

eLearning in Germany and Europe

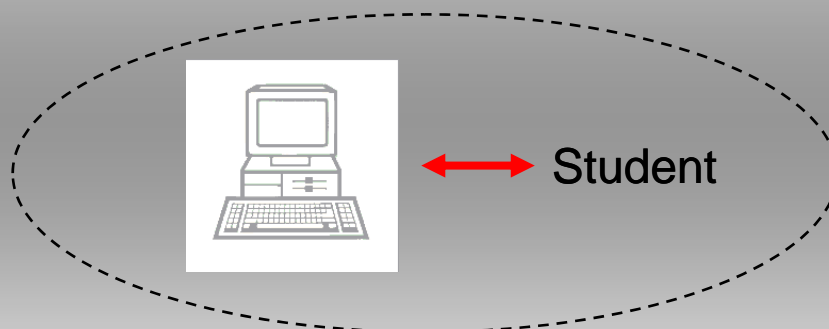
Current Status and Future Perspectives

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computer-based-learning

no network



computer-based-learning

no network

In most cases used in addition to traditional face to face learning

= blended learning

- statistical exercises
- exercises in calculation of diets
- eLearning programmes



computer-based-learning

no network necessary

eLearning programmes



computer-based-learning

no network necessary

eLearning programmms

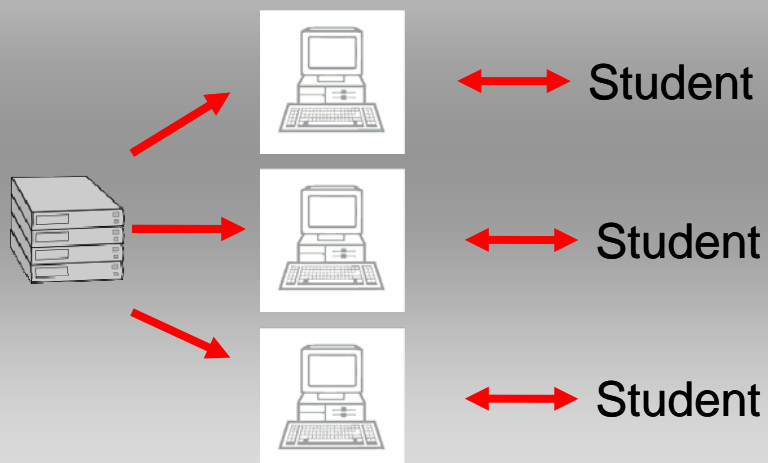
Created by authoring systems/authoring tools

- Toolbook
- Macromedia Authorware
- Adobe Director
- Mediator

prefere **web authoring languages**

computer-based-learning

with LAN and Fileserver



computer-based-learning with LAN and Fileserver



Fileserver contains

- text-files (handouts, pdf, ppt)
- multimedia-files (audio, video)
- image-database

usefull in eAssessment

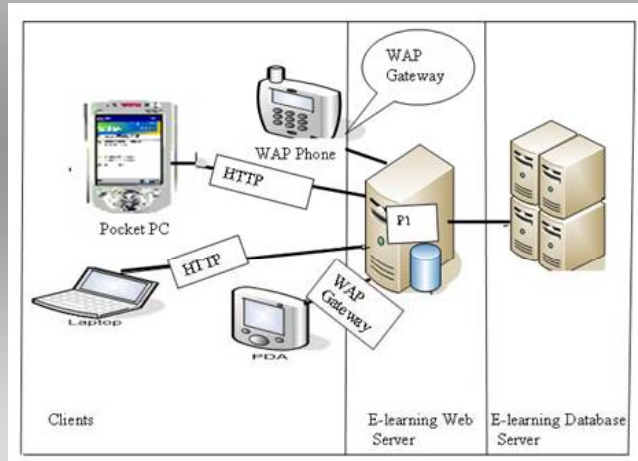
computer-based-learning with LAN and Fileserver

Client hardware

- normal PCs
- or
- Thin Clients
 - additional Terminal Server
 - less hardware defects
 - more easy in administration



web-based-learning with Webserver and Fileserver



web-based-learning with Webserver and Fileserver



Students use it
everywhere and to
every time



web-based-learning

with Webserver and Fileserver

Most important software on the webserver:

**Learning management
system
(LMS)**

web-based-learning

with Webserver and Fileserver

Important functions of the LMS

- Presentation of content
 - Content Management System
 - Authoring tools
- Communication tools
- Exercise and selfassessment-tools
- Evaluation and eAssessment-tools
- Administration-tools

web-based-learning

world-wide used learning management systems

- commercial product
 - Blackboard
- Open source software
 - StudIP
 - Ilias
 - Olat
 - Moodle

web-based-learning

learning management systems

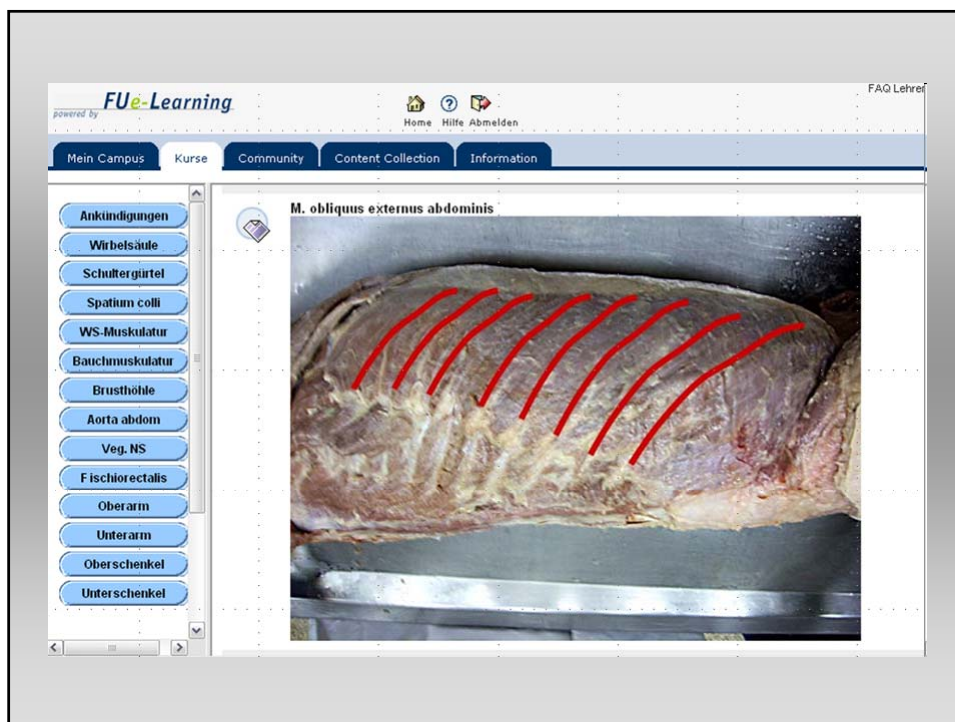


Training of the teachers in using the LMS!!
Supervise the upload of content to the LMS!!

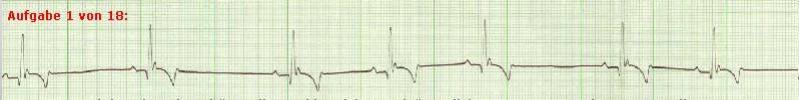
web-based-learning

benefits of a learning management system

- content is much better to find
- easy to manage content
- easy to integrate special applications
 - virtual microscopy
 - import of elearning programmms (written in html/xhtml)
- easy to add exercises and assessment




Aufgabe 1 von 18:



(c) Freie Universität Berlin, Fachbereich Veterinärmedizin, Oertzenweg 19b, 14163 Berlin


Wie hoch ist die Frequenz ?



70 Schläge / Minute
 80 Schläge / Minute
 90 Schläge / Minute
 100 Schläge / Minute

Physiologisches EKG Hund "Lilly"

Name: Punkte:



- Um welches Organ handelt es sich?
- Woran erkennen Sie das?
- Um welche Art der Veränderung handelt es sich?
 - Tumor
 - Entzündung
 - Degeneration
 - Kreislaufstörung
- Woran erkennen Sie das?
- Es handelt sich um eine/n:

