Best practices in web-based learning

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- About teaching and studying
- Examples of web-based courses at the CS dept
- Some "Best practices"

Web-based learning

- What makes a course web-based?
  - The course material in the web?
  - Using a web-based learning environment?
  - Giving video lectures through the web?
  - Teaching or tutoring through the web?
- In my opinion:
  - The focus on the course is in the web: the discussions, the tutoring, the working

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Terms used besides "web-based learning"

- Distance vs local course
  - distance courses could be given without the web; letter courses for example
  - local courses often use web material as part of the course material
- Distance vs web-based learning
  - distance learning is like self studying; you do it alone
  - web-based learning can be done alone, too, but the web offers the possibility to group work and discussions

At our department, for example

- All courses have web-pages
  - -> they are not considered as web-based courses
- Many courses have the course material in the web
  - -> still not web-based courses
- Some courses offer the opportunity to use a web-based practising tool
  - -> not a web-based course, because the lectures and tutoring are given face-to-face
- A couple of "pure" web courses
  - -> tutoring through the web

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"Teaching" and "studying"

- Someone, who wants to help others know more of the subject she knows well, is called a teacher
- Anyone, who wants to know more about the subject, is called a student
- The teacher and the student should work together for a shared goal: the student's learning
- This process is called the teaching – studying – learning –process
- I would like to talk about "mentoring" or "tutoring", instead of "teaching"

"Teaching" through the web could be

- giving instructions: as web-page, e-mail, in discussion groups or irc
- supplying the course material
- giving (publishing) the tasks
- discussion and problem-solving with the students
- grading

"Studying" on a web-based course could include

- reading the instructions and course material
- solving the tasks alone or in groups
  - excercises
  - exams
- discussion and problem-solving
  - Note, that the "web-based" on the course does not forbid face-to-face meetings!

Teaching vs studying in the web

- Both include discussion and problem-solving -> the students are often able to help each other as well as the teacher could
- On a good web-based course, the difference between students and teachers fade away

Web-based learning environments

- "A place in the web where you can learn"?
- Tools, that include a list of features that can be used in the teaching-studying-learning –process, like:
  - publication possibilities: web pages, wiki wiki web
  - discussion possibilities: e-mail, discussion groups, irc/chat

-> Features that exist outside the tool, too.

Web-based learning environments

- Tools like WebCT, Blackboard, BSCW
  - In Finland also FLE, Optima, and more
- The environments tend to be difficult to use at first, or slow or heavy to use
- Why would you want to use a learning environment?
  - ->The benefits of using the environment are bigger than the inconveniences it causes

Benefits of using learning environments

* Closed environment
  * one place
  * closed discussions: "safe feeling" for the students
  * group feeling: "I know them"
  * the course material is not public
* Identification, used for
  * adaptivity
  * social navigation
  * returning the tasks
  * grading

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Examples at CS dept

* Two different cases
  * Introduction to the Databases
  * Computer assisted learning environments
* More courses, too
  * Web-based parts on local courses
  * Video lecturing
  * Student counselling system in the web

Introduction to the Databases

* the material-based way
* a course with lectures and excercises is transferred to course material + a practising tool (SQL-Trainer) in the web
* timetable with strict deadlines for tasks
* face-to-face tutoring
* traditional exam
* grading: exam + SQL-Trainer tasks

Computer assisted learning environments (spring 2004)

- an "extreme" student-centered course with much freedom
- one introductive lecture, no course material
- groupwork in projects with "free" timetable and group size
- grading: projects + activity + peer assessment
- OurWeb as learning environment
  - project and report publication
  - wiki for producing the reports in groups
  - a tool for annotating reports
  - a statistics overview for the tutors

