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Design of learning activities based on Web 2.0 tools

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Social software in education /1

- Social software can be used for self-publishing, management of online media collections, collaboration, electronic portfolios etc.

  - Wikis, weblogs, social bookmarking

  - Inovation in education

  - Instructional design (learning activities)

  - Personalized learning environments

  - Collaboration, peer-to-peer learning, socializing

  - More cognitive, social and teaching presence of the learners

Social software in education /2

- Frequently used social software tools for online education (Mejias, 2006):

  - Blogs (personal web publishing)

  - Wikis (collaborative content management systems)

  - Distributed classification systems (classification of items by associating them with keywords/tags)

  - Rich site summary (RSS) feeds (subscription system that alerts the user when new content is available on a web publishing resource)

Mejias, U. (2006). Teaching Social Software with Social Software. *Innovate: Journal of Online Education*, 2(5)

Web 2.0

- Web 2.0 is a broad and evolving term describing new trends in using the web, with an emphasis on interconectivity, interactivity, and user-produced content

- Software [as a] Service
  - Online word processors (http://www.writely.com)

- Use of Collective Intelligence
  - Amazon (other shoppers activity patterns are used to advertise things you might like)
  - Wikipedia, Edupedia
  - Google search ranks based on how many other sites link to that page
  - Social bookmarking (http://del.icio.us) – shared, tagged bookmarks

- Everyone as Publisher ("Read-Write Web")
  - Blogs, wikis, Flickr (photos), eVite (invitations), Podcasts

- Aggregation & Tagging (solves the problem of information overload)
  - RSS aggregators, del.icio.us

See: Karr, T. (2006). *What is eLearning 2.0? : eLearning Technology*, Tony Karrer's eLearning Blog on e-Learning Trends

E-learning 2.0

- Various inovative approaches related to the use of Web 2.0 tools for online learning

	E-learning 1.0	E-learning 2.0
Components	Courseware, LMSs	Wikis, blogs
Ownership & information flow	Predominantly top-down	Bottom-up, collaboration, learner-driven, peer learning
Development time	Long	Rapid/none
Content size	~ 60 minutes	1-15 minutes
Delivery	According to schedule	When you need it
Content access	LMS	Search, RSS feed
Content creator	Lesson author	User(s)

Karrer, T. (). Understanding E-Learning 2.0. *Learning Circuits.*

Web 2.0 tools /1

- **Diverse tools for online publishing, content creation and cooperation**

  - **Photo management and sharing:** Flickr, Zoto

  - **Social bookmarking:** del.icio.us, Ma.gnolia

  - **Audio/video sharing:** Odeo, YouTube, Google Video

  - **Communication:** MySpace, Facebook, YackPack & Chingswing (audioconferencing), Yaplet (chatroom on webpage)

  - **Brainstorming and collaboration:** Bubble.us (mental maps), Thinkature & Imagination Cubed (interactive whiteboard), NoteMesh (note exchange), FunAdvice (questions and advice)

  - **Creative learning:** JotForm (online form design), LettrPop (newsletters, invitations), Bubblr (comic strips), Mojiti (video editing), SlideStory (PPT+voice)

Orehovački, T., Konecki, M., Radošević, D. (2007). Alati za e-obrazovanje 2.0. *CARNet Users Conference - CUC 2007.*

Online learning activities /1

- **Pedagogical activities for online learning**

(E)LEARNING STRATEGIES → **Learning technologies** → **E-TIVITIES**
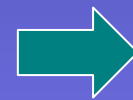
- Audio & video recordings
- E-mail
- LMS
- Weblog
- Wiki
- Web site

"... educational activities designed by e-moderators which include individual contributions and responding to the contributions of other learners in various CMC environments."

(Salmon,2002)

Kovačić, A., Bubaš, G., Zlatović, M., Balaban, I. (2008). Designing e-learning activities with a wiki for students of English as a foreign language. *"New Learning Cultures", Electronic Proceedings of the EDEN 2008 Annual Conference*, Lisbon, Portugal.

