



## **4. Potential applications in teaching**

Teaching/learning videos can be used in a variety of ways in university teaching and help to enrich and individualise the learning process. The continuous integration of teaching/learning videos into university teaching supports the development of key skills and prepares students optimally for the requirements of their degree programme.

Some of the most important areas of application are described below:

### Supplement to classroom teaching

Teaching/learning videos can usefully supplement traditional face-to-face teaching. Lecturers can explain complex topics in advance in a video so that the classroom time can be used for in-depth discussions, practical exercises and clarification of open questions. This method, often referred to as a "flipped classroom", allows students to familiarise themselves with the basics at their own pace and apply what they have learned in class.

(Hill, 2020)

(Brame, 2016)

### Self-study and revision

Videos offer students the opportunity to repeat learning content anytime and anywhere. This is particularly valuable for exam preparation, when students are absent due to illness or to consolidate topics that were not fully understood in class. The flexible availability allows students to customise their learning pace and times.

(Brame, 2016)

(Terada, 2022)

### Supporting practical and laboratory work

In practical subjects such as science, engineering or medicine, teaching/learning videos can help to teach and consolidate practical skills. Demonstration videos show step-by-step how to carry out experiments, laboratory procedures or technical work. This enables students to prepare themselves theoretically before the practical session and to apply what they have learnt in the laboratory with confidence.

(Brame, 2016)

### Online- und Blended-Learning-Kurse

Teaching/learning videos are a central component of online and blended learning concepts. In online-only courses, they partially or completely replace classroom teaching and enable learning independent of time and place. In blended learning scenarios, they supplement the classroom



sessions and offer additional learning resources. Both approaches promote the flexibility and accessibility of educational programmes and support lifelong learning.

(Brame, 2016)

### Promotion of independence and self-organisation

The use of teaching/learning videos promotes students' independence and self-organisation. The opportunity to work on and repeat content independently strengthens self-directed learning. Students learn to plan and structure their learning processes independently, which teaches them important skills for their professional life later on.

(Terada, 2022)

### Deepening and expanding teaching content

Teaching/learning videos make it possible to convey content that goes beyond the traditional curriculum. Lecturers can incorporate current research findings, expert interviews or practical application examples in the form of videos. This expands students' knowledge and offers them insights into practice and current developments in their subject area.

(Giannakos et al., 2014)

### Collaborative learning

Teaching/learning videos can also support collaborative forms of learning. Students can watch videos together, discuss them and work on related tasks. This promotes exchange and collaboration, which contributes to a deeper understanding of the content and the development of social skills.

(Giannakos et al., 2014)



**Sources:**

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