



Implementing e-Learning at the FU Berlin university-wide

Dr. Nadia Juhnke nadia.juhnke@fu-berlin.de CeDiS – Center für Digitale Systeme Kompetenzzentrum e-Learning / Multimedia





#### Project FUeL ("FU e-Learning")

#### Objectives

- spreading the use of e-learning university-wide
  - focus on Blended Learning
  - at least ¼ of all courses (already achieved)
- extending the (technological) infrastructure
- creating a student portal
- promoting e-learning content exchange
- marketing e-learning content, courses and services

#### Funding

- summer 2005 to autumn 2008
- Federal Ministry of Education & Research (BMBF): € 1.7 million
- FU resources





#### FUeL: Key Issues



Establishing Blended Learning in the Departments and Institutions



Integrating the Central Learning Management System within the FU IT-architecture



Creating a Central Student Portal



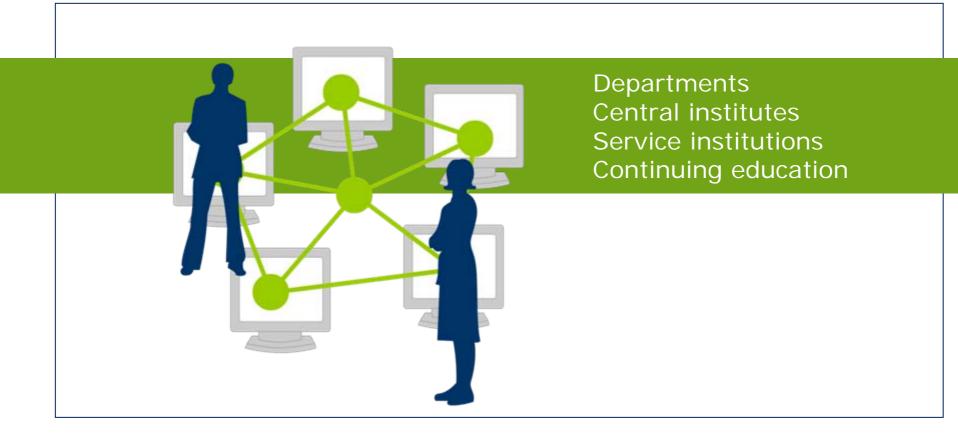
Exchanging e-Learning Materials (internally and externally)



Marketing Results and Expertise



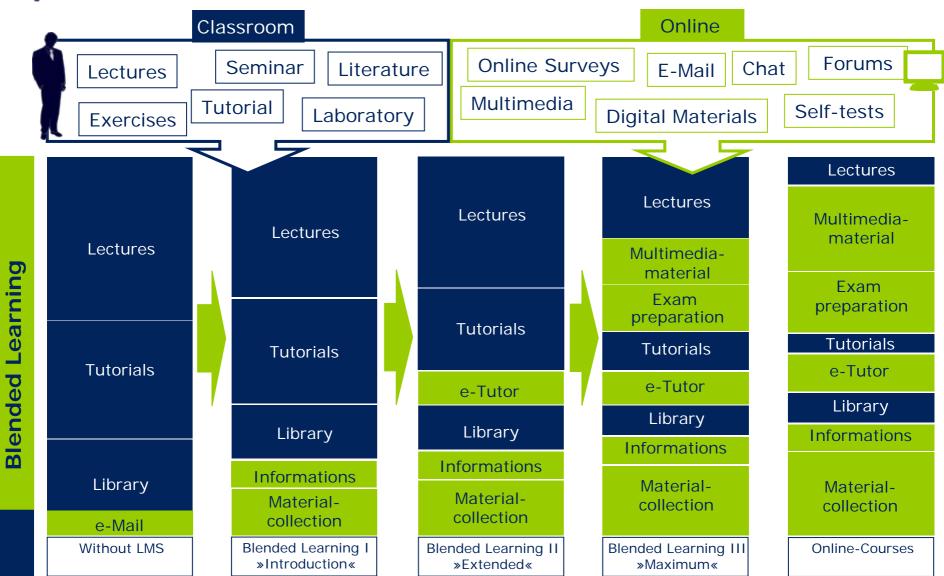
#### **Establishing Blended Learning**





## la Blended Learning









#### **Establishing Blended Learning**



#### **Central Services**

#### e-Learning Consultancy

- e-learning consultants for every department
- support for faculty
- strategic consulting for the deans

