Slide 1

![Lead logo]

LEAD workshops on Academic Leadership   21-27 October 2016

Educational Innovations

Dr. Goknur Kaplan Akilli

Slide 2

Introduction

- 3 main parts:
- Educational innovations
- New trends of educational modes & international market
- Competences to deal with changes & innovations in education

Slide 3

Educational innovations

- Innovation=a new idea, device, or method.
- the application of better solutions that meet
  - new requirements,
  - unarticulated needs, or
  - existing market needs.
- more-effective products, processes, services, technologies, or business models

Slide 4

Educational innovations

- Educational Innovation=a new idea, device, or method to enhance and improve teaching & learning.
  - answers to `how to teach?` question.
    - effectiveness & efficiency
    - more productive & less time

Slide 5

Why do we need to change?

THE 21st CENTURY LEARNER

Slide 6

Why do we need to change?

We're taking teaching and learning Above & Beyond

Today's students are moving beyond the basics and embracing the 4C's — "super skills" for the 21st century!

Communication
Sharing thoughts, questions, ideas, and solutions

Collaboration
Working together to reach a goal — putting talent, expertise, and smarts to work

Critical Thinking
Looking at problems in a new way, linking learning across subjects & disciplines

Creativity
Trying new approaches to get things done equals innovation & invention

For more 4C resources from the Partnership for 21st Century Skills, including the animated film ABOVE & BEYOND by Peter H. Reynolds & FableVision, journey to www.p21.org/4Cs

PARTNERSHIP FOR 21st CENTURY SKILLS

New trends of educational modes

- Digital Ecosystem
- Web 2.0
- Massively Open Online Courses- MOOCs
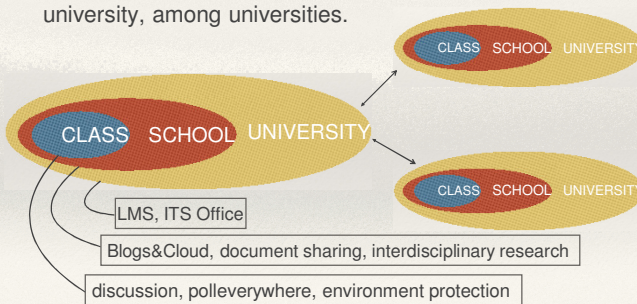- Open Educational Resources - OERs
- Blended Learning

Digital Ecosystem

- Integration of student information systems, learning management systems, curriculum management, etc.
- for optimum benefit of students, faculty (teachers) and staff.
- Different scales: in-class, within schools, within university, among universities.

Digital Ecosystem

- Different scales: in-class, within schools, within university, among universities.

CLASS SCHOOL UNIVERSITY

CLASS SCHOOL UNIVERSITY

CLASS SCHOOL UNIVERSITY

LMS, ITS Office

Blogs&Cloud, document sharing, interdisciplinary research

discussion, polleverywhere, environment protection

Digital Ecosystem: METU Example

- Learning Management System- ODTUClass
- Listservs for Discussion/Announcements
- Personal websites & Blog services
- Open Courseware Project
- METU webinar system
- Instructional Technology Support (ITS) Office
- Academic Professional Development (AGEP) program
- Staff Professional Development (IGEP) program
- METUTECH-ODTUKENT

Digital Ecosystem: METU Example

- Learning Management System- ODTUClass

Digital Ecosystem: METU Example

- Listservs for Discussion/Announcements

Digital Ecosystem: METU Example

❖ Personal websites & Blog services

Digital Ecosystem: METU Example

❖ Open Courseware Project - ocw.metu.edu.tr
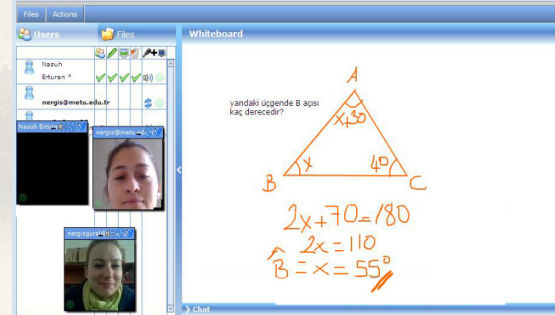

