

**Goran Bubaš**

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**Teaching with Web 2.0 Tools:**

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**Evaluation, Pedagogy and  
Integration Solutions**

**ITI 2010 Conference Workshop**

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# A. Recent trends in e-learning 1/4

- **EXPECTATIONS OF STUDENTS**

- Interest in online learning (especially by part-time students)
- 3A access to course material (ananytime, ananywhere, anany device...)
- High average level of computer/Internet literacy and use of multimedia devices
- New ways of learning and new tools for teaching
- Enrichment of educational experience



# A. Recent trends in e-learning 2/4

- **THE ONLINE TEACHER**

- Role specialization (authors, instructional designers, visual designers, multimedia experts, online moderators/instructors, technical support, etc.)
- Need for the development of new competencies of teachers
- Support for advanced ways of online teaching
- Greater workload and more complex demands (communication, creation of online materials)

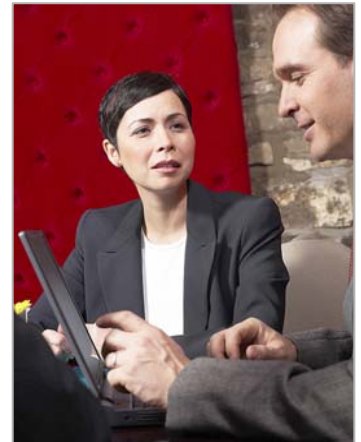


# A. Recent trends in e-learning 3/4

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- **THE UNIVERSITY ENVIRONMENT**

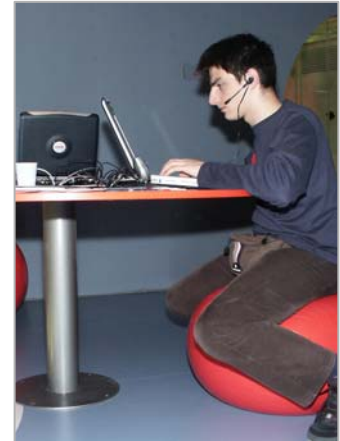
- Teaching that is more oriented toward the needs of learners
- Focus on competencies instead of course attendance
- Use of less traditional pedagogical approaches and models (collaborative learning, constructivism, etc.)
- Teacher development programs, support for online teaching and the use of new technologies