NEOPLASIE - Beninge epitheliale Neoplasie - Maligne epitheliale Neoplasie - Beningen mesenchymale Neoplasie -	ENTZÜNDUNG - Akute Entzündung - Subakute Entzündung - Chronische Entzündung -	DEGENERATION - Amyloidose - Hyaline Degeneration - Hydropische Degeneration -	KREISLAUF - Anämischer Infarkt - Hämatom - Hämorrhagische Infarzierung -
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- Wie Begründen Sie dies?
- Morphologische Diagnose?
- a) Wodurch können diese Veränderungen verursacht werden?
- b) Sehen Sie Hinweise für die Ursache und ...
- Woran erkennen Sie das?
- Wie bezeichnen Sie die Veränderung in diesem Organ?
- Wie heisst die Erkrankung?

web-based-learning


Integration of „CASUS“

„CASUS“ is a cased based multimedia training and authoring shell for the education of medical students

www.casus.eu

virtual microscopy





Universität Zürich

Histopathology online

Präparat pathologisch [Zusätzliche Informationen](#)

Oxalat-Nephrose (Frostschutzmittelvergiftung)



elektronisch über ScanScope verfügbares Präparat

Färbung	HE
Spezies	Hund
Organ	Niere
Lokalisation	---

Vorbericht
Unspezifische Symptomatik, Urämie

Erkrankung
Oxalat-Nephrose

Sektionsbefund
Unspezifisch


Beschreibung der Veränderung, die Diagnose wesentlich ist
Hydropische Epithelzelldegeneration in den Tubuli (toxische Tubulonephrose), Kristallbildung in den Tubuluslumina (Oxalatkristalle, Doppelbrechung), Dilatation von Tubuli, geringe Menge von eosinophilen Ausgüssen im Lumen von Tubuli (=Proteinzyliner). Die Glomerula sind allgemein unauffällig.

Morphologische Diagnose
Mittelgradige, akute, toxische Tubulonephrose m.

Beschreibung der histologischen Veränderung

Bilder mit Annotationen (Anklicken vergrößert diese)

Pod Cast

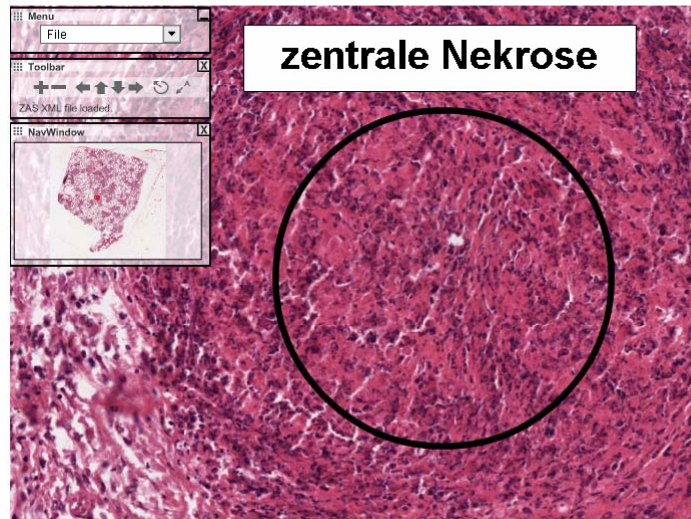

Freie Universität Berlin

Lungentuberkulose

Menu
File

Toolbar
ZAS XML file loaded

NavWindow



zentrale Nekrose

Annotations

Übersicht

8/11/2006 11:36 AM
Anonymous

Übersicht

Lungenprobe mit multifokalen, rundlich-soliden Herden

8/11/2006 11:36 AM
Anonymous

Label

List all

November 14, 2002 12:25 PM
Anonymous

web-based-learning

benefits of a learning management system

- integration of communication techniques
„WEB 2.0“
 - Email
 - Forum
 - Blog
 - Chat

web-based-learning

Discussion based learning in a „forum“

An **Internet forum**, or **message board**, is an online discussion site. It originated as the modern equivalent of a traditional bulletin board, and a technological evolution of the dialup bulletin board system. From a technological standpoint, *forums* or *boards* are web applications managing user-generated content.

web-based-learning

reflective learning in a „blog“

A **blog** (a contraction of the term "web log") is a type of website, usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in reverse-chronological order. "Blog" can also be used as a verb, meaning to maintain or add content to a blog.

web-based-learning

benefits of a learning management system

- possibility to integrate a knowledge base

web-based-learning

informal learning by using knowledge bases



Students use

Google

Wikipedia

...

web-based-learning

collaborative learning by writing a specific
knowledge base for veterinary medicine

