Video-based teaching: The digital lecture hall

Summary

For the improvement of the teaching quality in so-called mass lectures, the Freie Universität Berlin is focusing more on learner-centered teaching settings and thereby developed a new video-supported teaching format. The basic lecture "Introduction to Educational Science" is realized as an online course and accompanied by three face-to-face sessions. The video-based lecture focusses on the promotion of self-regulated learning, the flexibility of learning times and locations, the facilitation of exam preparation, family-friendly study possibilities and a higher self-participation. The new teaching format at the Freie Universität is based on teaching videos that were provided online within the framework of an introductory lecture. Between 200 and 1000 students work on these independently and can exchange ideas and thoughts with each other in a protected online environment. This includes discussing learning content or mutually preparing for the exam. The online study course is accompanied by three face-to-face sessions at the start, in the middle and at the end of the course.

Table of contents

Course

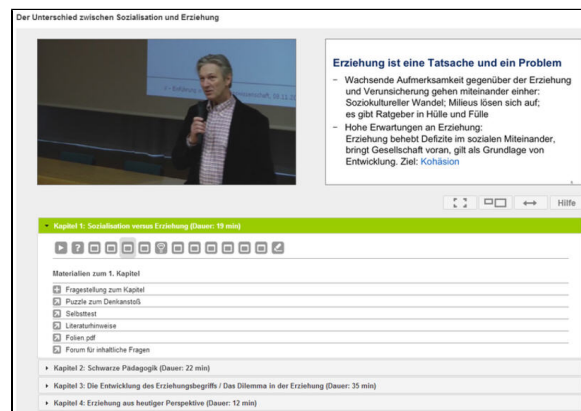|	
Course title	"Introduction to Educational Science online"
Course type	Lecture
Degree program	Educational Science (Bachelor)
	Teacher Training (Bachelor)
Lecturer	Prof. Dr. Gerhard de Haan
No. of participants	650 (2013/14), 950 (2014/15), ... 200 (2017/18)
SWS/CP	2 SWS

Illustration 1: "Introduction to Educational Science online"

Tools

- Tutorials (videos)
- Blackboard

Realization

The lecture is based on the recording of a traditional face-to-face lecture. Thereby the students sitting in front of their monitors do not have to forego the lecture hall atmosphere. The video teaching material was prepared as follows:

- Splitting up the 14 lecture videos into many approx. 20-minute self-learning units
- Special questions at the start of every chapter for targeted work on the teaching videos
- Thought-provoking impulses on the contents of the lecture for a direct reflection and application of that what was viewed
- Additional material such as presentation slides, literature, podcasts and reference links to in-depth analyses
- Interactive self-tests for checking on what one has learned and for the targeted preparation for the exam
- Possibility to download the audio files in a mp3 format in the sense of mobile learning

Tutorials as an introduction to the online environment and a learning pass both provide orientation. Central questions and answers to these can be found in the FAQ. The students are supervised through forums, e-mail and in regular office hours. In addition, online office hours are offered in the chat.

Experiences made by the lecturer

The central approach of the course is that the learners themselves are at the very center of the new lecture format. Therefore, as a new concept, students were included in the development of the digital lecture. For example, they developed interactive elements for the gamification of learning content, self-tests and thought-provoking impulses. Very good experiences were made with the concept "by learners for learners".

The reactions of the students to the realization of the lecture format are mostly positive. Those were the results of the accompanying evaluation. Emphasized here were the independence of learning from both time and location as well as the accompanying material for the exam preparation. On the other hand, critical voices point out that significant more time needs to be invested in working on the lecture contents. Included here is the statement that the personal contact to other students is neglected.

Further information

- In-depth presentation of the concept and information on access to the demonstration course (PDF)
- Website with additional scenarios and teaching examples for implementing digital technologies in mass courses of the Freie Universität Berlin

Support offered by CeDiS

- Consulting services for the implementation of digital solutions in teaching: The Center for Digital Systems (CeDiS) has extensive experience of many years when it comes to the implementation of digital media and systems within the fields of teaching, learning and research. We offer a wide variety of consulting services on the implementation of these tools and systems within the entire academic scope and especially at Freie Universität Berlin.
- Training courses and workshops: For lecturers at Freie Universität Berlin (professors, employees, tutors) as well as lecturers of other universities CeDiS offers training courses and workshops on the topic of teaching and learning with digital media. These course enable participants to implement online elements within their own sphere of teaching.
- The Executive Board of the Freie Universität supports e-learning initiatives: With the e-learning funding program financial resources are provided to lecturers that enrich and improve their courses quality-wise by implementing technological and media-related support. All of the academic staff teaching, the lecturers or even the institutions of the Freie Universität - without the Charité-Universitätsmedizin - can be supported within this program.