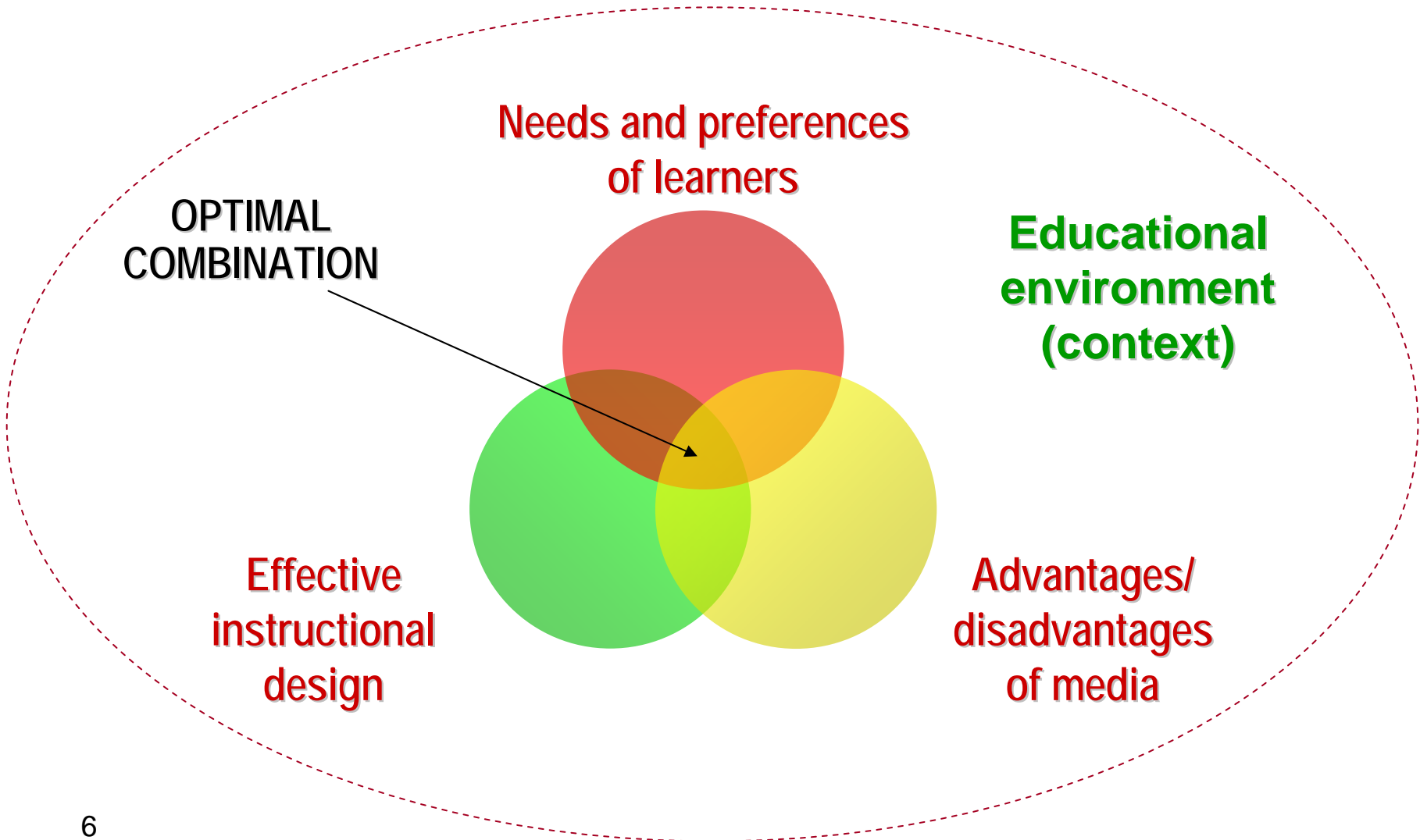
# A. Recent trends in e-learning 4/4

- **E-LEARNING @ UNIVERSITY**

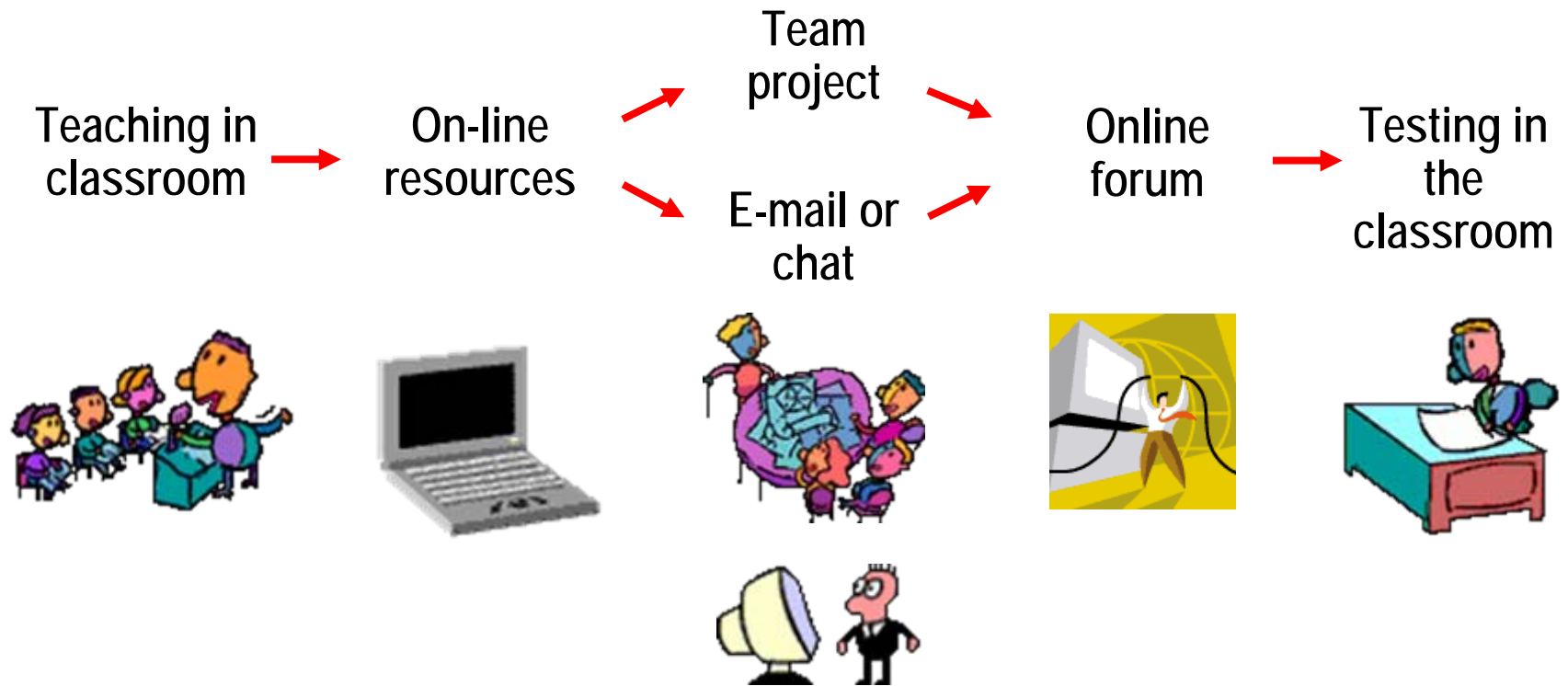
- Blended / hybrid learning environment and the use of various online tools (LMS, ePortfolio)
- Students are more independent in the use of educational content and adopt novel educational technology
- Standard teaching methods are supplemented with new strategies / techniques of teaching