#### **Training**

- use of the LMS (Blackboard)
- production of e-learning content
- didactics of e-learning

#### e-Learning Grants Program

- administration
- consulting and support

#### **Questions of Law**

- leaflets, question/answer pool
- individual advice

#### Learning Management System (LMS)

- training and consulting
- software operation
- hotline (phone, e-mail)
- cooperation with Charité

#### **Authoring Software**

- training and consulting
- technical support
- products: Lectora, Mediator

#### Multimedia

- conceptual design
- production

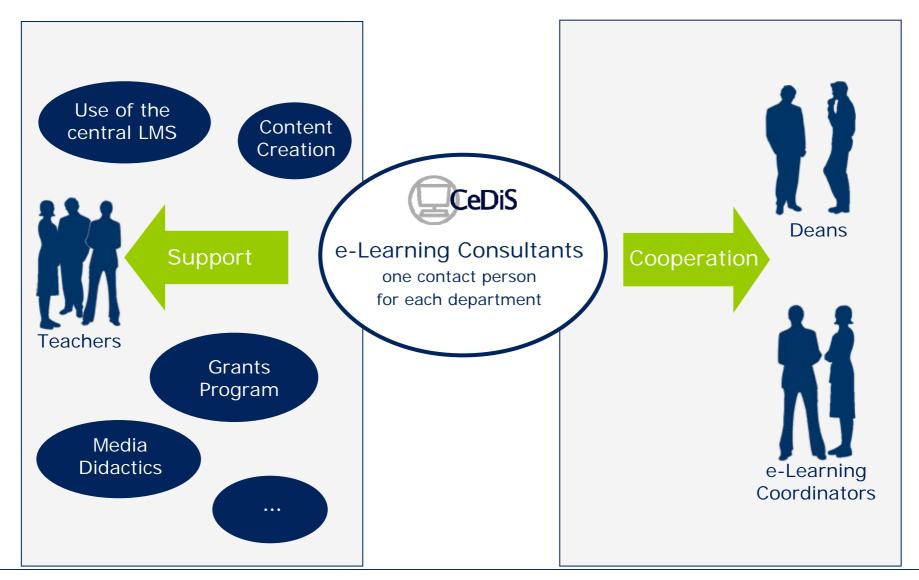
#### **Evaluation**

- support for quality improvement
- university wide student survey



## e-Learning Consultants











#### Regular Course Program

use of the LMS Blackboard

- introduction (3 hrs), advanced courses (1,5 hrs each) production of e-learning content
- conceptual design, software: Mediator, Lectora didactics of e-learning

#### **Special Events**

autumn school: production of e-learning content one week full of courses, workshops, expert talks

#### e-Learning Certificate

comprehensive curriculum on different aspects of e-learning target group: lecturers and teaching assistants conducted for the 3<sup>rd</sup> time







#### Goals

promotion of blended learning

- production of e-learning content
- usage of the central LMS Blackboard

support for early adopters

#### **Funding**

until 2010: 410.000 Euro annually from the FU presidency individual projects, joint projects, department-wide projects extra budget for new professors support and administration by CeDiS

#### **Outcomes**

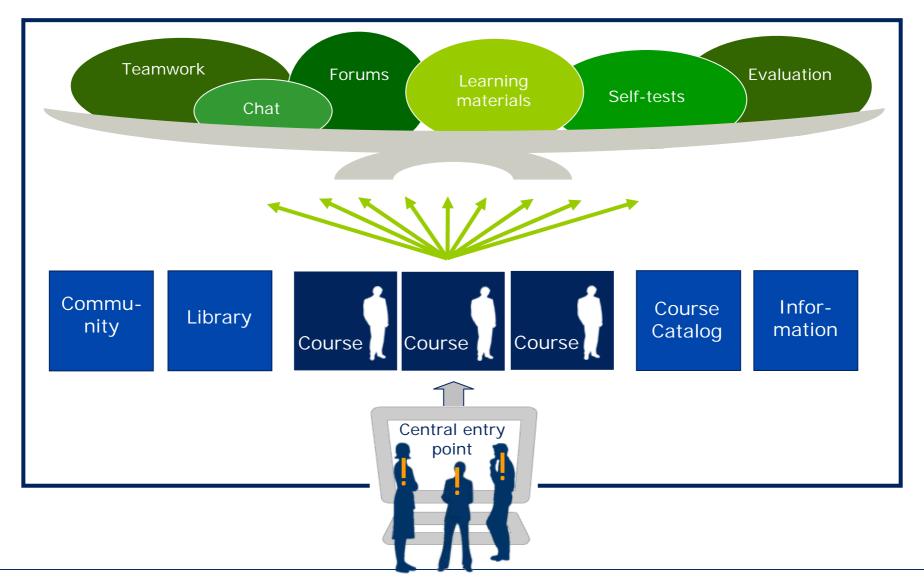
> 200 projects, involving every department broad dissemination of e-learning skills and competence





