

**Mainstreaming equity, opportunity and success in higher education  
Liverpool, April 13-14, 2010**

# **Technology enhanced learning improves retention**



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Faculty of Organization and Informatics Varazdin  
Croatia

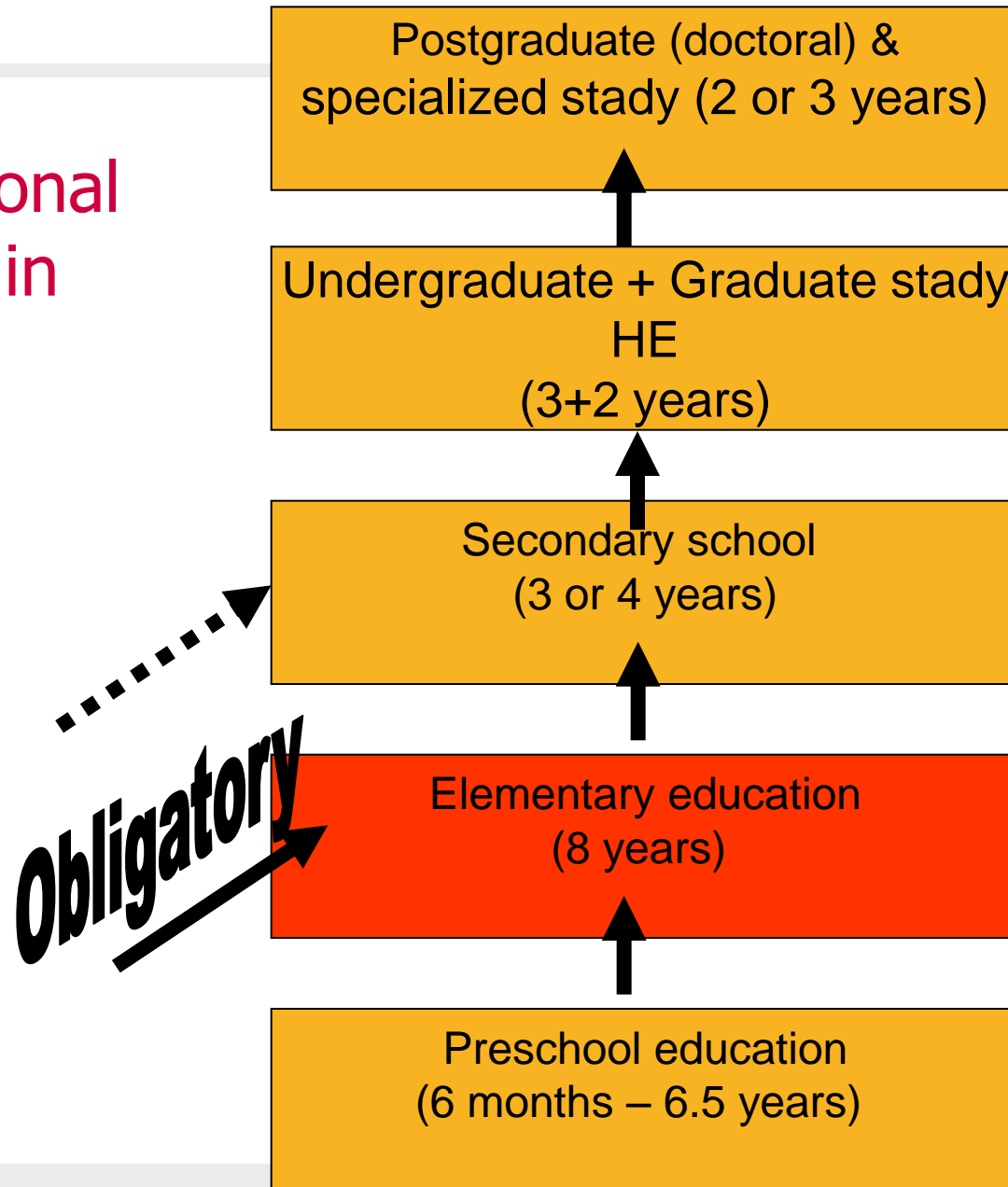
- Education in Croatia
- University of Zagreb / Faculty of Organization and Informatics Varazdin
- Idea of mainstreaming WP at FOI
- ICT at FOI ( Moodle e-learning system)
- Students with disabilities
- Indicators of success

Questions and conclusions...

