

Research and Development

Based on the [didactic tetrahedron](#), we carry out research projects and assignments for third parties. We use both quantitative and qualitative research methods, such as interviews, expert and online surveys, field observations and document analyses.

Our research focuses on three areas:

- Self regulated learning & learning strategies
IFeL identifies factors for successful learning in distance learning and blended learning scenarios with SRL. It develops appropriate stimulation and training measures as well as explanatory models. In this context, especially computer-based learning environments are at the forefront.
- Usability
The more developed and complex websites and eLearning tools are designed, the higher are the challenges for the users and the more slip-ups can be expected. Therefore, the user friendliness is an important quality feature of ICT products. The IFeL usability laboratory analyses the user behaviour on several levels: the attention control and perception are analysed by eye tracking (Tobii X120 system), the thought processes by verbal statements of the test subjects, the computer use by an analysis of the log files, and the evaluation of the product by subsequent interviews. The usability report resulting from this analysis may be used as a tool to optimise the system development and to evaluate an existing product.
- Quality management of virtual learning environments
With regard to the conception of virtual learning environments, we assume that there are four constitutive factors of learning: the content, the student, the teacher and the learning community. Learning strategies play a major role in our research, development and advisory approaches. Based on the analysis of the learning strategies in connection with the goals of the student or the teaching organisation, one can come to conclusions for the adjustment and development of learning environments and the quality of the courses offered.
>> [Research report no. 1 \(in german\)](#)
Blended Learning: The Rediscovered Community
>> [Research report no. 2 \(in german\)](#)
Media Competence: A Key Factor for the Implementation of Blended Learning Scenarios at Universities