

## Online Courses: A Multimedia Approach



Dr. Scott N. McDaniel  
[smcdanie@mtsu.edu](mailto:smcdanie@mtsu.edu)  
[www.mtsu.edu/~smdanie](http://www.mtsu.edu/~smdanie)

**Middle Tennessee State University**

## What are Advantages of Online Classes?

- Cooperative learning more effective in the online environment
- Better format for promoting critical thinking and independent learning
- More students can participate in the discussions
- Course is available all the time, no travel time to and from campus
- Students are allowed to work ahead, finish course early

## What are Disadvantages of Online Classes?

- Requires more time of instructor (40% given in a study by Ouellette, 1999)<sup>8</sup>, and more time of students (triple the time for a traditional course)<sup>6</sup>
- Students can disconnect quickly, retention may not be as high
- Course is more set, instruction is not as flexible, cannot easily change or reemphasize content
- No F2F interaction to judge students' level of understanding

## Suggestions From the Research

- Take an online course<sup>2</sup>
- Start with the basics<sup>2</sup>
- Be prepared to spend an enormous amount of up-front time.<sup>2</sup>

## Suggestions From the Research

- Take advantage of training<sup>2,3</sup>
- Observe other online courses prior to developing yours<sup>2</sup>
- Technical assistance is readily available throughout the course (for Student and Faculty)<sup>1,2</sup>

## Suggestions From the Research

- For experienced Online Faculty
  - Continue to update your course<sup>2</sup>
- Constantly evaluate your course
  - Have students evaluate the course with open-ended questions
- Separate course into self-contained modules<sup>1,3</sup>
  - Keep in mind Bloom's Taxonomy

## Seven Principles

1. Encourage contact between students and faculty.
2. Encourage cooperation among students.
3. Encourage active learning.
4. Give prompt feedback.
5. Emphasize time on task.
6. Communicate high expectations.
7. Respect diverse talents and ways of learning.

## Course Design

- Thoroughly plan course **before** delivery<sup>2</sup>
- Write course objectives clearly<sup>1,2</sup>
- Present material with different media (e.g. videos, text, PowerPoint, audio)<sup>2</sup>
- Limit the amount of on-screen readings<sup>2</sup>
- Use more constructivist activities<sup>2</sup>
- Online material should be attractive<sup>5</sup>

## Course Design

- Have them apply what they are learning by having them create projects to share with the other online students<sup>1,2</sup>
- Vary the assessment methods<sup>1,2</sup>
- Provide any resource links (e.g. library, good sites)<sup>2</sup>
- Clear deadlines<sup>1,2</sup>
- Specific expectations are given, including minimum amount of time per week for study and assignments<sup>1</sup>

## Evaluation Rubric

- [Evaluation Rubric](#)
  - Developed at Chico State University
  - Used several research based studies and other online resources to develop
  - Can be found here:  
<http://www.csuchico.edu/tlp/onlineLearning/rubric/index.shtml>

## Instructional Design Tips

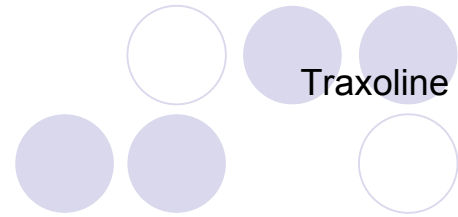
- Joan Van Duzer created a companion [document](#) that correlates to the rubric. Where the rubric is general on the components of online courses, this document is very specific.
- <http://www.csuchico.edu/tlp/onlineLearning/rubric/index.shtml>

## Multiple Forms of Media

- Audio
- Video
- Interactive modules
- Printable handouts

## Examples

- Video Slide Show
- Video Slide Show
  - [Example 1](#)
  - [Example 2](#)
  - [Example 3](#)—Interactive (Made with Macromedia Captivate)
  - I^3 Modules [Module 1](#) | [Module 2](#) | [Module 3](#)



## Traxoline

- It is very important that you learn about traxoline. Traxoline is a new form of Zionter. It is monotilled in Ceristanna. The Ceristanninians gristerlate large amounts of fevon and then bracter it to quasel traxoline. Traxoline may well be one of our most lukized snezlaus in the future.

## What is traxoline?

- A. A chemical byproduct of combustion
- B. A gasoline additive
- C. A new form of zionter

## Where is traxoline monotilled?

- A. San Luis Obispo
- B. Ceristanna
- C. West Wyomia
- D. France

## How is traxoline quaselled?

- Traxoline is quaselled by gristerlating large amounts of fevon and then brachtering it.

We feel pretty good about ourselves and know everything there is to know about traxoline

## Mid-talk exam

In your own words, describe why traxoline will be important to our future.