Digital Ecosystem: METU Example

❖ ~100.000 visitors/year

Digital Ecosystem: METU Example

❖ METU webinar system

Digital Ecosystem: METU Example

❖ Instructional Technology Support (ITS) Office

Digital Ecosystem: METU Example

❖ AGEP &IGEP programs:

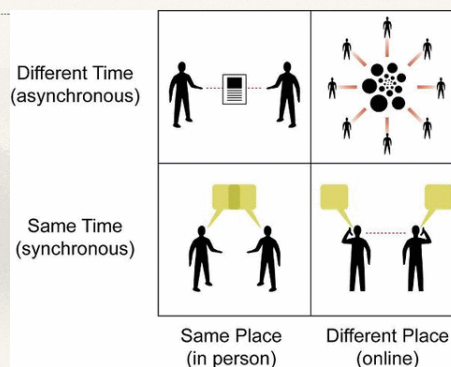❖ 16 modules about research incentives, effective teaching, introduction to various research centers and METUTECH.

Web 2.0

- search
- engage in inquiry
- share
- connect

Web 1.0, Web 2.0, Web 3.0,.... Web Next

- Web 1.0
  - early stage of the conceptual evolution of the World Wide Web
  - View-only webpages
  - Static info
- Web 2.0
  - websites allow users to do more than just retrieve information.
  - more user-interface, software and storage facilities, all through the browser.
  - interact and collaborate with each other in a social media dialogue as creators of user-generated content in a virtual community.
- Web 3.0
  - the Semantic Web
  - personalization
  - "the computer is generating new information", rather than humans.

Web 2.0-Characteristics

- Encourage author access and design rather than static information.
  - Online
  - User-created
  - Accessible
  - Open Source
    - Unrestricted
    - Free
    - Quality, stability
  - Kept in the Cloud
  - Mobile access

Examples of Web 2.0 Tools

- http://prezi.com/ online, interactive presentation tool
- http://www.dropbox.com/
- http://www.studyblue.com/ Make online flashcards with photos and audio!!
- http://doodle.com/ Online scheduling!
- http://www.diigo.com/ Online, social bookmarking!
- http://www.evernote.com/ Online notetaking!
- http://www.ujam.com/ Make your music!
- http://ge.tt/ The best way to publish & share your files!
- http://www.weebly.com/ Online website creation tool
- http://www.screenr.com/ Screencasting
- http://typewith.me/ Collaborative text editing
- http://wiggio.com Collaborative work group
- http://www.easel.ly Infographic tool

Examples of Web 2.0 Tools

- https://prezi.com/
- http://www.powtoon.com
- https://www.edmodo.com
- http://www.beyazpano.com
- http://goanimate.com
- https://studio.stupeflix.com/en/
- https://www.studyblue.com
- https://www.studyblue.com
- http://piktochart.com
- http://popplet.com
- https://bubbl.us
- http://www.spicynodes.org
- http://its.metu.edu.tr/seminerler/
- PollEv.com/akilli

MOOCs & OERs

- Harvard University
- MIT
- METU OCW
- Cengage Learning

Blended Learning

- Best of both worlds:
- mix of time & location
  - Online tools +
  - Face-to-face Instruction

Blended learning

Different Time (asynchronous)

Same Time (synchronous)

Same Place (in person)

Different Place (online)

Competences for innovations in education

- GOLD standards:
  - Goal-based
  - Optimum-technology integration with
  - Learner (student)-centered
  - Design (backwards design)

Lead

Backward design:

1. Identify desired result of instruction.
2. Determine acceptable evidence of learning.
3. Plan experiences and instruction (i.e., learning strategies, resources, and activities).

ATTENTION!!!

- Innovation fails when:
  - poor goal definition
  - poor alignment of actions to goals
  - poor participation in teams & among teams
  - poor communication & access to information
  - poor monitoring of results (impact assessment)

"Thank you!!!"

谢谢

Lead

Activity Time

- 5 groups:
  - 5 teaching strategies: direct instruction, cooperative learning, discussion, inquiry-discovery learning, problem-based learning
  - 5 technologies: simulation, games, web 2.0 tools, mobile applications, paper & pen
  - 5 contents: environment protection, online security, cyberbullying, our body, geometry.