Online learning activities /1

Examples of e-tivities and suitable Web 2.0 tools

- **Learner Pre-Questions** - Collaboration: _FunAdvice (questions and advice)_
- **Cite model / Interviewing** - Audio/video sharing: _Odeo_, _YouTube_, _Google Video_
- **Anecdote** - Creative learning: _Bubblr (comic strips)_, _Mojiti (video editing)_
- **Identify a problem** - Communication: _Yaplet (chatroom on webpage)_
- **Examples/Non-examples** - Video sharing: _YouTube_, _Google Video_
- **Group/individual inquiry** - Social bookmarking: _del.icio.us_, _Ma.gnolia_
- **Project** - Creative learning: _JotForm (online form design)_, _SlideStory (PPT+voice)_
- **Group/individual feedback** - Communication: _MySpace_
- **Graphic organizers** - Brainstorming and collaboration: _Bubble.us (mental maps)_, _Thinkature & Imagination Cubed (interactive whiteboard)_
- **"For" and "against" dialogues** - Communication: _YackPack & Chingswing (audioconferencing)_, _Yaplet (chatroom on webpage)_
- **Reflection** - Creative learning: _LettrPop (newsletters)_, _SlideStory (PPT+voice)_
- **Questions for assessment** - Creative learning: _JotForm (online form design)_

See: Janac, K., Kipperman, D., Linder, D.: _Learning Strategies Matrix_, College of Education, San Diego State University

A case of blended learning /1

- The blended learning environment

Classroom lecturing → **Online activities**

- Web resources
- E-course
- WebCT materials & discussions
- Blog & wiki

Bubaš, G., Kermek, D. (2007). Courseware tools and social software in a hybrid university course: A case study with an evaluation of the online components. *Proceedings of the International Technology, Education and Development Conference - INTED2007*, Valencia, Spain.

A case of blended learning /2

Common sequence of offline and online activities

Traditional lecturing Course topics	**Online excercises in a computer lab** Web, courseware	**Home assignments** Various topics
Students' presentations Various topics	**Students' online content** Web pages, wiki, weblogs	
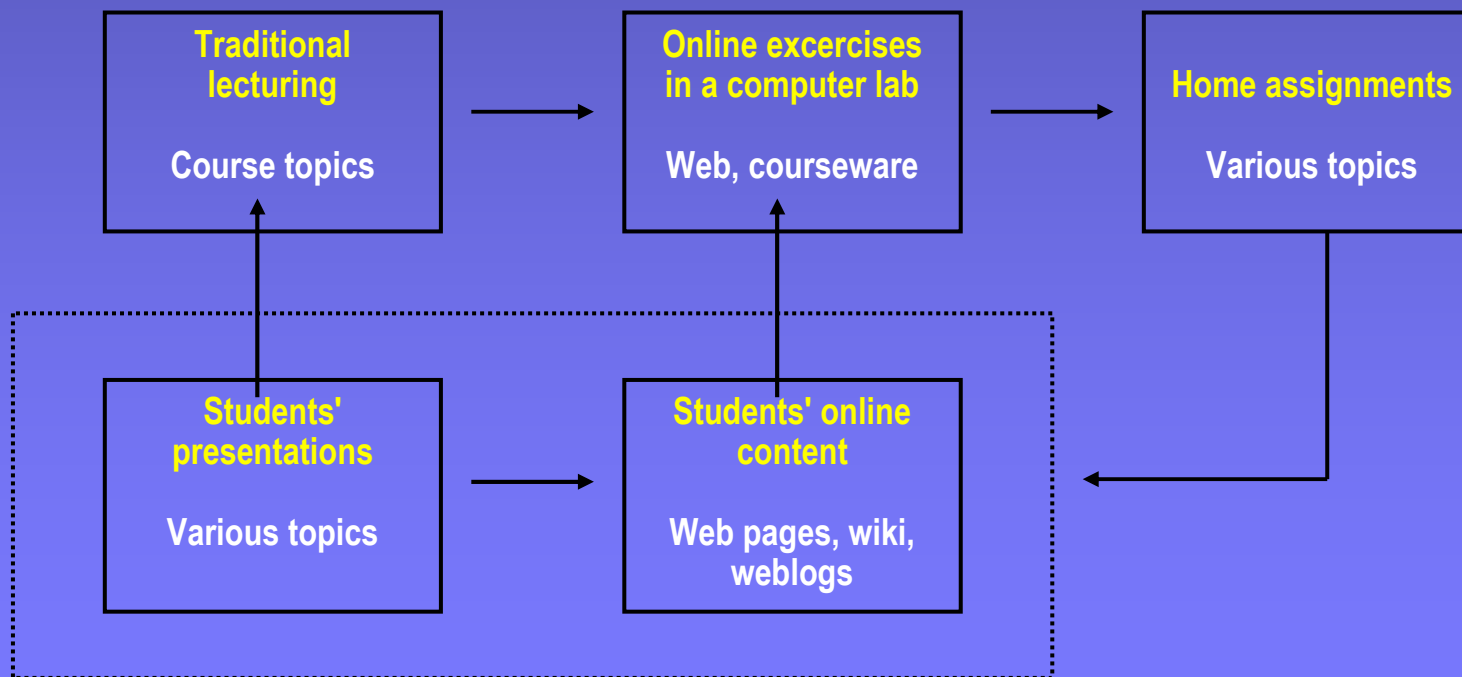
A case of blended learning /3

