



The Use of Formative Evaluations in the Online Course Setting

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Course Evaluation in the Online Setting

- ▶ Goals
 - ▶ Improve course
 - ▶ Assess/increase student learning
- ▶ Traditional Methods
 - ▶ Student assessments
 - ▶ Summative course evaluations
- ▶ Formative Evaluations
 - ▶ Continuous Improvement
 - ▶ Benefit to current as well as future students

Problems with Traditional Evaluation Techniques in Online Courses

- ▶ No agreement on best method
- ▶ Need different techniques
- ▶ Difficulty adequately measuring quality online teaching
- ▶ Summative evaluations
 - ▶ Focus on promotion and tenure
 - ▶ May not be used to improve course or teaching
 - ▶ Don't benefit current students
 - ▶ Popularity contest
- ▶ Course may be designed by one faculty and taught by another

Value of Formative Evaluations in Online Courses

- ▶ Completed during or throughout the course
- ▶ Immediate feedback
- ▶ Gives feedback to instructor lacking face-to-face interaction
- ▶ Provides ability to change course at the current time
- ▶ Creates feedback loop for continuous improvement
- ▶ Increases student participation
- ▶ Encourages student self-evaluation

Use of Formative Evaluation Information

- ▶ Questions to Ask:
 - ▶ Students' perceptions of activities, pace, student engagement
 - ▶ Pertinent to both students and instructor
- ▶ Use feedback to make changes
 - ▶ Fairly immediate feedback allows for changes during course
 - ▶ Improvements increase student involvement and motivation

Methods of Formative Evaluation

- ▶ Formal peer evaluations
- ▶ Short student surveys
- ▶ eFACT: Formative Assessment of Classroom Teaching for Online Courses
- ▶ Modified Face-to-Face Group Instructional Feedback Evaluation Techniques
- ▶ Surveys through commercial software or course software

Case Study: Medical Terminology – Course Design

- ▶ Course offered online for 15 years; currently online only
- ▶ Open only to specific majors; freshman through last semester seniors
- ▶ Unknown prior student online course or ReggieNet experience
- ▶ Evaluation done Summer of 2014
- ▶ 28 students in course
- ▶ 2 evaluations done – midpoint, final week of course; extra credit given
- ▶ Student grades at midterm and final also compared

Case Study: Medical Terminology – First Evaluation

- ▶ On-line minute paper
- ▶ Four questions
 - ▶ Name two things about this course that you feel are helpful to your learning medical terminology.
 - ▶ Name two things about this course that you feel are barriers to your learning medical terminology
 - ▶ Name one thing the instructor could do to better assist you with learning medical terminology in this course
 - ▶ Name one that that you could do to better assist you in learning medical terminology
- ▶ Answers analyzed and changes made (21/28 responded)

Case Study: Medical Terminology – Second Evaluation

- ▶ On-line minute paper
- ▶ Three questions
 - ▶ Did you utilize the discussion boards, office hours, or email tips implemented? If yes, what tool(s) did you use?
 - ▶ If yes, how did you find this to be helpful in your learning of medical terminology?
 - ▶ If no, why not?
- ▶ Answers analyzed, success of changes assessed, and changes made for future classes (19/28 responded)

Case Study: Pathophysiology I – Course Design

- ▶ Offered online for first time Fall 2014
- ▶ Early major course; junior students
- ▶ Content-heavy course; fundamental to Health Information Management
- ▶ Offered online due to staffing issues; adjunct instructor taught “canned” class
- ▶ 27 students
- ▶ Unknown student experience with online courses; familiar with ReggieNet
- ▶ 2 formative evaluations; after first exam, after third exam; extra credit given

Case Study: Pathophysiology I – First Evaluation

- ▶ On-line student survey
- ▶ Three questions
 - ▶ For you personally, what has been the most difficult part of the course material so far?
 - ▶ What was the most difficult part of the first exam?
 - ▶ What can we do to improve learning outcomes?
- ▶ Answers analyzed and changes made (23/27 responded)