# Faculty of Organization and Informatics Varaždin

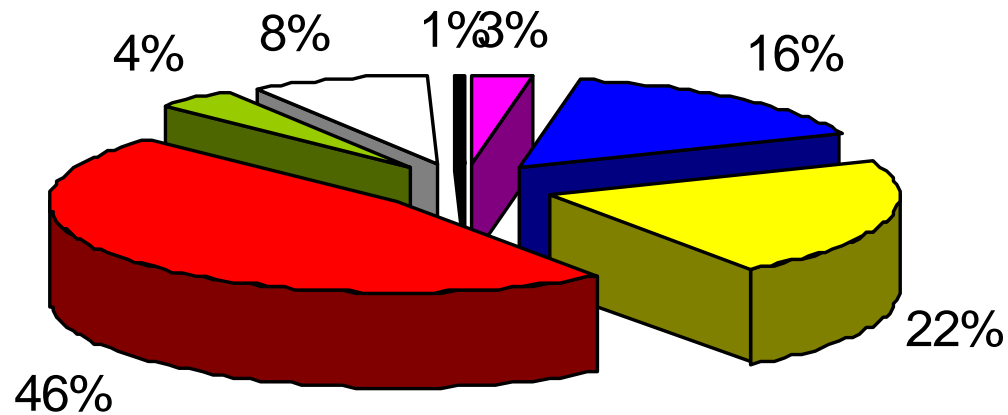



# Educational system in Croatia



# Level of education

Croatian Bureau of Statistics - Census 2001 <http://www.dzs.hr>



- |   |  |
|---|--|
|  No education      |  Unfinished elementary school |
|  Elementary school |  High school                  |
|  Polytechnics      |  College, Master, Ph.D.       |
|  No answer         |  |

- **ELEMENTARY EDUCATION**

- Croatian National Educational Standard (CNES) – 2005-2010



- **SECONDARY EDUCATION**

- “*Tour de matour*” – highschool diploma / the state graduation exam
- National Programme of Measures for the Introduction of **Compulsory** Secondary Education



- **HIGHER EDUCATION**

- Bologna process (Prague, 2001)
- academic degree standards and quality assurance standards



- The University of Zagreb (1669) - oldest and biggest university in South-Eastern Europe
- 29 faculties
- 3 art academies
- Centre for Croatian Studies
- More then **60,000** full-time undergraduate and postgraduate students
- the University is the strongest teaching institution in Croatia



- Education in the field of ICT
- The Faculty offers:
  - three-year (6-semester) undergraduate course of study
  - two-year graduate course of study
  - postgraduate study or specialized studies + Ph.D.



- to educate informaticians for the 21st century
  - up-to-date study programmes equal to the most recent curriculums accepted in Western Europe and America
  - supported by innovative learning methods and modern laboratories
  - involved students in interesting projects

<http://www.foi.hr>



# Departments FOI



Department of Theoretical Foundations



Department of Computing and Technology



Department of Information Systems Development



Department of Quantitative Methods



Department of Economics



Department of Organization



Department of Foreign Languages

# Who are under-represented groups of students?

- students with disability
- part-time and mature students
- foreign students
- students whose parents were war veterans
- students from disadvantaged socio-economic background
- ... other under-representative groups of students (i.e. according to gender issue)

# E-learning strategy at FOI

Learning/teaching	Description	Technologies
<b>Traditional /Classical</b>	Ex catedra in classroom	Textprocesor
<b>ICT supported teaching and learning</b>	Use of technology to enhance classic teaching	Prezentations (PP), Multimededia CD-ROM, Web courseware, E-mails and mailing lists, Forum
<b>Blended, mixed, hybrid Levels: FOI1, FOI 2, FOI3</b>	<b>Combination of f2f teaching and ICT supported teaching – higher level of technology usage</b>	<b>LMS (Learning Management Systems) CBT/WBT (Computer/Web Based Training), Videoconferences</b>
<b>Online education</b>	Teaching and learning only through technology	Internet, LMS, Videoconferences

- 1) Undergraduate study – 72 (100% of courses)
- 2) Graduate study – 30 (100%)
- 3) Doctoral study – 17 (63%)
- 4) Postgraduate specialist study – 23 (43%);
- 5) Professional study - 48 (80%);
- Entirely online – 1 course.
- In total there **212** e-courses at FOI

# Range of Effective learning environment (ELE factors)

- 1) access to technology
- 2) stress free environment
- 3) test taking skills



- Vidaček-Hainš, V., Appatova, V. & Prats, H. (2008). Components of effective academic learning environment: Case studies of Croatian and American students. Proceedings of the 19th Central European International Conference on Information and Intelligent Systems, Varazdin, HR, 137-144.