Use of Web 2.0 tools for online learning activities

MediaWiki

Dictionary

Individual work &
peer-to-peer
learning

Del.icio.us

Social bookmarking

Teams create
collections on
specific topics

Traditional

**PPT presentations
and web pages**

Individual work on
group assignment

Include

Include

Include

Blog tool

**Theoretical content &
personal stories**

Write/design in pairs
(on specific topics)
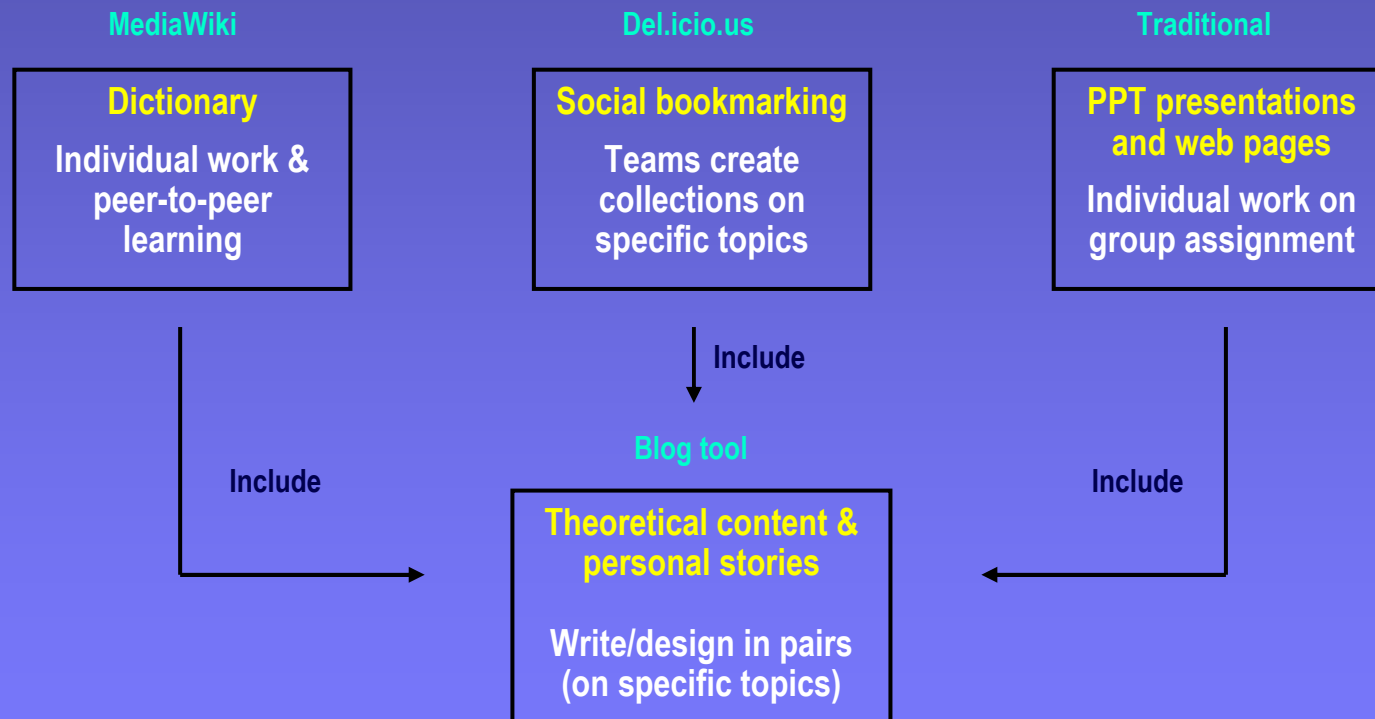
Wiki in a blended learning course /1