### Central Learning Management System (LMS)





# Freie Universität Berlin

#### Pro / Contra Blackboard LMS

#### strong points:

- ease-of-use for students and teachers (maybe except Content Collection)
- quite stable operation
- scalable architecture
- expandability (Building Blocks concept)
- large user community

#### weak points:

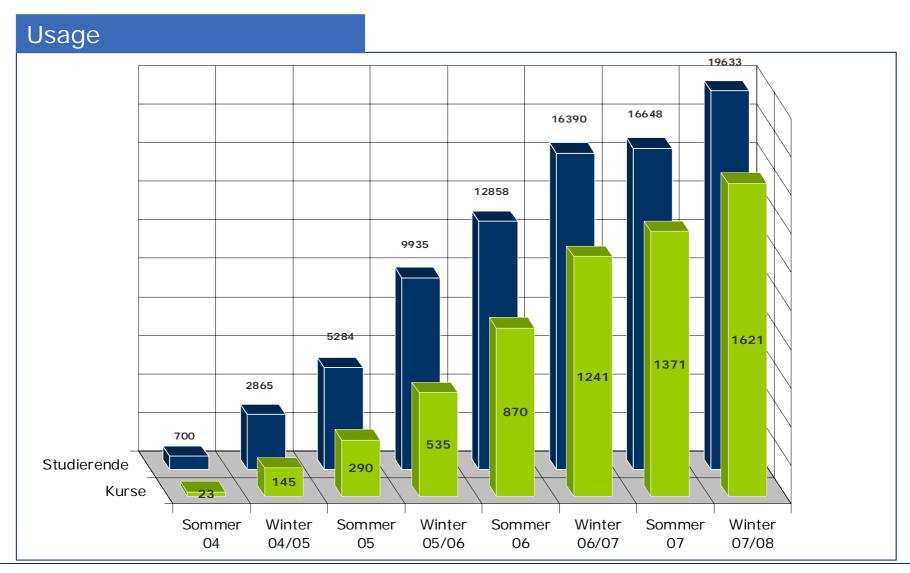
- mainly instructor centered
- lack of tools for student participation / collaboration
- Poor technical documentation, proprietary API
- old UI techniques (no deep linking possible)
- lack of standard conformity e.g. SOAP, WSRP, JSR168
- lack of conformity with the German data protection laws





### Central Learning Management System (LMS)











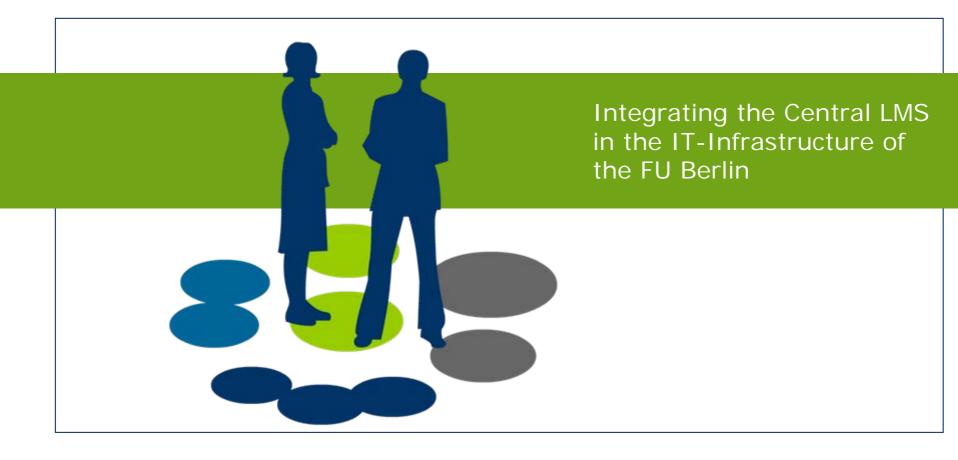
#### Student Survey

- general acceptance: 88 % would favor a LMS supported course over a traditional course
- most students say: the LMS
  - facilitates student work
  - saves time
  - is easy to use
- most used functions:
  - course materials, course information
  - e-mail, test, discussion board
- average login time: 78 % less than 1 hour/week
- usability: 72 % had no or few technical or handling problems
- students' technical equipment:
  - 71 % have a broadband internet connection
  - 74 % have a notebook