Projects in Berlin
(Vetipedia) and
London

web-based-learning

benefits of a learning management system

- integration eAssessment

very good experiences with

- eAssessment-tools of Ilias
- Combination of Olat (LSM) and Qant (eAssessment)

web-based-learning

Online-teaching in virtual classrooms

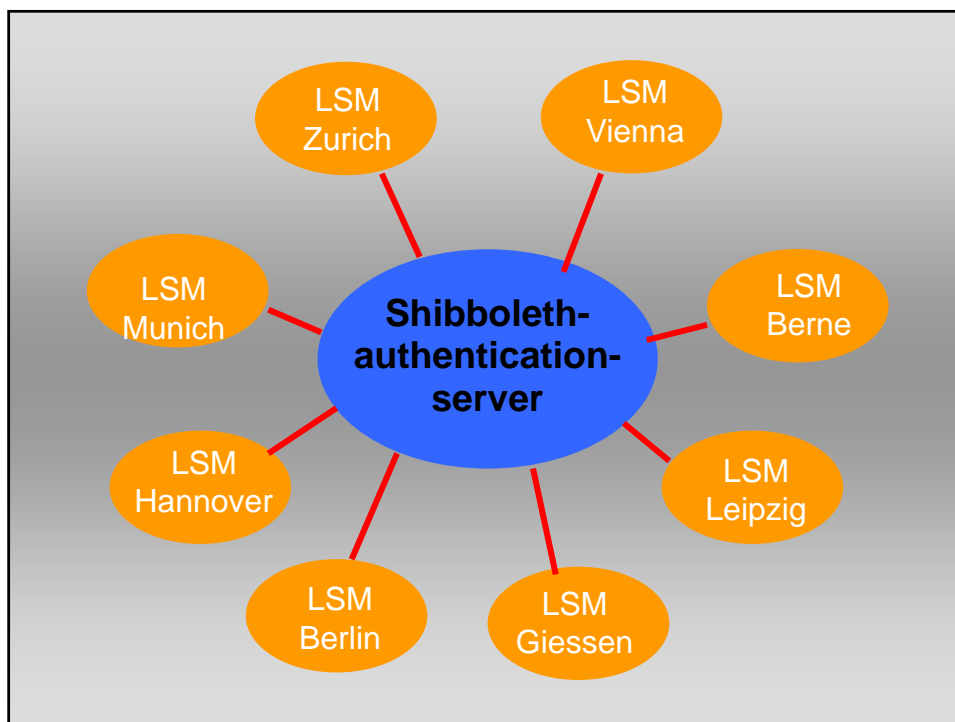
- **teacher** with webcam and microphone, presentation of powerpoint or multimedia-files
- **students** are online and are discussing in a chatroom

Problem

Cooperation of the different faculties



Connection of the different learning management system via a central authentication system by „single sign on“



Future project

Personal Learning Environments

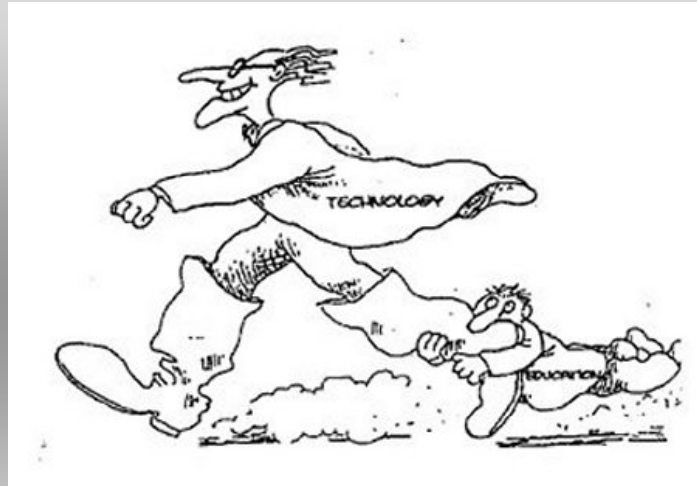
"**Personal Learning Environments** are systems that help learners take control of and manage their own learning. This includes providing support for learners to set their own learning goals manage their learning; managing both content and process communicate with others in the process of learning and thereby achieve learning goals

Future project

Personal Learning Environments

→ better life-long-learning

- integration of
 - LMS of the Universities
 - LMS of Veterinary Societies
 - LMS of European colleges
 - social networks (Facebook, StudiVZ)



**Do not use eLearning-technologies
as an end in itself!!**