Thank you for introduction and thank to the organisation of ED-MEDIA to get the chance to present our project.
Good afternoon and thank you as the audience to participate in this presentation.
At first I have to correct something about the choosen title for my presentation: The title refers to our main project – running from 2003-2006
And this presentation deals with only a part of it, the actual stage. I will refer to this later in the outline.

SIGNAL project

Improving Learning Progress with Technologies in Postgraduate Professional Education with Extremly Heterogeneous Participants

Outline

- SIGNAL project
- Main goal
- Extra constraints / problems
- Outlook

At first I'll introduce the SIGNAL project and the main goal briefly: This is the main project and that leads to the title; the context of research area is to improve the learning results in a heterogeneous field of participants by supporting learners with constructivist approach in both f2f and distance learning lessons and by bringing them into action and interaction among themselves. We will not implement a whole LMS!

So the first two items will describe the main project briefly and the second one will describe the actual stage.

The context of the presentation is to point out the problems and difficulties on our way in the main project; Therefor I'll give a list of extra constraints. These slowed down the research in the main project. That is the reason why the title and the presantation differs.

In the outlook I'll show the roadmap for our initial research project.

You see, this is a real work-in-progress presentation of a newly initiated project.

Q: Who in the audience deals with distance learning and/or a blended learning approach? Please raise your hands now. Thank you, I'll come back to this later …

The SIGNAL project

- Train teacher to teach computer science
- Postgraduate professional education
- In-service training
- Compact study
- Locally distributed
- Initial observations

Briefly: For comprehensive secondary school, they all volunteer.

They have allready a teacher degree, all employed, comes from different disciplines, mostly math/physics

They got a small reduction in their job, but they have to invest much more time then estimated!

It's a 4 semester instead a 6 semester study, 1st year with monthly f2f meetings, in the 2nd weekly meetings. Partly distance learning.

In entire Bavaria.

We encountered that the teacher do better, seems obvious. See paper for hairy detailed numbers.

Main goal

- Media/PC Competence

- Learning environment

- Learning community

- Heterogeneity and prevailing conditions

- Didactical, pedagogical and social concept

- Evaluation and adjustment

In this project we want to assess the MEDIA/PC COMPETENCE of the participants. Because we assume that this is a key qualifikation for a) using new media in a partly distance learning study and b) learning and interacting in a learning environment.

Then after training the competenceswe want to set up a LEARNING ENVIRONMENT (LE) with only specific and appropriate functions e.g. mail, discussion board, document repository. It's not a complete virtual study but the LE should support f2f- and distance learning units. More precisely we want to use two different LE in different courses to evaluate these against each other.

This both should lead to a LEARNING COMMUNITY (LC) where the students interact during their distance learning units and knowledge isaccumulated, e.g. solutions of their exercises and example programs. This attic of knowledge they can use during preparation time for their exams.

The experiences in the LC and the aspects of HETEROGENEITY AND PREVAILING CONDITIONS (e.g. social/private environment) should form a DIDACTICAL; PEDAGOGICAL AND SOCIAL CONCEPT. For our technical support for the learning prozess (e.g. multimedia elements, functions of LE).

This must be followed by EVALUATION AND ADJUSTMENT.

Extra constraints / Problems

- Participants: tight schedule

- Course structure: f2f meetings

- Technique: technical problems

+ lack of comtence

= avoidence of the learning environment

But the LE is one pillar of our research aspects of supporting the learning process. We want to apply a cooperativ and blended learning approach to fit the heterogeneity of the field of participants. In f2f tutorials we are very successful, but we failed to implement such an approach in the LE!

During the first course and a prephase of using a LE (Lotus Notes Quickplace and BSCW) some extra constraints occurred v grouped in three categories:

TIGHT SCHEDULE resulting from that time consumption of the study was wrong calculated and the pressureamong job, social/private live and study is high. That led to some abnormal termination in the past. The reduction in their job covers onl a third of the time.

F2F MEETINGS: Especially the weeklyf2 sessions in the 2nd year for a whole day, consisting of tutorials and lectures, makes the LE more and more dispensable. There seems to be no immediate need beside ma and phone.

TECHNICAL PROBLEMS at the beginni were the main reason for changing from Quickplace to BSCW. After failing to use the LE once or twice the students mostly gave up to use the system permanantly.

Together with the assumed LACK OF COMPETENCE regarding PC/media competence this led to AVOIDENCE OF THE LE. Example: BSCW gives the possibility of a personal v-card. But the students ask for a printed list with phone numbers and adresses. Even if the v-card the BSCW is better accessible from work and home. After refusing to provide such list, the v-card was used widely.

Outlook

- Assess Expectations

+ Competences / relevant factors

- Train competences

- Focus on sustainability

To overcome these problems we suggested these things:

We want to assess the EXPECTATIONS of the learner they have from such a LE and interactive multi media elements beside the multimedia/PC COMPETENCES and other RELEVANT FACTORS. These can be sex, family status, town/country environment, subjects to teach.

In accordance to the results we must TRAIN COMPETENCES that all learners are able to use multimedia elements and LE in a correct sense.

Finally we want to focus how the consideration of the learners situation influences the sustainability of use of multimedia elements and LE at their work at school.

Thank you for listening and your patience!