Students work individualy to create their own dictionary of online communication and psychology of internet use – results of collective effort: descriptions of 240 terms in 4 weeks
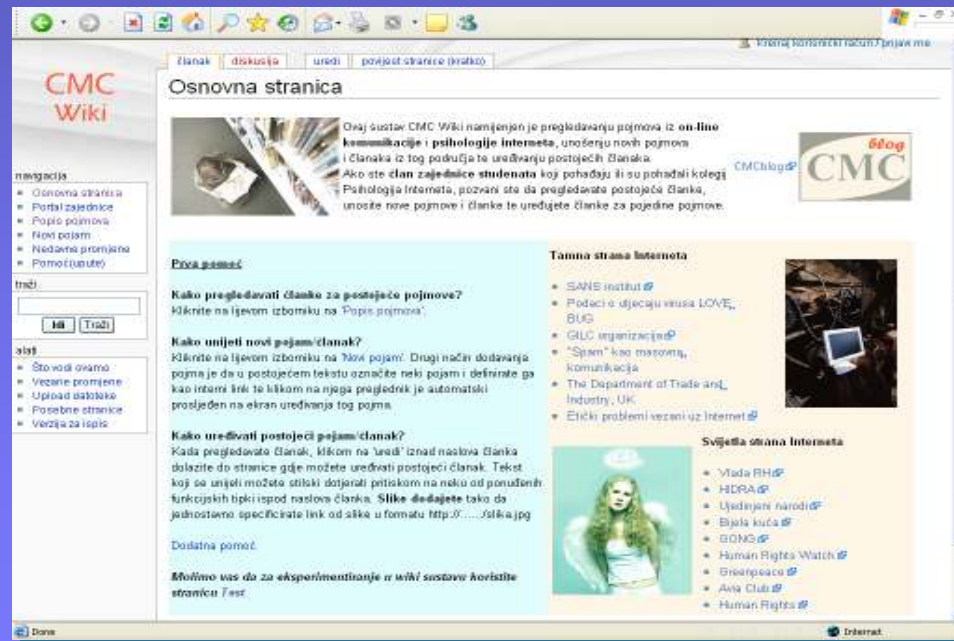
Wiki in a blended learning course /2

Functions/results of e-tivities with a wiki system

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

Blog tool in a blended learning course /1

- Students work in a team to create a blog with educational content and their experiences on a specific topic. They work on visual design and link external web pages of team members and terms in the wiki dictionary of the course.

Blog tool in a blended learning course /2

- Functions/results of e-tivities with a weblog

Creativity	Interaction	Personality & charm
Peer-to-peer learning		Social presence
Learning experience	WEBLOG	Motivation for learning
Web publishing	"E-portfolio"	Storytelling

Evaluation of online tools /1

◆ **Usefulness of online tools** *(1 -very bad; 5 - very good)*
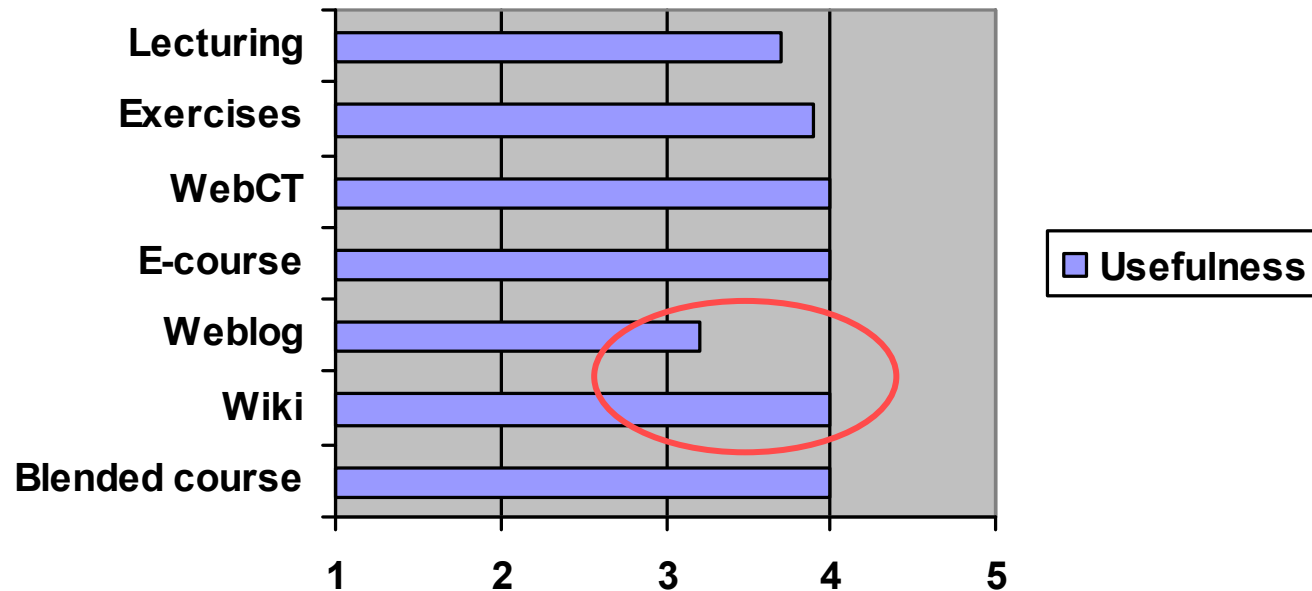
Evaluation of online tools /2