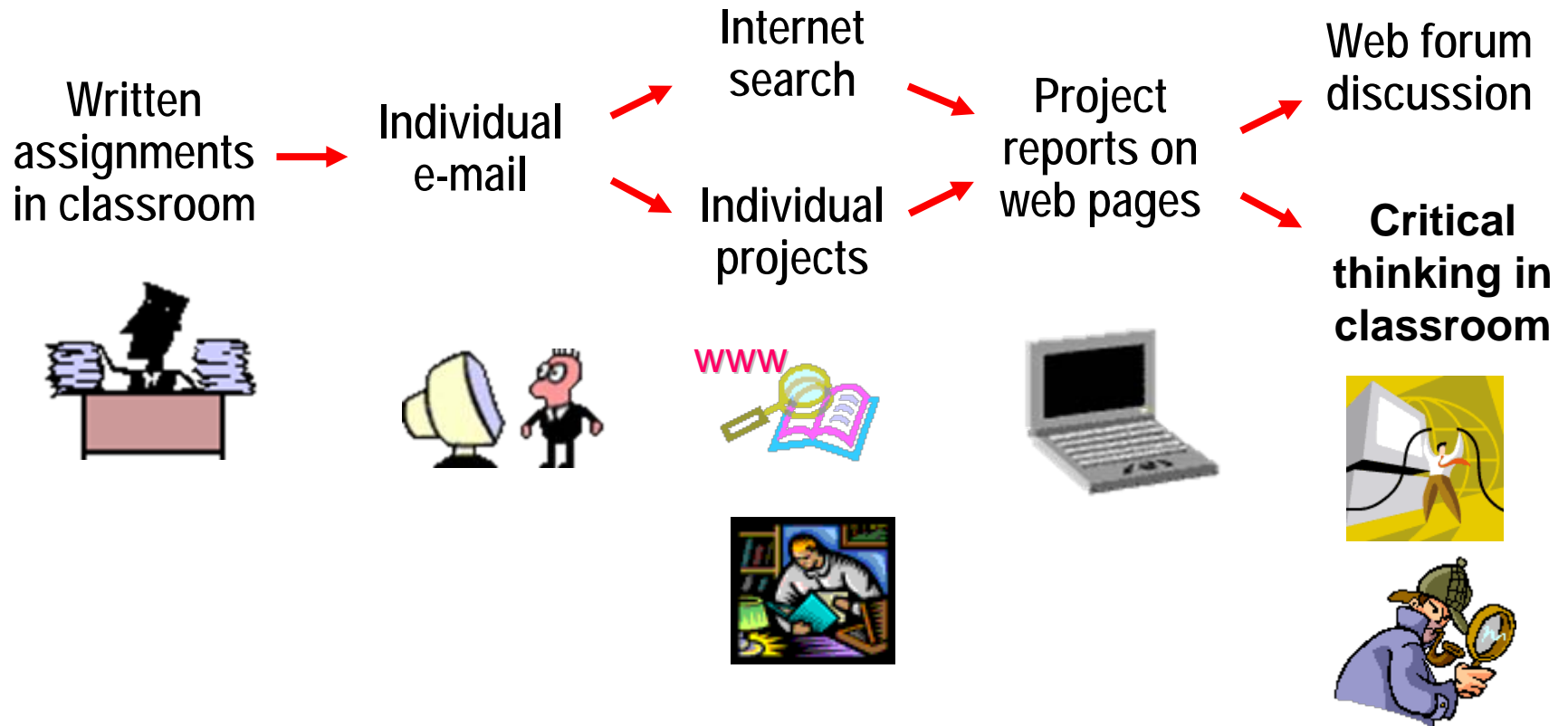
# B. Hybrid learning



# C. Serial/parallel hybrid learning



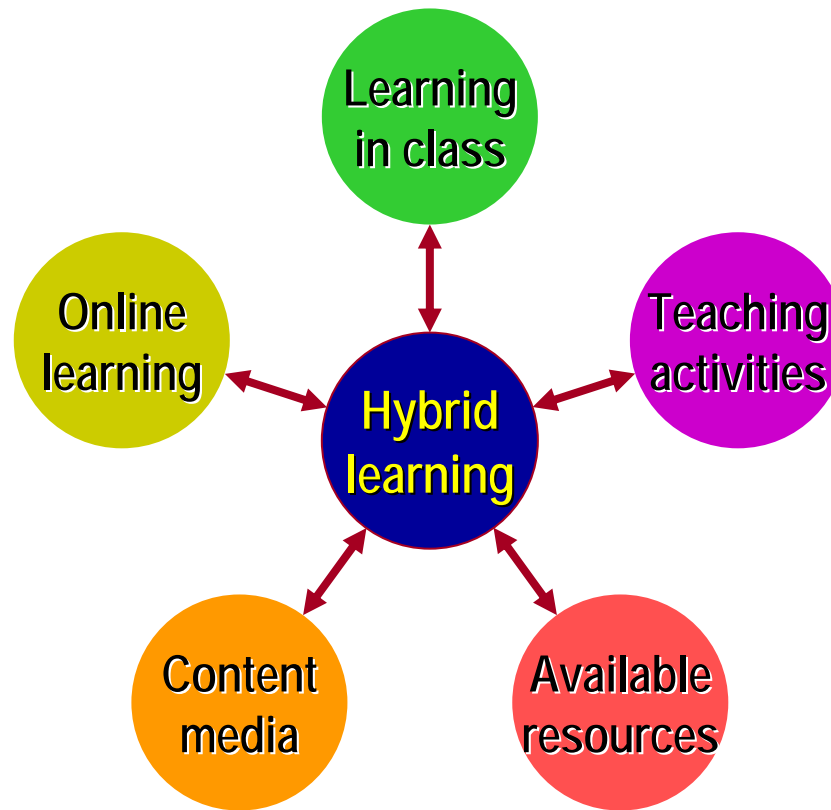
# D. Integrated hybrid learning





# E. Optimization in hybrid learning

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# F. Early example of hybrid learning 1/4