#### IT-Integration

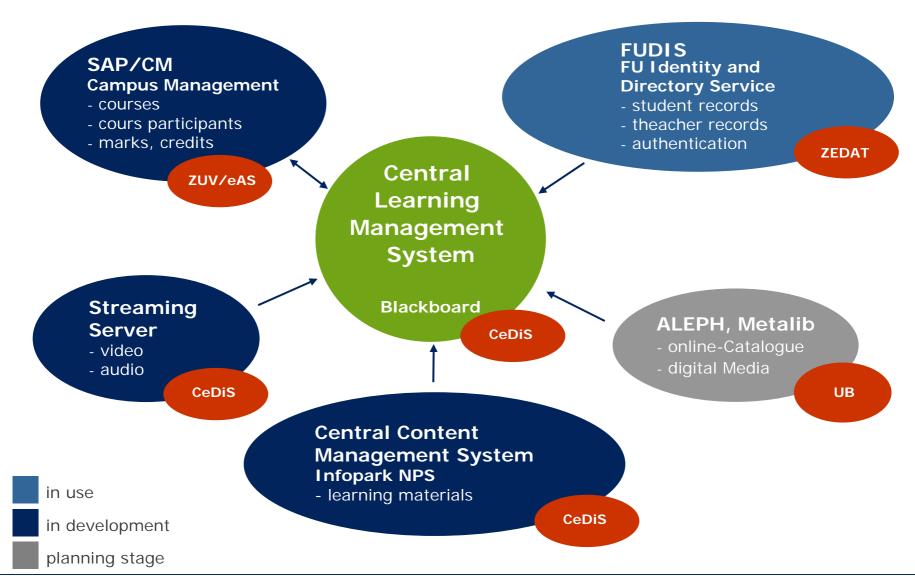


















#### **FUDIS**

FU Directory and Identity Service

- central service for personal data and authentication
- aggregation of data from different systems (SAP, HIS, ...)
- high data quality
- daily updates
- LDAP

#### **Implementation**

- flexible, component-based architecture
- data protection: passwords are only stored at FUDIS, not in the LMS
- SOAP Web Services
- security: IP numbers, SSL, password