Documents by topic - Mozilla

http://ourweb.hiit.fi/v1/docpool/poplist?instance=tao

Yleistä
- Verkkopedagogiikka - Esitelmä kurssilla Tik-110.555 New!
- Malmi, Lauri. (2001): Yliopistot muutoksessa: opetuksen arki New!
- MIT OpenCourseWare | OCW Home New!
- OPM - Koulutuksen ja tutkimuksen tietostrategia New!
- TAO ja kehitysmaat, kesken
- TAO ja kehitysmaat, kesken
- Kohti tietokoneavusteista opetusta - tieto- ja viestintätekniikan vallankumous kehitysmaissa, Valmis
- Suosittu verkko-opetus ei ole kaikkien ulottuvilla
- Future Learning Environment - selvitys New!
- Suomen eOppimiskeskus(terminologiaa)

Activity overview
1 new highlight

Oppimisteoriat
- Jonathan Brown, mikko valjento, Marja Silenti: Eri oppimiskäsitykset ja niiden soveltaminen verkko-opiskeluun
- Oppimisteoriat verkkopedagogiikassa VALMIS
- Oppimisteoriat (KESKEN ja osaltaan tämän Wikin testausta)
- Oppimisteoriat verkkopedagogiikassa
- The Value of Adaptivity in Hypermedia Learning Environments New!
- Opettaminen Verkossa ja Verkko-opiskelu: Opas Opettajalle New!
- Didaktisia lähtökohtia New!
- Ongelmaperustainen oppiminen tietoverkoissa
- Heinonen, Lindström, Luoto, Stenberg: Oppimiskäsitykset ja niiden soveltaminen verkko-opiskelussa

Vuorovaikutus verkko-opiskelussa
- Opetukselliset MUD- ja MOO-ympäristöt (versio 1)
- Verkkokurssin toteuttaminen, V A L M I S
- TAO-kokemuksia, versio3, kesken
- Kokemuksia tietokoneavusteisesta opetuksesta, Valmis
- Opiskelualustojen vertailu (Työdokumentti)
- toka versio, keskeneräinen
- Virtual Environments for Education, Research and Life New!

Applet CGILink started

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Wiki document - Mozilla

http://ourweb.hiit.fi/v1/wiki?instance=tao&pagename=P11V0

This is a slightly customized version of MoinMoin Wiki. Click the link at the bottom of the page to edit the contents.

Opetukselliset MUD- ja MOO-ympäristöt (versio 1)

Risto Niskakangas, Mikko Suonio ja Juho Uutela

1. Johdanto

Tässä tekstissä käydään läpi MUD::eja yleisellä tasolla (M... kemmin MOO::ita (MUD Object Oriented), jotka ovat
eniten saaneet huomiota opetuksen kannalta. MUD::ien k... a ulkoasusta huolimatta, ohjaavuus vahvaan
vuorovaikutukseen sekä ympäristön että toisten käyttäjie... isia keskusteluhuoneita joiden välillä voi navigoida.
MUD:n voisi määritellä seuraavasti:

> Anni Rytkönen
> Tämä on mielenkiintoisesta aiheesta
> selkeä kokonaisuus! Hieman
> lisäjäsentelyä ja ehkä jotain
> täydennystä niin hyvä tulee
> :}
> Olli Sinerma
> Tästä aiheesta voisi olla hauska
> tehdä jatkotutkimusta nykyaikaisten
> MMORPG (Massive Multiplayer Online
> Role Playing Game) pelien pohjalta.
> Itse addiktoituneena fanina olen

MUD on ohjelma joka hyväksyy yhteyden useal... ttäjälle pääsyn virtuaaliseen verkkoympäristöön, jossa
he voivat mm. keskustella toistensa kanssa, raken...