- E-learning tools for the “Psychology of the Internet” university course (2004-2006)



ON-LINE KOMUNIKACIJA  
PSIHOLOGIJA KORISTELJA INTERNETA

INFO USLUGE DEMO O NAAMA

LOGIN



Otkrijte kako možete biti uspješniji i prikladniji u vašim privatnim i poslovnim on-line aktivnostima.

Unaprijedite vještine u komunikaciji putem interneta, prezentiranju informacija na webu, on-line privatnosti i sigurnosti itd.

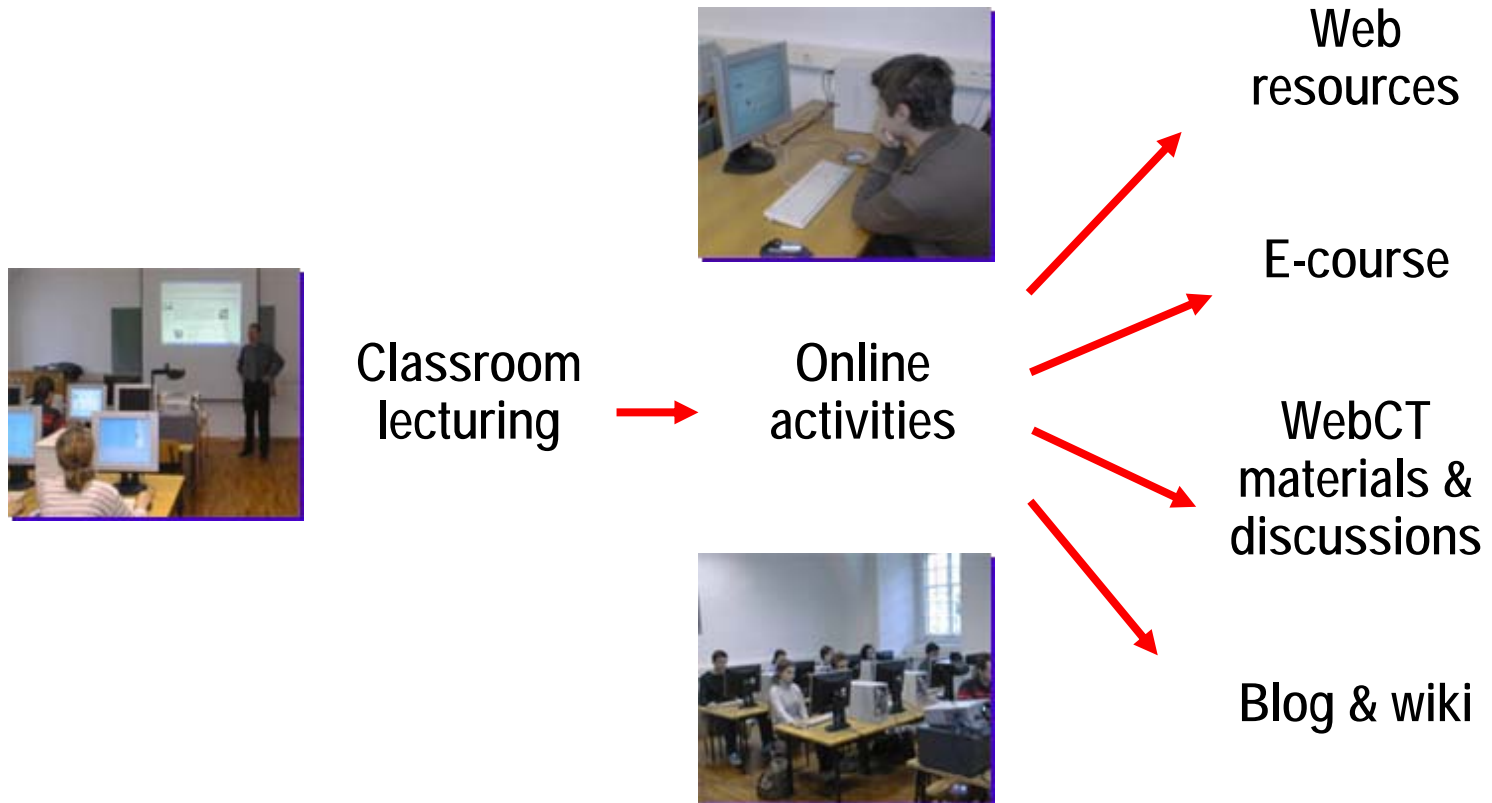
Otkrijte naše upitnike on-line vještina i ponašanja koji su važni za vašu uspješnost i prikladnost u komunikaciji Internetom.

