



Universität Zürich
Institut für Informatik

Binzmühlestrasse 14
CH-8050 Zürich
Tel. +41 44 63 54 340
schauer@ifi.unizh.ch
www.ifi.unizh.ch/~schauer

Helmut Schauer
Professor

Research Project: eLearning with myJoVE

*EE-Lab at University of Zurich for JoVE
(Journal of Visualized Experiments), Cambridge*

1. Introduction and Purpose

JoVE (<http://www.myjove.com>) is the first interactive, online video journal in the life sciences, based in Cambridge (USA).

The first issue was published online 11/30/2006. JoVE has close ties to Harvard University and an editorial board that is comprised of scientific leaders from the world's leading universities (Harvard University, Princeton University, Kyoto University, University of Zurich etc.). The media echo was very positive and encouraging (e.g. Nature, Voice of America, Biotechnology.de)

The overall purpose of this research project is to investigate a unique format (videos as academic papers) in a unique medium (free online video journal) with special emphasis on eLearning. The novelty of this journal allows us to construct new knowledge to the eLearning field.

2. Objectives

The four objectives of the research project eLearnign JoVE are:

- 1 Evaluate eLearning effects of the medium video in a scientific journal:
 - Examination of differences in learning between a paper journal and an eLearning online Videojournal
 - Is the medium video-online-journal suitable for eLearning?
 - How can video-online-journals change the eLearning process?
 - Would this eLearning process be possible in different academic fields (e.g. computer science, business & economics) and how?
- 2 Examine the eLearning process by considering a combination of an online video journal with a virtual, academic community of interest:
 - How can community building in academia be actively stimulated
 - Will a community of interest speed up eLearning effects and push academic quality of knowledge?
 - How can the process of virtual community building be initialized? What are suitable strategies?



- 3 Enhance learning effects by improving technology to allow JoVE users handling information more flexible. This includes:
 - Breaking videos into "chapters" shown in the beginning, similar to movies on DVDs
 - Clicking on objects in videos
- 4 Development of a virtual community of interest (or social network) based on the commenting system around the video articles
 - How to build communication on the website forum in order to meet interests of different groups: professors, students, post-docs, sponsors, funds etc.

3. Structure

We will organize this research project in various forms:

- Diploma Thesis
- Bachelor Thesis or a in-depth study („Vertiefungsarbeit“)
- Semester works
- Internship for a thesis with JoVE in Cambridge

4. Initial Bibliography

Kim, A.J. (2000): Community building on the web. Secret strategies for successful online communities. Berkely: Peachpit

Winkler, K., Mandl, H. (2005): Virtuelle Communities – Kennzeichen, Gestaltungsprinzipien und Wissensmanagement-Prozesse, MedienPädagogik, Zürich

Schauer, H., Marte, A. (2002): Seminar "Virtuelle Kommunikation" an der Universität Zürich in Kooperation mit H. Mandl, LMU München und U. Schneider, KFU Graz.

http://www.ifi.unizh.ch/groups/se/teaching/ws01_02/vk/index.html

Walther, J.B. (2000): Die Beziehungsdynamik in virtuellen Teams. In: Boos, M., Jonas, K.J., Sassenberg, K. (Hrsg.), Computervermittelte Kommunikation in Organisationen. Hogrefe, Göttingen