

Quality in Online Teaching and Learning

What is online education?

Online education is electronically supported learning that relies on the internet for instructor/student interaction and the distribution of class materials. This may range from downloadable content (such as digital textbooks, lecture notes and video or audio materials) through informal teaching (such as Open Online Courses) to fully structured online courses that include assessments and the awarding of a qualification. Online learning frees education from the constraints of time and space that go with face-to-face teaching. It requires that students have access to the internet and an adequately equipped desktop PC, laptop, tablet, or other suitable device.

What does quality means in online teaching?

The quality of education reflects the relationship between learning and the demands, goals, standards (regulations) and requirements set by individuals, organisations, local community members and the state at large. The term 'quality of education' is broken up into the following terms that require a separate definition each:

- Quality of teaching;
- Quality of academic staff;
- Quality of study programmes ;
- Quality of equipment/device, maintenance and support rendered;
- Quality of internet; quality characteristics of the learning environment,
- Characteristics of students, university entrants;
- Quality of university management;

- Quality of research.

Several *quality standards* have been defined and tested in numerous contexts around the world for online teaching and learning environment. These are:

1. **Institutional standards:** vision, planning, & infrastructure, internal quality assurance processes.
2. **Teaching and Learning Standards:** Course structure and Design; Way of Instruction and Assessment of Student Performance.
3. **Support Standards:** Faculty; Students; Guidance Services; & Organizational Support.
4. **Evaluation Standards:** Internal and external program evaluation; Program continuity of improvement activities.
5. **Technology, Examination security**

Rubric for Online Course Instruction

What should a quality online course look like?

This rubric offers a framework for addressing this question. Use of this rubric represents a developmental process for *online course design and delivery*.

Category	Guidelines
1.Learner Support & Resources	<ol style="list-style-type: none"> 1. Course contains adequate information for online learner support and links to campus resources. 2. Course provides a variety of course-specific resources, contact information for instructor, department, and program. 3. Course offers access to adequate resources supporting course content and different learning abilities.

2. Online Organisation & Design	<ol style="list-style-type: none"> 1. Course is well-organized and navigable. Students can understand the key components and structure of the course. 2. Course syllabus identifies and delineates the role the online environment will play in the course. 3. Most web pages are visually and functionally consistent. 4. Accessibility issues are briefly addressed. (Including: sight, mobility, hearing and technical.)
3 Instructional Design & Delivery	<ol style="list-style-type: none"> 1. Course has adequate and appropriate activities to assess student readiness for course content and mode of delivery. 2. Learning objectives, instructional and assessment activities are well aligned. 3. On-going assessment strategies are used to measure content knowledge, attitudes, and skills. 4. Regular feedback about student performance is provided in a timely manner throughout the course. 5. Students' self- assessments and/or peer feedback opportunities exist.
5 Innovative Teaching with Technology	<ol style="list-style-type: none"> 1. Course uses a variety of technology tools to facilitate communication and learning. 2. New teaching methods are applied to innovatively enhance student learning. 3. Multimedia elements and/ or learning objects are used and are relevant to accommodate different learning styles. 4. Course optimizes Internet access and effectively engages students in the learning process.
6. Faculty Use of Student Feedback	<ol style="list-style-type: none"> 1. Instructor offers opportunities for students to give feedback on course content. 2. Instructor offers opportunities for students to give feedback on ease of online technology and accessibility of course. 3. Instructor uses formal and informal student feedback in an on-going basis to help plan instruction and assessment of student learning throughout the semester.

Staff concerns on online teaching

- Lack of instructor support: Teaching online takes more time than teaching face-to-face and this creates concerns related to faculty workload. One study suggests that online instructors are spending three times more time than face-to-face instructors evaluating student work.

- Academic integrity is questionable: Assessment standards are not in place for online learning. In addition, potential for plagiarism and cheating is high as there are no formal exams on campus.

Free Video Tools to record and edit video lectures

1. Camtasia: Camtasia is a screen recorder and video editor for educators to create video tutorials and other instructional videos.
2. Bb Flash back express (free) has identical features with Camtasia.
3. Camstudio (free) is a straightforward program that lets you record your screen and audio.
4. Screencast o matic (free) easy to use, 15 minutes time limit.
5. Bandicam: has very good video quality.
6. Virtualdub (free video compression tool)

Comparison of Video Formats for Online Teaching

As most asynchronous online courses rely on Internet videos to deliver course content, the choice of video format may become crucial to the success of the online course.

To compare file sizes a sample lecture video was taken and encoded it using the various file formats using Camtasia. The video length was kept 6 minutes. The file size (640X480), frame rate (30 frames per second), and other options were kept constant.

Table 1 File size

File Format	Size
AVI	14.6 GB
WMV	28.4 MB
MPEG-4	35 MB
Flash	130 MB

Table 2 Portability

F i l e Format	Windows	Mac OSX	iPhone/iPad	Android

AVI	Yes	Software required	Software (app) required	Software (app) required
WMV	Yes	Software required	Software (app) required	Software (app) required
M P E G - 4 / MP4	yes	yes	yes	yes
Flash	P l u g i n requires	P l u g i n requires	Not supported	S o f t w a r e (app)required

Based on the above tables, MPEG-4/mp4 is recommended.

References:

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2. Teaching in the digital age <https://opentextbc.ca/teachinginadigitalage/part/ensuring-quality-teaching-in-a-digital-age/#:~:text=1.,guarantee%20q%20uality%20teaching%20and%20learning.>
3. A Guide to Quality in Online Teaching and Learning, Flexible Education Norway (2018) https://issuu.com/fleksibel_utdanning_norge/docs/quality_education_netversion