Upoznajte kako znanost o komuniciranju i psihologija interpretiraju ponašanje korisnika interneta.

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# F. Early example of hybrid learning 2/4



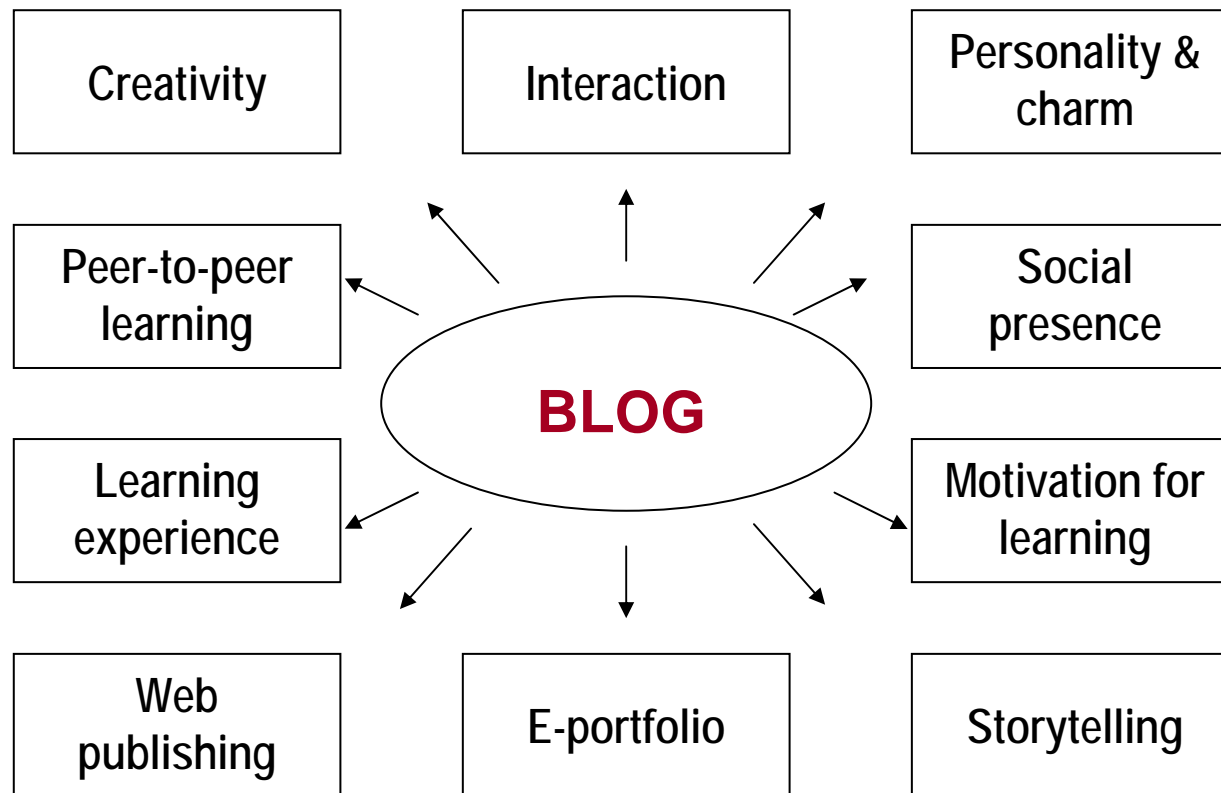
## F. Early example of hybrid learning 3/4