Case Study: Pathophysiology I – Second Evaluation

- ▶ On-line survey
- ▶ Six questions
 - ▶ What changes that have been made to the course have you used or taken advantage of?
 - ▶ If you used any of these changes, how have they helped your learning?
 - ▶ What changes have you made in your test preparation methods?
 - ▶ How have these changes that you have made helped you?
 - ▶ What areas of the course do you still find difficult?
 - ▶ What additional changes would you recommend to facilitate your learning?
- ▶ Answers analyzed and changes made (23/27 responded)

Results – Medical Terminology – First Evaluation

- ▶ Overall positive responses
- ▶ Barriers to learning
 - ▶ Online course
 - ▶ No lectures/discussions in class
 - ▶ No peer interactions
 - ▶ Harder to ask questions
 - ▶ Technology concerns
 - ▶ Fast pace in summer/large amount of material

Results – Medical Terminology – First Evaluation

- ▶ What could instructor do?
 - ▶ More assignments
 - ▶ More discussions
 - ▶ On-campus office hours
 - ▶ Weekly emails
 - ▶ Many stated nothing
- ▶ What could students do?
 - ▶ Stop procrastinating
 - ▶ Time organization
 - ▶ Study differently

Interventions for Medical Terminology

- ▶ After first evaluation:
 - ▶ Discussion board added
 - ▶ Two hours of on-campus office hours/week
 - ▶ Weekly email
- ▶ Email sent to students
 - ▶ Changes
 - ▶ Recommendations for success
 - ▶ Comments on fast pace and technology concerns
 - ▶ Encouragement of email questions

Results – Medical Terminology – Second Evaluation

- ▶ No students used discussion boards or office hours
- ▶ 5/19 – email tips
- ▶ 4/5 found email tips helpful
- ▶ 14/19 stated satisfied with study habits/grades so didn't use
 - ▶ 2 stated not close to campus so office hours not an option
- ▶ Student grades improved in second half of course after changes made

Results – Pathophysiology I – First Evaluation

- ▶ Students unhappy with
 - ▶ Online course format
 - ▶ Communication
 - ▶ Feeling of “teaching themselves”
 - ▶ Inability to assess own learning prior to exam
- ▶ Suggestions
 - ▶ More activities, quizzes, or practice exams
 - ▶ Face-to-face exam preparation sessions
 - ▶ Additional communication

Interventions for Pathophysiology I

- ▶ Weekly face-to-face sessions added
- ▶ Assignments added for student assessment of learning

Results – Pathophysiology I – Second Evaluation

- ▶ Improved student satisfaction
- ▶ 59% attended review sessions; 82% completed added assignments
- ▶ Ability to ask questions in person noted to be helpful
- ▶ Students revised test preparation methods – felt more prepared
- ▶ Still found some areas difficult
 - ▶ Exam format
 - ▶ Large amount of information
 - ▶ Lack of face-to-face course
 - ▶ Time allotment for exams
- ▶ Student grades improved after changes made

Discussion

- ▶ Information used by instructors, department chair, other stakeholders
- ▶ Medical Terminology
 - ▶ Positive feedback
 - ▶ Course improvements made in summer course as well as future courses
 - ▶ Long term plans to add audio for pronunciation, additional assignments, including study suggestions in initial course email
- ▶ Pathophysiology
 - ▶ Changes made during course resulted in increased student satisfaction
 - ▶ Course changed back to an on-campus course
 - ▶ Ideas for future online course development

Conclusions

- ▶ At ISU:
 - ▶ Medical Terminology – always room for improvement
 - ▶ Pathophysiology – deeper understand of online course needs
 - ▶ Both classes –
 - ▶ Student expressed appreciation that their opinions sought, changes made based on input
 - ▶ Student role in success increased
- ▶ Formative Evaluation
 - ▶ Meets need for accountability
 - ▶ Student participation increases
 - ▶ Changes can be made in current class to benefit current students