Usability and contribution to the blended learning course *(1 -very bad; 5 - very good)*
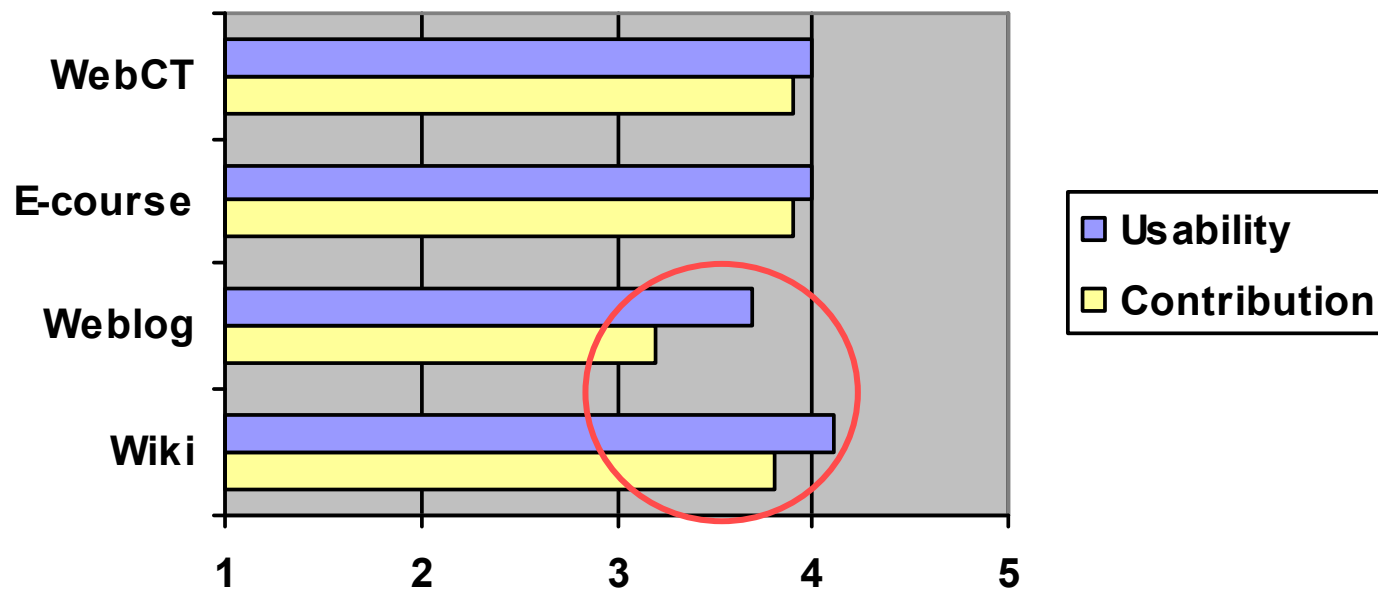
The Engwiki project /1