#### Student Portal



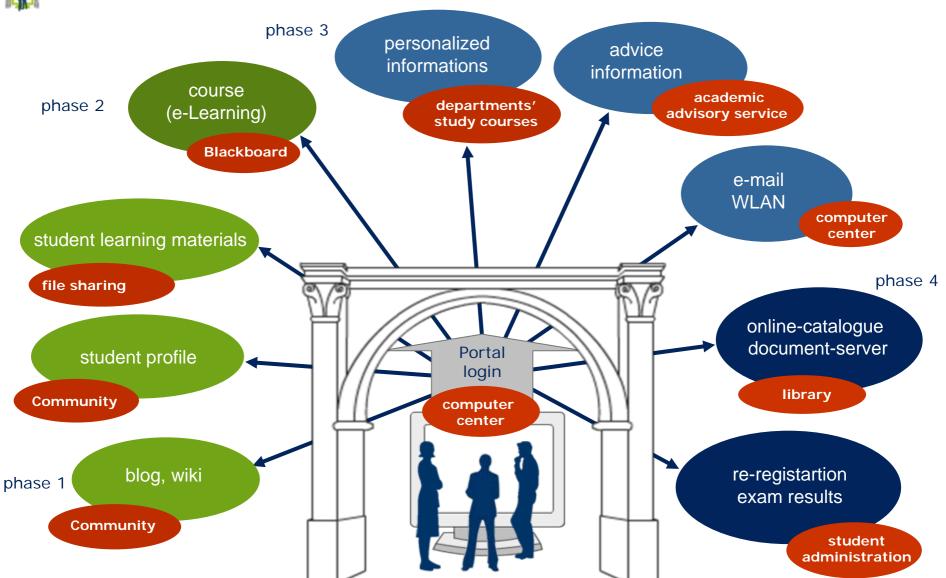


Personalized Information and Services for Students









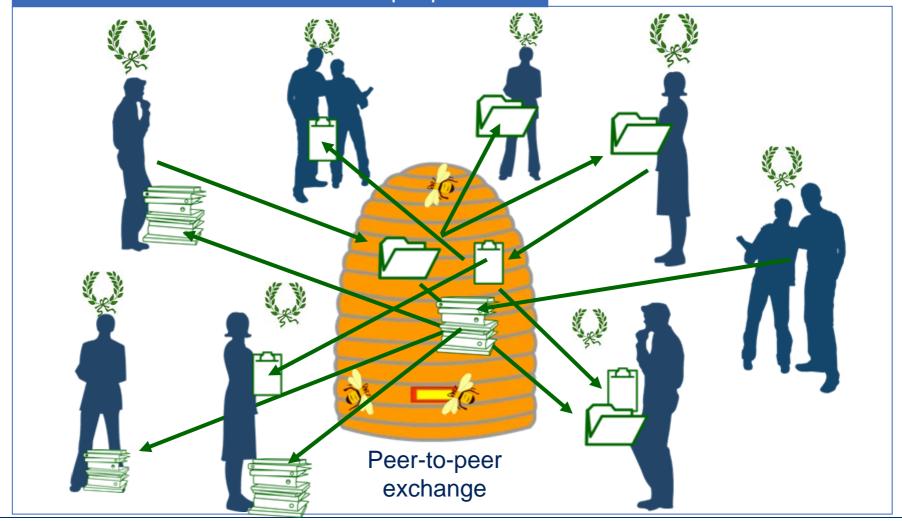




### Student Portal: Community



#### Students materials for exam preparation





# Freie Universität Berlin

#### "Web 2.0" / Social Software

#### Social Software

Content produced by users

Low threshold / easy-to-use

The Web as workspace

User self-organization

Social networks

Linking of content and services









#### Blogs and Wikis in teaching

Simple creation of Web content by teachers and students

Supporting collaboration and communication

Discursive writing style

Peer-to-peer review

Working together on texts

Knowledge exchange through networking and linking up





#### "Web 2.0" / Social Software

#### CeDiS Services

#### Blog availability

- personal blog for all FU members
- (multi-user) blog for Blackboard courses
- System selected: WordPress

#### Additionally planned CeDiS Services

Training courses and workshops on Social Software Wiki availability

- Wikis for Blackboard courses

#### RSS feeds

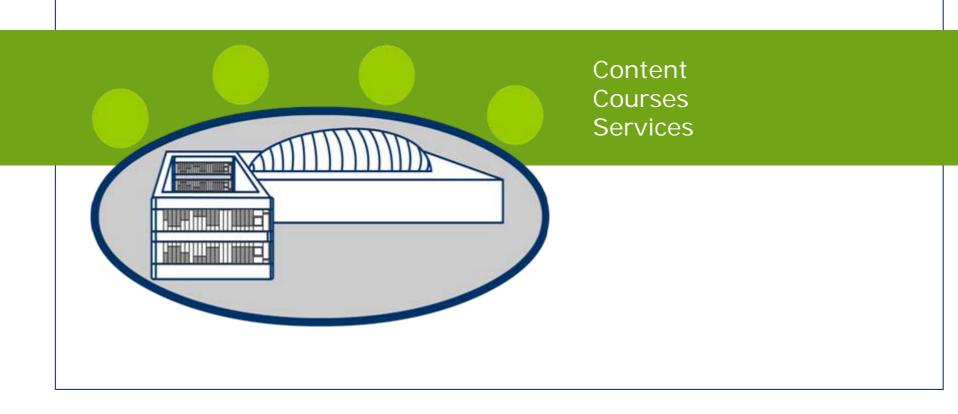
announcements from Blackboard courses

(Podcasts, Social Bookmarking, ...)















#### e-Learning Content

- learning materials are a main compentence of the university
- conversion into e-learning content takes time and money

#### Courses

- online courses incl. e-tutors
- course providers: departments, central institutes, centre for continuing education
- MBA programs, part-time study, university certificates

#### Services

- training and consulting (LMS, CMS, authoring tools, multimedia, e-learning, ...)
- media production (web, print, animation, audio, video)
- hosting (LMS, CMS)







Thank you for your attention!

Questions?

Dr. Nadia Juhnke nadia.juhnke@fu-berlin.de CeDiS – Center für Digitale Systeme Kompetenzzentrum e-Learning / Multimedia



www.cedis.fu-berlin.de