

## Technology in Higher Education

The use of technology in college courses is essential for the high quality of college programs. It offers new delivery methods and prepares the students for their future jobs. The implementation of technology is an ongoing task which requires systematic approach and continuous active search for the better ways of course delivery.

Early implementations of the new technologies:

- keep the content of courses relevant: databases, spreadsheets, big data, and simulations
- support the modern course delivery: online courses and the support of different course delivery channels

Online programs:

- increase the program availability: working adults and worldwide offering
- are competitive to other online, traditional, or massive open online programs

**Strategic investments in the technology and online course delivery provide:**

- online content: texts, exercises, simulations, labs, databases and searches
- high quality of the course delivery and assessment: CMS, online communication and assessment
- faculty and student training and incentives for the use of technology

**How to ensure that the investments in technology produce the best outcomes?**

- Maintain a list of all technology resources.
  - faculty: a list of all technology used in all courses
  - students: a list of technology skills that the student should have after completing the program (the learning outcomes for technology)
- Introduce the technology gradually.
  - faculty: three to four technology levels for courses can be defined; the faculty may be encouraged to start their courses at the lower level and in the subsequent cycles to move up
  - students: introductory courses should be less demanding technologically than the more senior courses so that students can gradually build their technology skills
- The resources need to be documented and supported.
  - faculty: videos, templates, workshops, FAQs, and a training on how to teach online
  - students: instructions, FAQs, videos on how to complete the assignments, templates, and a training on how to learn online
- The resources need to be reused in different courses whenever possible.
  - faculty: the use of different software with similar functionality should be avoided
  - students: more complex software functions may be explored in the subsequent courses
- The rewards for the use of technology.
  - faculty: monetary, reduced teaching load, travel funds, and required use of the technology for promotions
  - students: rubrics may include points for the use of technology
- Regular technology reviews to ensure the program relevance.
  - faculty: obsolete technologies must be replaced with the most current ones
  - students: should be learning the latest technologies to make them competitive in the job market and prepare them for their future leadership roles