◆ **Goals**

- Research into experimental use of a wiki for EFL/ESP
- New and more motivating out-of class activities complementing the basic course
- Variety, personalization, individualization of teaching and learning
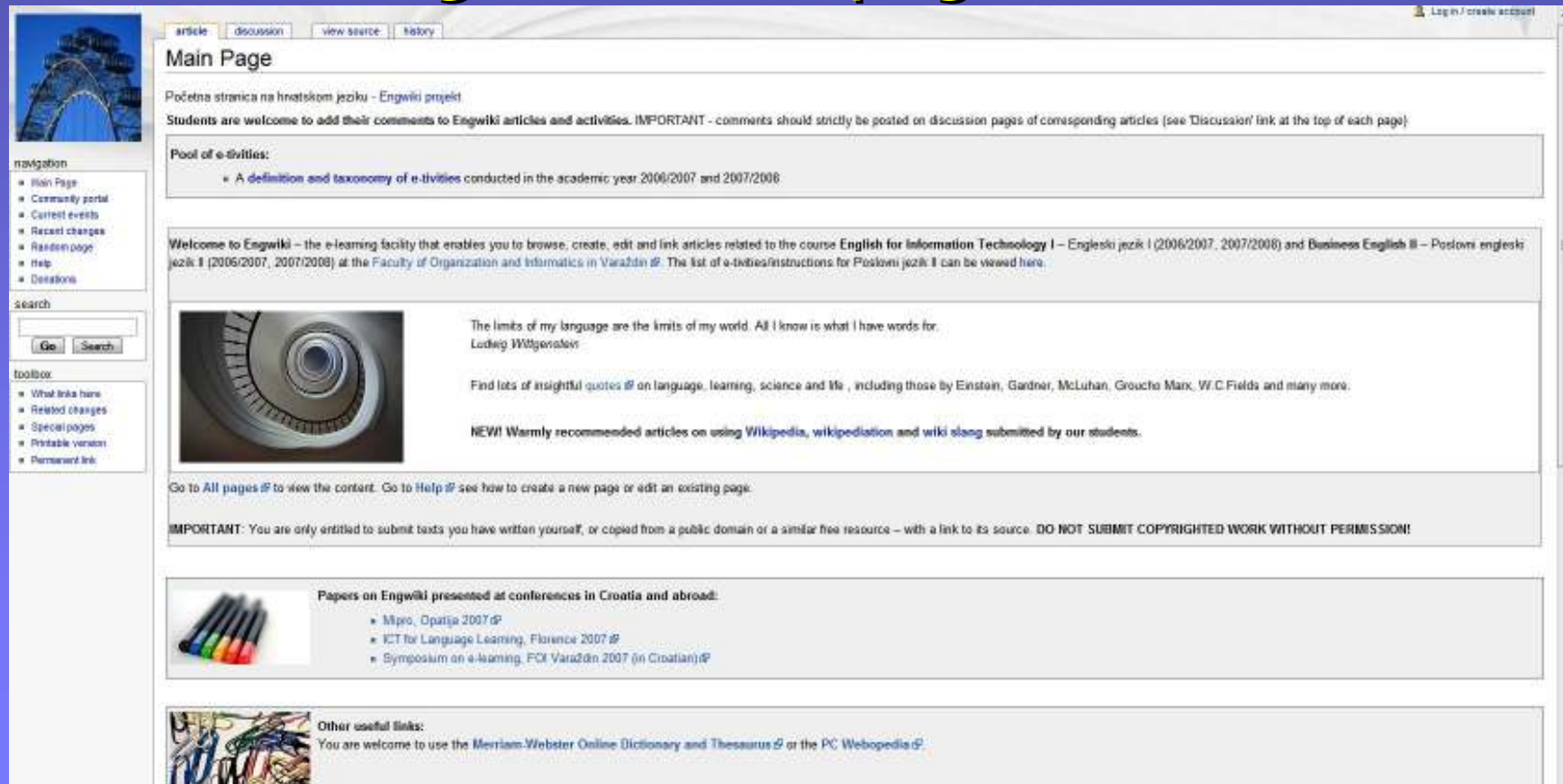
◆ **Challenges**

- Changing role of the teacher / students
- Greater responsibility and preparation
- ICT support and competence
- A broader view of what education should/could be

Kovačić, A., Bubaš, G., Zlatović, M., Balaban, I. (2008). Designing e-learning activities with a wiki for students of English as a foreign language. *"New Learning Cultures", Electronic Proceedings of the EDEN 2008 Annual Conference*, Lisbon, Portugal.

The Engwiki project /2

- The *Engwiki* homepage

The Engwiki project /3

- *Engwiki* e-tivities

  - wiki-based learning activities
  - intended for collaborative language learning

- Taxonomy of e-tivities

  - Extensive:
    (free) input and output,
    content and non-linguistic challenge

  - Intensive:
    (controlled) input and output,
    insisting on accuracy; less open-ended

The Engwiki project /4

Example 1 of an e-tivitiy for *Engwiki*

- Content-based wiki article (theme "E-book")

| article | discussion | edit | history |

E-book

E-book (by Kristina Gibanjek, 1, G12)

E-book (also called as ebook, eBook) has many definitions although everyone says the same thing. I didn't know which one to pick so I wrote most of them.