2. MUD/MOO

Useimmat MUD::it ovat verkon kautta moninpelattavia vuorovaikutteisia tekstipohjaisia pelejä, joissa on toisaikaista keskustelua ja useita erilaisia paikkoja/tiloja
kuten tavallisessakin elämässä. MUD::it voidaan jaoitella karkeasti kolmeen ryhmään: **peliliset**, **opetukselliset** ja **sosiaaliset**. Sosiaalisia MUD::eja voisi verrata
IRC::hin (Internet Relay Chat), ainakin toisaikaisen keskustelun pohjalta, mutta yhtenä erottavimpana tekijänä on mahdollisuus vuorovaikutukseen ympäristön kanssa.
MUD::eissa voi esim. "katsella" toista henkilöä tarkemmin, jolloin saa tämän henkilön antaman kuvauksen itsestään tai voi liikkua huoneesta toiseen saaden kuvauksen
uudesta huoneesta ja näin simuloitua tavallista liikkumista.

MUD::ien virtuaalimaailmoja voidaan kuvata esim. kuvina/karttoina, joissa yksi pikseli vastaa yhtä huonetta ja pikselin väri huoneen tyyppiä. Karttakuvia käyttäen
ihmisen on helpompi hahmottaa oma virtuaalinen ympäristönsä. Kolmiulotteisen ympäristön kuvaus saadaan aikaiseksi esim. kun näitä karttoja ladotaan päällekkäin.

Applet CGILink started

Start | Microsoft PowerPoint - [p... | Wiki document - Mozilla | 19:44

Activity statistics (tao) - Mozilla

http://ourweb.hiit.fi/v1/stats/summary?instance=tao

Name	Visited articles	Visited reports	Highlights to articles	Highlights to own reports	Highlights to other reports	Comments to articles	Comments to own reports	Comments to other reports	Newsgroup messages	Articles added	Report versions added	E-mail messages sent	Last session
	20	52	0	0	38	0	0	4	0	0	13	2	16.04.2004
	0	0	0	0	0	0	0	0	0	0	0	0	10.03.2004
	53	49	27	0	9	3	0	14	0	6	13	10	07.04.2004
	5	1	0	0	0	0	0	0	0	0	0	0	09.03.2004
	0	0	0	0	0	0	0	0	0	0	0	0	26.01.2004
	24	54	5	2	10	1	11	23	0	2	12	17	20.04.2004
	1	0	0	0	0	0	0	0	0	0	0	0	11.03.2004
	1	0	0	0	0	0	0	0	0	0	0	0	28.01.2004
	52	54	20	0	19	11	0	130	6	6	0	4	08.04.2004
	16	27	1	0	0	4	7	0	0	2	11	3	14.04.2004
	36	55	0	5	31	10	39	63	0	2	10	44	14.04.2004
	26	0	0	0	0	0	0	0	0	1	0	0	05.02.2004
	31	24	0	0	0	0	0	1	3	0	0	3	27.05.2004
	5	4	0	0	0	0	0	0	0	0	0	0	16.03.2004
	4	7	0	0	0	0	0	0	0	0	0	0	17.02.2004
	34	54	63	0	15	8	9	17	0	10	10	11	08.04.2004
	75	58	3	2	8	13	24	23	6	3	10	5	19.05.2004
	14	20	0	0	0	0	9	5	0	0	13	8	06.04.2004
	14	20	1	1	5	0	0	1	0	0	10	1	06.04.2004
	0	0	0	0	0	0	0	0	0	0	0	0	N/A

Done

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"Best practices"

- Timetable
  - Offer a timetable – demand a timetable – make your own timetable
  - Deadlines
- Groupwork
  - Alone in the web?
  - Offer group tasks – gather a group
  - Makes learning collaborative

"Best practices"

- Be active
  - Discuss
  - Gather groups
  - Ask questions
  - Answer other students questions
- Learning diary
  - Keep diary of what you have learned
  - Write down good ideas after group discussions
  - Work with your notes every now and then; collect a portfolio of what you have learned

Best practices in web-based learning – in summary:

- Do the "best practices" in "web-based" learning differ from the ones on local courses?
- The web is just another environment for studying – the learning process is still the same!

Thank you!

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