# Digital Library

- Collecting data in FOI library
- Visually impaired students (PDF)
- For all students – easy access










URL: <http://dlib.foi.hr/>

## Uvod

-  Osnovne informacije o kolegiju
-  Uvodne napomene
-  Forum s vijestima
-  Upute za izradu prezentacija i referata
-  Raspored kolokvija A
-  Rezultati\_kolokvij\_A
-  Kriticki\_esej\_termin
-  Rezultati kriticki esej

-  Test - Komunikacija (R. Fox)
-  Test - Uvod u studij ljudske komunikacije (K. Reardon)
-  Test - Značajke interpersonalne komunikacije (K. Reardon)
-  Test - Uvod u poslovno komuniciranje (G. Bubaš)
-  Test - Komunikacijska kompetencija (G. Bubaš)
-  Test - Prezentacijska komunikacija (G. Bubaš)
-  Test - Komunikacija u prodaji (G. Bubaš)

### My Courses

-  ELF
-  Predd
-  Ek
-  EP
-  In
-  Stručn
-  Za n

### Nedavna ak

Aktivnost od  
Travanj 2009  
Potpuni izvje  
aktivnosti...

Nema novos  
prijava susta

### Kalendar


◀ Sv

Pon	Uto	Sri
	4	5 6
11	12	13
18	19	20
25	26	27

### Events K

-  Global
-  Group

### Network Ser

 FOI e-po

Ime / Prezime	Started on	Završeno	Utrošeno vrijeme	Ocjena/10	#1	#2	#3	#4	#5
<b>Renata Novosel</b>	10 Srpanj 2008, 17:51	10 Srpanj 2008, 17:55	4 min 43 sek	8	--/2	--/2	--/2	--/2	--/2
	10 Srpanj 2008, 17:58	10 Srpanj 2008, 17:58	sada	6	--/2	--/2	--/2	--/2	--/2
<b>Bojan Okreša</b>	11 Svibanj 2008, 15:33	11 Svibanj 2008, 15:34	58 sek	4	--/2	--/2	--/2	--/2	--/2
	5 Lipanj 2008, 14:33	5 Lipanj 2008, 14:33	54 sek	4	--/2	--/2	--/2	--/2	--/2
<b>Saša Vrček</b>	29 Svibanj 2008, 15:24	29 Svibanj 2008, 15:25	1 min 4 sek	8	--/2	--/2	--/2	--/2	--/2
<b>Antonio Žitnjak</b>	19 Svibanj 2008, 19:49	19 Svibanj 2008, 19:52	3 min 10 sek	6	--/2	--/2	--/2	--/2	--/2
<b>Anita Šumiga</b>	17 Travanj 2008, 15:22	17 Travanj 2008, 15:25	2 min 57 sek	9.4	--/2	--/2	--/2	--/2	--/2
<b>Filip Sokač</b>	3 Lipanj 2008, 23:30	3 Lipanj 2008, 23:33	2 min 9 sek	8	--/2	--/2	--/2	--/2	--/2
<b>Mario Bastalić</b>	18 Travanj 2008, 10:45	18 Travanj 2008, 10:46	51 sek	4	--/2	--/2	--/2	--/2	--/2
<b>Jelena Mišetić</b>	14 Travanj 2008, 17:49	14 Travanj 2008, 17:59	9 min 25 sek	10	--/2	--/2	--/2	--/2	--/2
<b>Sandra Hrman</b>	4 Svibanj 2008, 14:37	4 Svibanj 2008, 14:39	2 min 2 sek	8	--/2	--/2	--/2	--/2	--/2
	4 Svibanj 2008, 14:40	-	open	-	--/2	--/2	--/2	--/2	--/2
<b>Ivana Šincek</b>	14 Travanj 2008, 21:59	14 Travanj 2008, 22:02	3 min 13 sek	10	--/2	--/2	--/2	--/2	--/2
<b>Karlo Međeral</b>	17 Travanj 2008, 19:11	17 Travanj 2008, 19:14	2 min 31 sek	8	--/2	--/2	--/2	--/2	--/2
<b>Spomenka Japek Korpar</b>	21 Svibanj 2008, 20:09	21 Svibanj 2008, 20:10	1 min 38 sek	6	--/2	--/2	--/2	--/2	--/2
	8 Lipanj 2008, 19:00	8 Lipanj 2008, 19:00	1 min 43 sek	8	--/2	--/2	--/2	--/2	--/2

# Students with disabilities

**Ured za studente s invaliditetom - Mozilla Firefox**

File Edit View History Bookmarks Tools Help

Back Forward Reload Stop New Tab New Window Downloads DownloadHelper

http://www.unizg.hr/uredssi/

http://mail.google.co... http://www.kohit.net/ http://emp3finder.com/ http://www.phazemp... EU http://www.eudict.com/ You http://www.youtube.... http://www.kfunigraz... http://katz.cd/ http://www.facebook...

**Ured za studente s invaliditetom** (Untitled)

 Sveučilište u Zagrebu  
**Ured za studente s invaliditetom**



Nalazite se ovdje ▶ Naslovnica

traži...

