

# ***Dekalog e-learning***

**Oleg Zaikin**

**Warsaw School of Computer Science**

**2017**

# *Introduction*

# The Bologna process - a brief historical outline

*<http://wwsi.edu.pl/>*

- Magna Charta Universitatum

- Bologna, September 1988
- 900 years of the oldest European university
- Signatures of nearly 400 rectors (now over 500)

The beginning of the process of educational and scientific integration in Europe

- Sorghum declaration
- Paris, May 1998
- 800th anniversary of the Sorbonne in Paris
- 4 countries (ministers of education): France, Germany, United Kingdom, Italy

# Bologna Process - Ministers of Education Conferences

Bologna Declaration, June 1999

- 29 countries, including Poland
- Baseline: 2010 European Higher Education Area
- European Area of Higher Education or European Educational Space
- Prague Press, May 2001
- "Towards the European Higher Education Area"
- 33 countries

# Bologna Process - Ministers of Education Conferences

- Berlin Communication, September 2003
  - "Implementation of the European Higher Education Area"
  - Third degree: doctoral studies
  - 40 countries (among 7 new ones: Russia)
  - Message from Bergen, May 2005
  - "European Higher Education Area - Achieving Goals"
  - 45 countries
  - Message from London, May 2007
  - Summary and priorities for the next 2 years
  - 46 countries (Montenegro arrived)
  - Conference: Benelux countries, 2009

# European educational space

- Basic assumptions
  - Promoting mobility ("horizontal" and "vertical")
  - Comparability of diplomas
  - European Credit Transfer System (ECTS)
  - Two-Stage Studies (Three-Stage)
  - European dimension
  - E-learning
  - Continuing education
  - Quality assurance of education

# E-learning - Terminology (and not only!)

- [http://www.profesornet.pl/na\\_odl.htm](http://www.profesornet.pl/na_odl.htm)
  - *Distance education, e-education, telematic education, distance education, virtual education*
  - *E-learning, distance learning, online learning, distance education, internet-based education*
  - *E-learning, distance learning, internet teaching, remote teaching*
  - *Distance learning*
  - *Distance learning, distance*

*E-learning  
At the University of  
Warsaw*

*COME@UW*



# Center for Open and Multimedial Education – genesis

- Interdepartmental unit
  - Transformation of Open Learning in 1999
  - Center for Open and Multimedia Education
  - <http://www.come.uw.edu.pl/>
  - Professor Grażyna Wieczorkowska
  - The creator and director of COME until August 31, 2005
  - Currently Chair of the Program Board of COME
  - MSc in Mathematics
  - Doctorate, habilitation and professorship: i profesura: psychologia

# Need to start with the tools - "platform"

- Existing solutions
  - Commercial systems (eg Blackboard, Lotus Learning Space, WebCT)
  - Systems available free of charge (eg Claroline, ILIAS, Moodle)
  - Systems developed at universities for their own use or for wider dissemination (eg NGin2)
  - Platform in COME
  - Phase 1: own system
  - Phase 2: cooperation with the Jagiellonian University and development of NGin2
  - Phase 3: since mid-2004 – Moodle

# Platform functionality

- Existing solutions
  - Commercial systems (eg Blackboard, Lotus Learning Space, WebCT)
  - Systems available free of charge (eg Claroline, ILIAS, Moodle)
  - Systems developed at universities for their own use or for wider dissemination (eg NGin2)
  - Platform in COME
  - Phase 1: own system
  - Phase 2: cooperation with the Jagiellonian University and development of NGin2
  - Phase 3: since mid-2004 – Moodle

# Platform functionality – c.d.

- Information on progress
  - Individual for the learner
  - Collective and individual for the leader
  - Communication with / between participants
  - Asynchronous (newsgroup, message board etc.)
  - Synchronous (chat or Internet phone)
  - Reporting
  - Ability to analyze individual results and the course and effects of training

# Didactic model COME

- Developed by the experience of several years  
First Class Assessment in Education took place in 2000  
Courses of various types, including:
  - Group discussion in English
  - Online education
- Mayan Epigraphy (theoretical and practical writing)
- Intercultural education
- Writing abstracts in English
- Psychology of eating
- Psychology of motivation
- Social Change in Poland
- Survival Polish

# Typical online course

- Weekly material
- Typical tasks of the week
  - Get to know the pages of the paper manual
  - Get to know the selected media files (text, audio, video, pages)
  - Housework
  - Test selection
  - Add-on test (classic, crossword)
  - Open questions
  - Group questions

# Typical online course-cd

- The courses last 6-10 weeks
- Examination in stationary form
- In real life"
- Occasionally, by phone
- Examination - 80% of tasks within the deadline

## Costs

- Science subjects
- Humanities subjects

# Advantages of online education

- Full control of the education system
  - Monitoring work and learning and teaching
- Forcing high student activity
  - Setting good goals
- Breaking the geographic and temporal barrier
  - Students and teachers from around the world
  - Asynchronous
- Breaking the social barriers
  - Disabled person
  - Families with children



