاون الدولي والإقليمي في مجال التعليم الإلكتروني لمواكبة تطور المعرفة الطبية والبحث العلمي.

HON @CODE CERTIFIED 07/2008

Dr Amir Monir Design-2009

We apply the international rules of "**Best Practice**"

- We have the **ONLY** Internationally Accredited Website among the Egyptian Universities Nationwide

- We are the **ONLY** e-Learning Unit that has a Quality Management System and applies the international standards ISO 9001 :
  - Quality Manual
  - Policy and procedures control system
  - Document control system
  - Daily performance and adjustment system

- We are the largest and most equipped e-Learning Unit among the e-Learning Units in the University

The unit website
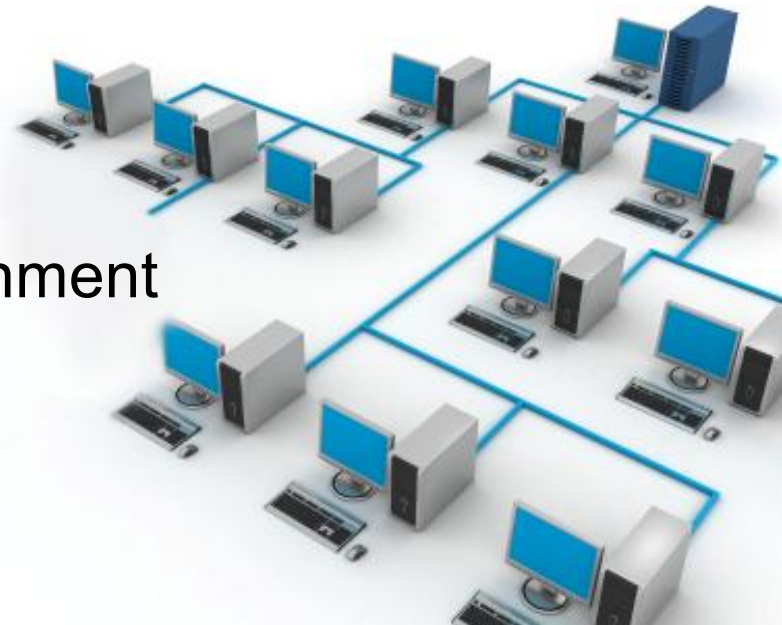

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And now…….we have this

DELL POWEREDGE 2900 SERVER

Dell PowerEdge 2900

It means an identity in the real world

It is the soul of the e-Learning environment

Unlimited future potentials

Best added value for the future

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Take-home notes

- e-learning is a new culture of learning

- Resistance to e-learning is not because of the product, but simply because human nature is reluctant to innovate and change.

- It is expected that ministry of higher education and government will gradually accredit and recognize large number of e-learning programs in the near future

- It is us who can implant the technology – enabled education among our students

- It is us who can change the rules and implant the culture of e-learning

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and remember……. we never give up

Thank you
End of session One
Comments and Discussion