**Glavni izbornik**

- ▶ **Naslovnica**
- ▶ Aktivnosti
- ▶ Korisne informacije
- ▶ Aktualno
- ▶ Dokumenti
- ▶ Kontakt
- ▶ Linkovi

**Dobrodošli!**

Na Sveučilištu u Zagrebu, na kojem studira preko 65.000 studenata, studira oko 200 studenata s invaliditetom, što iznosi oko 3 promila. Kako bi se postiglo da svi potencijalni studenti s invaliditetom koji žele studirati na Sveučilištu u Zagrebu to i ostvare, nužno je osigurati uvjete za uspješno studiranje svim sadašnjim, a i budućim studentima s invaliditetom. Stoga je Sveučilište u Zagrebu osnovalo Ured za studente s invaliditetom kao referalni centar u kojem studenti mogu dobiti informacije na licu mjesta, kao i putem telefona, e-maila, letaka, brošura. Ured kroz svoje aktivnosti studentima nudi i izravnu pomoć u rješavanju specifičnih problema koji se mogu pojaviti tijekom studija, te tako predstavlja mehanizam za osiguravanje jednakih mogućnosti.

**Ured je namijenjen studentima s:**

- oštećenjima vida
- oštećenjima sluha
- tjelesnim invaliditetom
- višestrukim oštećenjima
- kroničnim bolestima
- psihičkim poremećajima
- teškoćama u učenju (disleksija, disgrafija i sl.)
- ostalim zdravstvenim stanjima ili teškoćama koje mogu utjecati na tijek studija.

**Uredom za studente s invaliditetom Sveučilišta u Zagrebu rukovode i upravljaju**

- prorektor za studije i upravljanje kvalitetom i voditelj Ureda

Done

start Microsoft PowerPoint ... Ured za studente s in... Desktop HR 11:00

Individual needs and curriculum specificities:

- personality
- pedagogical and instructional practices
- communications technology (computers in education)
- persons with disability
- skills for independent living...



# Assistive technology (AT)

- Includes assistive, adaptive, and rehabilitative devices for people with disabilities
- Disabled people can achieve independence in executing routine tasks



- Counseling office – psychological counseling
- Good corporation with medical care
  - First year students – problems in adaptation
  - Fear and apprehension before exams
  - Communication problems with professors / students
  - Continuing education...
- Peer counseling (students advisors)
- Educational assistant
- Tutoring...

## Further activities:

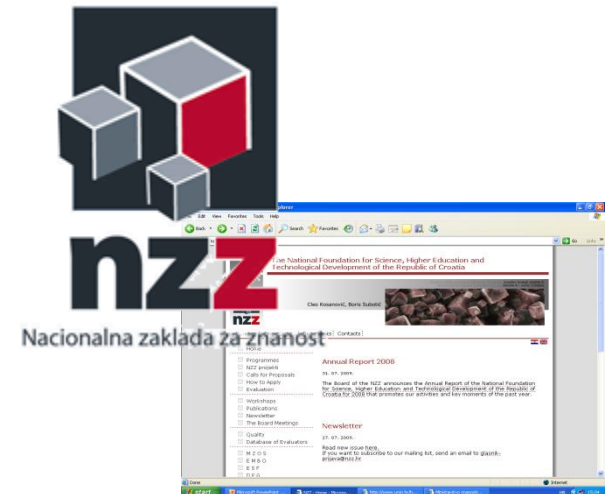
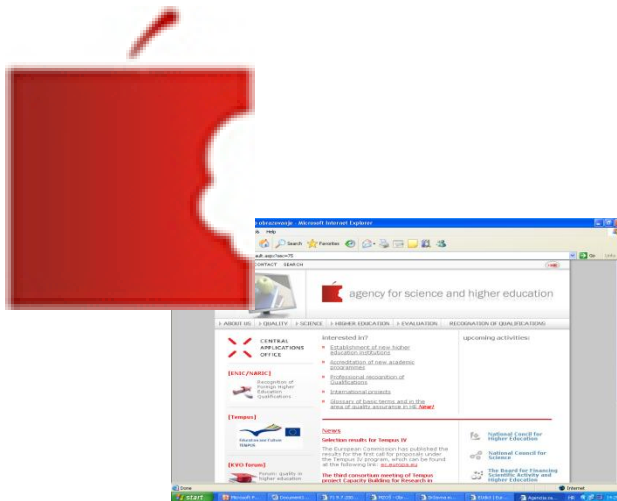
- Reduce brain drain and increase brain gain
- Enhance international mobility of under-privileged groups of student
- Encourage more students to be educational assistants for students with disabilities

- International Relations Office
- International Projects Centre
- international students



# National level

- Agency for science and higher education
- <http://www.azvo.hr/Default.aspx?sec=75>
- National foundation for science, higher education and technological development
- <http://www.nzz.hr/>



## How to...

- ... enhance retention and enhance the number of students with disabilities who will study at FOI
- ... develop widening participation for target groups of students
- ... develop courses for educational assistants
- Develop widening participation for target groups of students



Thank you!



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