- Effects of the use of a wiki in the course "Psychology and the Internet"

Personal web publishing	Development of vocabulary and concepts	Peer-to-peer learning
Self-organizing activities	<b>WIKI</b>	Collaboration
Sense of responsibility	Orientation toward public interest	Empowerment

## F. Early example of hybrid learning 4/4

- Effects of the use of a blog in the course "Psychology and the Internet"



# G. Hybrid learning and Web 2.0 tools

- The hybrid course “Computer-Mediated Communication” (2008-2010) combines traditional lectures in the classroom with exercises in computer laboratory and the use of e-learning / Web 2.0 tools like Moodle, wiki, blog, e-portfolio, delicious, Glify, Bubbl.us, Slidestory, Veotag, Jotform, Google docs, Helipad, SpringNote, iGoogle, myYahoo, Pageflakes, MockFlow, Mockingbird i etc.

The screenshot shows a Moodle course interface. At the top, the course name is "Računalom posredovana komunikacija" and the user is logged in as "Goran Bubas". The course ID is "ELF - RPK". The main content area is titled "Uvod" and contains a list of activities and resources, including a forum, a seminar, and a model of online communication. The right sidebar contains a "Najaviježije vijesti" section with a news item about a seminar, a "Kalendar" section showing a calendar for May 2010, and an "Events Key" section.

**foi**  
Računalom posredovana komunikacija

Prijavljeni ste sustavu kao Goran Bubas (Odjava)

ELF - RPK

Switch role to... Omogući izmjene

**Korisnici**

- Sudionici
- Aktivnosti
- Attendances
- Books
- Chats
- Forumi
- Pitanja
- Resursi
- Surveys
- Testovi
- Wikis

Pretraži forume

Kreni

Naпредно pretraživanje

**Administracija**

- Omogući izmjene
- Postavke
- Assign roles
- Ocjene
- Outcomes
- Grupe
- Backup
- Restore

**Uvod**

- Forum s vijestima
  - Osnovne informacije o kolegiju
  - Model praćenja rada studenata i ocjenjivanja na kolegiju
  - Prisutnost na nastavi
  - Rezultati bodovanja aktivnosti i usmenog ispita (18.02.2009.)
  - Rezultati praćenja aktivnosti i prvog kolokvija (07.12.2009.)
  - Završni rezultati praćenja aktivnosti (bodovi: dolasci, kolokviji, dnevnik, web 2.0 alati, projekt)
- 1 Uvodno predavanja i seminar** (domene RPK; ovisnost o Internetu i online disinhibicija; seminar:
  - Izvori na Webu iz RPK; delicious
  - Aktivnosti za 14.09.2009. (Izvori iz RPK na Internetu; delicious)
  - Uvodno predavanje - 14.09.2009.
  - Studentski blog/projekt: Osobni identitet i Internet (u 3 dijela)
  - Studentski blog: Disinhibicija i Internet
  - Studentski blog/projekt: Ovisnost o Internetu (u 3 dijela)
- 2 Predavanje o "paradoksima" Interneta** (domene paradoksa i povezani izvori na webu; seminar:
  - Aktivnosti za 21.09.2009. (blog kolegija; linkovi na ilustracije "paradoksa")
  - Članak "Paradoksi Interneta kao komunikacijskog medija"
  - Studentski blog/projekt: Virtualno društvo (u 2 dijela)
- 3 Model kompetencije u RPK i vještine online komunikacije** (Spitzbergov model; seminar:
  - buble.us. - mentalne mape, Glify - blok dijagrami
  - Aktivnosti za 27.09.2009. - prvi dio (buble.us, Glify)

**Najaviježije vijesti**

Dodajte novu temu...

