

# Quality Online Teaching: An Analysis of Qualitative Course Evaluation Data

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## Background

Essentially, quality teaching is defined by instructors who support student learning, an educational design that is effective, and a robust system of assessment and feedback (van Dijk et al., 2020). However, we can only define the concrete methods for achieving these conditions within a specific context (Renkl, 2015). In the wake of the COVID-19 pandemic, this context changed, as instructors and students had to shift from in-person to remote learning and teaching. Consequently, there is so far only a limited amount of research that examines how students respond to online learning and their views on quality teaching in a digital environment.

## Questions

- (1) What criteria do students use to evaluate online courses? Do they differ from the criteria they use for evaluations for in-person classes?
- (2) From a student's perspective, what are the factors that promote or hinder online learning?
- (3) What concrete patterns of teaching behavior meet students' expectations?

## Methodology

### Sample

- 23 courses (with a total of 82 focus groups and 322 students) from 6 different departments.
- Each course was divided into synchronous (zoom) and asynchronous (moodle) units.

### Data Collection

Teaching Analysis Polls (TAP) conducted between Summer 2020 up to and including Summer 2021.

### Classification

Two independent raters by means of a coding manual (Hawelka, 2019)

### Data Analysis

- Inter-rater reliability (Cohen's kappa)
- Results weighted by number of groups per course
- Frequency distribution of answers per category
- Frequency distribution of category per course (at least once)
- Good/poor practice examples

## Results

The inter-rater reliability is  $\kappa = .915$ .

96.3% of all answers matched our existing categories. Technical issues experienced by the instructor were subsumed under the category 'classroom management'; this category was broadened accordingly. The following figures show our analysis of student feedback on the most significant factors that help or hinder their learning.

The word clouds on the left (Figures 1 and 2) represent the top positive and negative answers from students. The categories on the right indicate the factors which students found helpful or obstructive. In order to qualify, each category had to be mentioned at least once per course. The sentences below each category represent typical student answers.



Figure 1 Factors that foster learning



Figure 2 Factors that hinder learning

### 96 % Student Involvement

Zoom Breakout Rooms allowed for student interaction and group work.

During class discussions, the instructor asked insightful, thought-provoking questions.

During synchronous sessions, the instructor was open to questions and gave thoughtful responses.

### 78 % Learning and Reading Material

The instructor provided plenty of additional materials (lecture notes, readings, videos).

Moodle quizzes were helpful and promoted a deeper understanding of the subject matter.

### 74 % Interaction

The instructor responded to emails promptly (even on weekends and during breaks).

The instructor was regularly available through Zoom to discuss papers and presentations.

### 57% Task Understanding

The instructor failed to clearly communicate expectations regarding assignments or exams.

The instructor did not provide sample solutions on Moodle, making it difficult to know how much we were expected to work on assignments.

### 48 % Student Involvement

Discussions in Zoom Breakout Rooms were mostly ineffective.

The instructor was unable to motivate students to participate in in-class discussions.

### 48% Perceived Competence

The weekly workload was too heavy and the schedule to complete the project (creating a podcast) was too tight.

The assignments were too challenging.

## Implications

- TAPs can also be used to evaluate online courses.
- Highlights the importance of quality interaction, arguing against purely asynchronous self-learning offerings.
- Guideline for creating university-level online learning environments (do's and don'ts).
- Topic ideas for professional development courses focusing on online teaching in higher education (understanding assignments, student involvement, perceived competence, materials, and advising).
- Presents priorities for the design of course evaluation forms for online courses.
- Guideline for interpreting quantitative course evaluation data. Students may evaluate the quality of teaching and learning not just against fixed standards but also against their own expectations (Scriven, 2007).

## Limitations

- TAPs were conducted according to instructor demand. Therefore, the sample selection may not be representative.
- TAPs were conducted while the campus was closed due to the COVID-19 pandemic. Further research is needed to determine whether these findings can be transferred to regular in-person classes.
- Differences between subjects and departments are probable and would need to be examined on the basis of a larger sample.

## References

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