-> E-book is electronic book that readers can download from the Internet or borrow through a library and read using a handheld device.

-> E-book is an electronic version of a book that is found and read on the Web.

-> E-book is an electronic book. Usually, it is a book that has previously been published in paper, reproduced in electronic format, and made available on a database such as netLibrary.

-> E-book is an electronic (or digital) version of a book. The term is used ambiguously to refer to either an individual work in a digital format, or a hardware device used to read books in digital format. Some users deprecate the second meaning in favour of the more precise "ebook device."

The Engwiki project /5

- Example 2 of an e-tivitiy for *Engwiki*
  - *Hall of fame* (<u>extensive</u> activity; theme "Napster")

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article | discussion | edit | history

Hall of Fame – 11. Napster

Contents [hide]
1 Napster: The Sound of Music
2 Peer-to-Peer File Sharing
3 Piracy Issues
4 Current Status
5 The reason why Napster should be in the Hall of Fame
6 External Links

Napster: The Sound of Music   [edit]

Napster is an online music service which was originally a file sharing service created by Shawn Fanning. Napster was the first widely-used peer-to-peer (or P2P) music sharing service, and it made a major impact on how people used the Internet. Its technology allowed music fans to easily share MP3 format song files with each other, thus leading to the music industry's accusations of massive copyright violations. Although the original service was shut down by court order, it paved the way for decentralized P2P file-sharing programs such as Kazaa, Limewire, and BearShare, which are now used for many the same reasons and can download music, pictures, and other things. The popularity and repercussions of the first Napster have made it a legendary icon in the computer and entertainment fields.
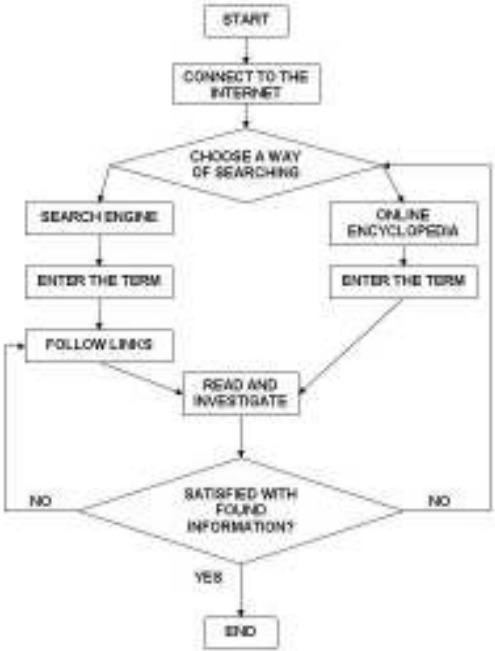
TM

The Engwiki project /6

- Example 3 of an e-tivitiy for *Engwiki*
  - *Flowchart* (intensive activity; theme "Web search")