28. Jan, 13:43  
Goran Bubas  
Termini za usmeni ispit u siječnju i veljači 2010. više...

20. Nov, 17:03  
Goran Bubas  
Nadoknada seminara u dvorani s računalima u drugom medijskom razdoblju više...

Prošle teme ...

**Kalendar**

May 2010

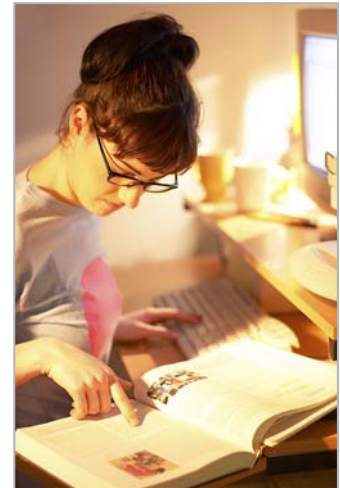
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31						

**Events Key**

- Global
- Course
- Group
- User

# H. Pedagogical techniques 1/2

- **STANDARD TECHNIQUES IN E-LEARNING:**
  - Group discussion
  - Repetition
  - Testing (multiple choice)
  - Case analysis
  - Practical assignments
  - Essays (critical thinking)



# H. Pedagogical techniques 2/2

- **CATEGORIES OF INNOVATIVE TECHNIQUES IN E-LEARNING:**
  - Prior knowledge activation
  - Information preview
  - Motivation
  - Information acquisition
  - Practice & feedback
  - Closure
  - Other



[Link](#)

Janac, K., Kipperman, D., Linder, D.: *Learning Strategies Matrix*, College of Education, San Diego State University, [http://edweb.sdsu.edu/Courses/ET650\\_OnLine/MAPPS/Strats.html](http://edweb.sdsu.edu/Courses/ET650_OnLine/MAPPS/Strats.html)



# L. Example of pedagogical activities

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- **Pedagogical activities (e-tivities) with a wiki in teaching English as a foreign language**

- *Engwiki projekt* ([Link](#))

[http://e.foi.hr/engwiki/index.php/Main\\_Page](http://e.foi.hr/engwiki/index.php/Main_Page)

# M. Pedagogy and e-tivities 1/3

- **BEHAVIORISM**

- *How to reinforce desired behavior?*
- Learning is divided into small units/steps that are well reinforced!
- The reward should be provided immediately after learning
  - quizzes, marks and other reinforcement practices
- Learning is based on the repetition of activity and reward
  - “drill” as an effective learning method



# M. Pedagogy and e-tivities 2/3

- **COGNITIVISM**

- Learning is viewed as information processing
  - *How new concepts are acquired?*
  - *How information is organized, stored and interconnected?*
- Different ways of learning:
  - use of models and visualization
  - abstract thinking
  - activities with objects in the environment
- Teaching methods:
  - learning and connecting of concepts
  - categorizations, schemes
  - depending on previous knowledge
  - combined ways of learning



# M. Pedagogy and e-tivities 3/3

- **CONSTRUCTIVISM**

- The learners “construct” knowledge with their practical activity
  - *How to form integrated (holistic) knowledge?*
  - *How to structure the learning process?*
  - *How to connect cognitive and socio-emotional experience?*
- Learners choose and transform information, form hypotheses and make decisions
- Teaching principles:
  - learners discover new knowledge (principles)
  - content and methods of learning are adapted to construction of new knowledge
  - practical application of what is learned
  - potential for “knowledge transfer” in problem solving



# N. Practical activity

- **Web 2.0 and pedagogical e-tivities**
  - Categorization of e-tivities
    - place 3-4 e-tivities in each theoretical category ([Link](#))
  - For a specific topic of a lecture and e-tivity choose a Web 2.0 tool:
    - choose/create e-tivities for topics of several lectures
    - select Web 2.0 tool(s) for e-tivities ([Link](#))