# *Dekalog*

# (1) Combine online education with stationary (*„Be blended“*)

Some features of traditional classes can not be played on the Internet

- Non-verbal signals during interaction

  - Intonation, gesturing, mimicry

- Monitoring the students' reaction by the lecturer

  - Influence on course of lectures "without words"

- Personality and charisma of the lecturer

- Problem of Identification of students

## (2) Put more emphasis on interacting with students than developing elaborate tools

- The learning process is tedious and complicated
  - It is necessary to maintain an appropriate level of motivation
  - Excessive freedom is killer
- Success requires viewers
  - The biggest success is not happy when we have no one to talk about him
- Dialogue is more important than the best multimedia
- packages

(3) Create a social group from the participants, working in a team with an integrator and assistants.

An integrator is a person who:

- knows all the members of the group
- He knows what he's doing and what he's up to
- Helps you to go through a phase of frustration
- initiates / monitors discussion in a group

The professor / lecturer may be an integrator, but ... an economic account!

## (4) Individualize the difficulty levels of the classes

- Pattern of individualization — gym
  - Everyone exercises at the same time and place, but with individually tailored workload and set of exercises

### Advantages of individualization

- The ability to compensate for differences in pre-processing
- Opportunity for the more capable

## *(5) Set good goals Do not reload the program*

- The teacher often thinks only of what he wants to convey

On the Internet, more than in traditional teaching (where time is a natural constraint), it is possible to overload

- Providing information versus assistance in assimilating information

## (6) Be multimedia - especially to record sound files

- Try to "imitate" traditional teaching as much as possible
  - Audio and video recordings
  - Possibility of non-verbal signals
  - Paper manuals

### Weight of asynchronous interaction

- Students value the recorded comment for their work
- The more feedback the better

## (7) Plan student activity, check the level of assimilation — automate testing

- During the teaching phase, it is important to plan the student activity path

What and in what order should the learner do?

- Exams and tests of choice

Automatic test checks

- Feedback weight



## (8) Separate the teaching process from the certification phase. Allow repeating tests in the learning phase

- Recipe for problems with student identification
- During the learning process
  - Please help
  - Ability to repeat tests
  - Possible cheating is a learning problem

Verification and certification phase

– Same as in traditional education

– The final effect is important!

## (9) Monitor the didactic process - Ask questions open in the evaluation questionnaires

- Obligatory filling of the questionnaire
  - Condition of the certificate
  - The only way to get full feedback

Examples of questions:

- What should be changed in the next edition?
- Would you recommend this course to others?
- If so, who? If not, why?

Clarity

## (10) Be involved and flexible

- Do not hold on to the slave program
  - Watch the students
  - Modify the execution progress according to the group level

The teaching process is a compromise between the teacher's expectations and the student's abilities

Better and better!

*A na koniec, jeśli czas  
pozwole ...*

# IBIZA

## Interdyscyplinarna Baza Internetowych Zajęć Akademickich

- Idea
  - Interdyscyplinarność kształcenia
  - Przełamywanie barier wydziałowych
  - Upowszechnianie zdalnego nauczania
- Wsparcie władz centralnych
  - Zarządzenia Rektora z lipca 2004 oraz czerwca 2005
- Zwiększająca się popularność
  - Semestr zimowy 2005/06: 21 kursów
  - Semestr letni 2005/06: 32 kursy
  - Kilkadziesiąt tysięcy studentów zainteresowanych

# IBIZA – przykładowe kursy w semestrze zimowym 2005/06

- *Geologia – wybrane zagadnienia*
- *Gry świadome i podświadome w bliskich związkach*
- *Historia Unii Europejskiej i jej miejsce w świecie*
- *Konflikty zbrojne – zasady i mechanizmy*
- *Maya\_1, Maya\_2 Hieroglyphic Writing*
- *Programowanie w Java 2 Micro Edition*
- *ROBOTOMACHIA czyli Warsztaty Nowych Technik Medialnych*
- *Słowniki i encyklopedie w Internecie – budowa i użytkowanie*

# „Hymny pochwalne”

- „Mogę dowolnie sterować czasem nauki, ale wiem, że co tydzień muszę wyrobić się z kolejną porcją materiału. [...] Nie ma taryfy ulgowej. Muszę być aktywny.”
- „Poziom kształcenia jest jak najbardziej uniwersytecki i jako taki nie odbiega jakością od zajęć stacjonarnych na Uniwersytecie. Forma internetowa, dzięki swojej elastyczności jest wygodna dla osób pracujących. Jest też dużo bardziej motywująca i skuteczna dzięki interaktywności i wymogowi cotygodniowych zaliczeń.”
- „Żadne studia stacjonarne nie dały i zapewne nie dałyby mi tak wielu wiadomości. [...] Studia wymagają szalonej systematyczności i samozaparcia [...] Przez 5 lat studiów magisterskich nigdy nie byłam tak zaangażowana i tak skutecznie ‘zmuszana’ do pracy.

*Dziękuję za uwagę*