Evaluation of e-tivities

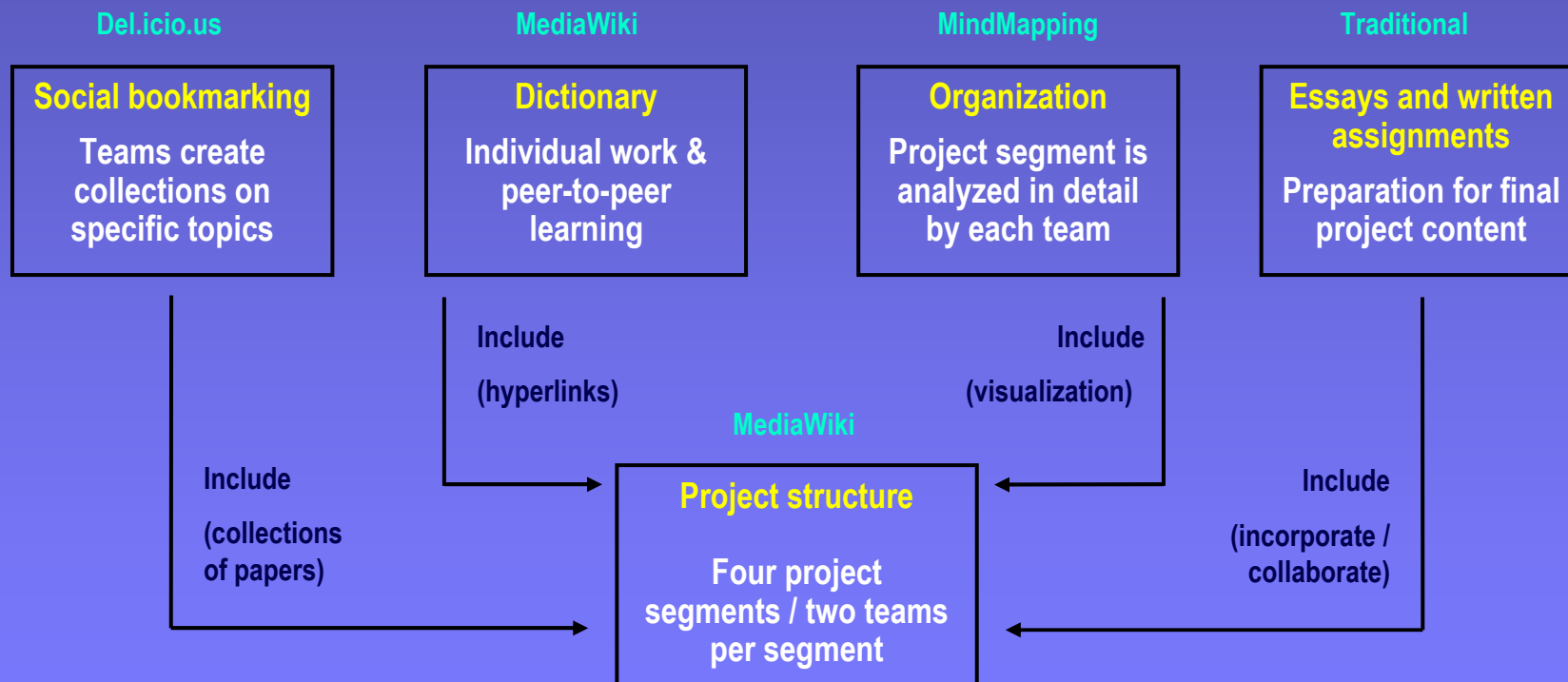| EXAMPLES OF PREDOMINANTLY EXTENSIVE (FREE) INPUT AND OUTPUT E-TIVITIES			
Collections of online resources			
Hotlist M_u=3.44 ; M_i=3.44 ; N=16		*Media Scrapbook* M_u=3.19 ; M_i=3.25 ; N=16	
Quiz M_g=3.38 ; N=87			
Histories, biographies and analogies			
Paradoxes M_u=2.88 ; M_i=3.00 ; N=56	*Decades of the 20th Century* M_u=3.02 ; M_i=3.06 ; N=98		*Hall of Fame* M_g=3.35 ; N=79
Narratives and role plays			
Storyboard (Complaints) M_u=3.71 ; M_i=3.83 ; N=7	*Debate (Globalization)* M_u=3.83 ; M_i=3.91 ; N=12		*(Not) Your Cup of Tea?* M_u=2.74 ; M_i=3.11 ; N=47
Opinion-based e-tivities			
Brainwriting M_u=3.82 ; M_i=4.05 ; N=11	*Challenge* M_u=2.66 ; M_i=3.07 ; N=29	*Chain Letter* M_u=3.58 ; M_i=4.09 ; N=11	*Friend or Foe?* M_u=2.57 ; M_i=2.83 ; N=30
Experience-based e-tivities			
Time capsule M_u=2.69 ; M_i=2.98 ; N=45		*My First Encounter With...* M_g=3.39 ; N=87	

* M_u - average rating of usefulness; M_i - average rating of interestingness ; M_g - average rating of general aspects of e-tivity
** the rating for M_u, M_i and M_g was performed on a Likert-type scale ranging from 1-very poor to 5-very good

University CRM project /1

Project-oriented e-tivities for teams of students

Del.icio.us	MediaWiki	MindMapping	Traditional
Social bookmarking Teams create collections on specific topics	**Dictionary** Individual work & peer-to-peer learning	**Organization** Project segment is analyzed in detail by each team	**Essays and written assignments** Preparation for final project content

Include

(hyperlinks)

Include

(visualization)

Include

(collections of papers)

Include

(incorporate / collaborate)

MediaWiki

Project structure

Four project segments / two teams per segment

Conclusion

- Wikis, blogs and social bookmarking tools can be used for the creation and implementation of useful and interesting online learning activities.

- Various Web 2.0 applications enable novel designs of online learning environments.

- Inovation in online education may be costly, but it is also rewarding and potentially very effective.