

COMPREHENSIVE ANALYSIS OF EXISTING LEARNING MANAGEMENT SYSTEMS (LMSs)

Name of institution: Virtuelle Hochschule Oberrhein

Type of institution: university

Address: Institute of Computer Science, University of Freiburg, Georges-Köhler-Allee, Geb. 51, 79110 Freiburg

Telephone: ++49 761 203-8169 Fax: ++49 761 203-8162 Email: -

URL: www.viror.de

Name of training manager: (Optional).....

LMS used: clix campus from imc

URL of LMS: <http://campusonline.uni-freiburg.de>: 8181

Language of LMS: german, english, french

Number of years in use: about 1/2 year pilot scheme

Other LMSs used: not any longer

Number of students in the system: about 200

Number of courses available: 6 Typical duration: 1 semester/term

Number of tutors in the system: unknown

This analysis is divided into six parts.

1 Course development tools

2 Student support tools

3 Tutor support tools

4 Administration (student database and records)

5 Technology (quality of software)

6 Price

1 Course development tools

1.1 *Course creation.* How satisfactory was the LMS for course creation?

The contents are set up independently from the LMS; everything can be adapted.

1.2 *Structure and didactic flexibility - openness.* In the creation of course materials did the LMS permit didactic flexibility? Was the structure open to differing didactic possibilities?

There is no fixed learning path: it is open to extension in many ways – in the end, it depends on the author.

1.3 *Teacher userfriendliness*. How easy was the LMS to use by teachers and course developers?

Good

1.4 *Support for graphics, audio and video, moving image*. Did the LMS support the provision of graphical materials, moving images, audio and video in the course content?

It can all be integrated.

1.5 *Questioning, assessment, assignments*. What provision was made by the LMS for student questioning and assessment and the design of student assignments?

There are 7 types of self-assessment – from multiple-choice to list matching. The workflow in the sciences runs as follows: the tasks and support are sent to the student. Their work is then sent back, and arrives automatically at the right tutor, who corrects the work, and enters the marks, etc.

2 Student support tools

2.1 *Interactivity possibilities*. What provision does the LMS make for student interaction?

2.2 *Online student to student communication (synchronous and asynchronous)*. What facilities does the LMS provide for student communication to other students and how successful is it? Is both synchronous and asynchronous communication between students supported?

Communication is synchronous and asynchronous. For the former, we have chat-tools, for the latter, discussion forums, blackboards and an internal E-Mail system. There is also a new send-messaging system, but we have not used it yet.

2.3 *Online student to tutor/institution communication (synchronous and asynchronous)*. What facilities does the LMS provide for student communication to the tutor and to the institution's administration and how successful is it? Is both synchronous and asynchronous communication supported? Are these support services available 24 hours a day?

The same communication tools.

2.4 *Resources, library, references*. What facilities does the LMS provide for student acquisition of resources required by the course, especially library resources and references to required readings?

A link-list can be established for every course. External and internal navigation links can also be added.

2.5 *Feedback on work and assignments*. What is the quality of provision of feedback to students on their work and assignments?

We have just co-developed something new which fits our requirements exactly. Its practical testing will first be completed by the end of term.

3 Tutor Support tools

- 3.1 *Tracking students - database questions.* How user friendly is the LMS for tutors wishing to track their group(s) of students and retrieve data from the student database?
It is possible, but we lack experience.
- 3.2 *Group management tools.* What facilities are provided by the LMS to the tutors for managing their group(s) of students?
A group can be set up for each tutor. Each group then has access to all communication tools, in the sense of a shared workspace, where documents can be up and/or downloaded.
- 3.3 *Preparation of questions and assignments by tutor.* How successful is the LMS in providing tutors with user friendly and didactically successful tools for the design of student questions and assignments?
Administration runs through external document formats. The tutor/assistant does the work with, for example, Latex, and he then uploads.
- 3.4 *Course planning for students (monitoring pace).* What tools are provided by the LMS to tutors to enable them to monitor and plan student progress?
The tutor can see how often a student clicks on any given learning unit, but he cannot see how much time he/she has spent there.
- 3.5 *User-friendly administrative systems between tutor and institution.* What provision does the LMS make for successful tutor to institution communication?
It can be set up as a shared learning space, but we do not find this necessary.

4 Administration (student database and records)

- 4.1 *Enrolment procedures and fee paying.* What facilities does the LMS provide for student enrolments, course allocations and payment of fees?
At the moment, students are required to register externally by means of a web-form. The information is then imported after having been checked for legitimacy.
- 4.2 *Passwords and security.* How successfully does the LMS handle student access to the system and the security of all student interactions with the system?
We have not set up any secure connections. There are two password models: a common login, used for everything else too, is taken from the central index, or an extra password can be sent by E-Mail.
- 4.3 *Student records database.* How successful is the system's student database, especially for data storage and data retrieval?
No experience.
- 4.4 *Examination and certification records.* What structures are provided for recording of data and results leading to examination and certification?
There is no integrated system for examinations. The only marks recorded are those achieved in assignments.

- 4.5 *Course, class and tutors database.* What facilities are provided for administration of courses, classes and tutors?
Each tutor has a "Tutors" area where he can see the courses that he holds.

5 Technology (quality of software)

- 5.1 *Server - hardware and software options.* What is the quality of server hardware and software options? How is the system integrated with existing software?
Databank: SQL-Databank (Oracle), Server: Windows-Unix-Linux. Interfaces for integration are in preparation.
- 5.2 *Client - hardware and software options.* What is the quality of client hardware and software options? Does the system permit metatagging?
Normal Browser and diverse plug-ins. Performance hardware depending on the course. Metatagging provides good support.
- 5.3 *Flexibility of didactic structure; updating, adaptability.* Is the didactic structure flexible or is it determined by the technology? How adaptable is the technology to updates and to new technology that becomes available to the market?
Updating is relatively unproblematic.
- 5.4 *Limitation of size (number of students, courses, tutors..)* How satisfactory is the LMS for handling varying numbers of students, courses, tutors? How does it cope with 100, 1000, or 10000 students and large course databases?
Non-existent at the moment.
- 5.5 *Speed of system.* How is the speed of the system and student satisfaction? How does it cope with downloading courses and high bandwidth materials?
Satisfactory.

6 Price

- 6.1 *Cost of the LMS (Learning Management System).* What is the cost of the LMS to the institution?

No statement
- 6.2 *Annual fee.* What fees have to be paid annually for the system by the institution?

No statement.
- 6.3 *Student Enrolment fee (100 students, 1000 students, 10000 students.)* How do fees to use the LMS vary when the student base is 100 students, 1000 students, 10000 students? Is online invoicing available?
No special costs.
- 6.4 *Maintenance costs: staff involved in management, IT specialists, trainers, etc*
What is the maintenance costs to the institution of the LMS and what staff resources are need to maintain it and keep it functioning?
Ca. 20 % of a BAT IIa-Position.

6.5 *Training of teachers and learners and system users.* What costs are involved in staff and student training to use the LMS system?
2 half-days once a term through the accounts centre. No offers for students.

Conclusion: Overall evaluation:

What features would you like to see included in this LMS in the future?

In the future, the import and export of courses on the basis of Standards of scorm, improvement of internal EMail functions, and course structuring within the LMS should be more flexible.

We chose this product because it is possible to work on its further development together with the company.