How is traxoline like common table salt?

## What's important

- We have to focus students' attention to what's important – especially in an online class.

## Software Used

- **Dreamweaver:** to manage and publish the website
- **Fireworks:** to edit images and produce animations
- **Camtasia Studio:** This includes DUBit, Camtasia Recorder, Camtasia Producer, and Snagit Studio. I am able to develop tutorials with audio and video to lead the students through more complicated concepts.
- **Captivate.** Similar to Camtasia Studio, but allows one to create *interactive* tutorials.
- **TI-Graph link:** Enables me to capture screens from the required graphing calculator and place them on the web in a tutorial.
- **MathType:** Allows mathematical symbols to be published on the web.
- **Microsoft Word:** I use this word processor to write most of the documents that are found on the web.
- **Microsoft Excel:** I use this spreadsheet for bigger tables found on my site (e.g. the course outline)
- **PrimoPDF:** Free program that makes PDF documents.
- **Winplot:** I use this software to generate many of the graphs found:
- **Snagit:** I use this software to copy graphs from the test generator as well as snagging charts and graphs from the web:
- **Virtual TI:** This is a TI-83 calculator emulator. It allows me to take screenshots of the entire calculator and stream them into a narrated video

## Selective Enrollment In Online Courses

- **Requirements for Student Success**
  - Time management skills
  - Self-discipline and motivation
  - Independent learning skills
  - Computer skills
- **POD Required for Enrollment**
  - Submits online survey
  - Must be first attempt in course
  - When possible, get input from previous instructors
  - Use instructor's discretion

## Survey for an Online Course

- Provides initial contact with prospective students and basic information for further contact - name, email address, and phone number
- Assesses semester of interest, prior course attempt, and computer access
- Allows potential students to rate themselves on characteristics that have been determined to be conducive to online learning

## Brief Introductory Video

- **Introduce** yourself and the online course you teach.
- Outline differences between traditional and online classes.
- Give advantages of the online format.

## Getting Off to a Good Start

- **Email 2 weeks prior to semester start**
  - Syllabus
  - Requirements such as textbook, calculator, etc.
  - Agenda for orientation meeting
- **Orientation meeting**
  - Get an information card on each student
  - Students take a “look” at how to navigate to the different components of the course
  - Have students compose an email message and make a post on the discussion board
  - Have students take an introductory quiz
  - Have students introduce themselves and talk about taking online courses, etc.

## Building Community in Online Classes

- **Students Want Direction**
  - Structure has been rated as “the most important factor in online learner satisfaction”<sup>6</sup>
  - Clearly defined objectives with related course content
  - Clear navigation within the course
  - Weekly guide to schedule work

## Building Community in Online Classes

- **Students Want Connection**
  - **Email and Discussion Board**
    - Compartmentalize discussion board into separate units of the course
    - Have a “student lounge” area of discussion board for students to get acquainted and to chat
    - For larger enrollments, form discussion groups
    - Engage students in a weekly dialogue activity
    - Students need to see that participation [connects](#) to their learning

## Integrity in Online Classes

- Have student present ID at orientation meeting and at each proctored test
- Online test or quiz items chosen randomly from database of questions
- Time limits for tests (questions delivered one at a time, feedback does not include correct answer)
- Monitor students’ work throughout course
- Varied forms of assessment

## Assessment in Online Classes

- **Incorporate Multiple Forms of Assessment**
  - **Tests** - Online and proctored
  - **Quizzes** - Provide quick, constructive feedback
  - **Posts/Participation**
  - **Projects/Presentations** - Group and individual
  - **Papers/Homework** - Provide several opportunities throughout the semester for students to “turn in” homework

## Retention in Online Classes

- Lack of faculty contact is purported to be biggest reason for non-retention in RODP
- Use tracking feature quickly to make sure that students are accessing the course
- Call any student who has not accessed course in a week’s time
- Use interactive activities to “see” students’ level of understanding with frequent feedback
- Conduct review sessions

## References

1. The Institute for Higher Education Policy (2000). Quality on the line: Benchmarks for success in Internet-based distance education. Available online: <http://www.ihep.com/PR17.html>
2. McKenzie, B. K. & Bennett, E. (2004). Making online work: Messages from the field. SITE Proceedings, pp. 588-595.
3. Harrison, N., & Bergen, C. (2000). Some design strategies for developing online courses. *Educational Technology*, 40(1), 57-60.

## References

4. Chickering, A. & Gamson, Z. (1987). Seven principles for good practice in undergraduate education. AAHE Bulletin.
5. Madden, D. (1999). 17 elements of good online courses. Obtained online at <http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/online/web-elem.htm>

## References

6. Online [Cl@ssroom](#) (February 2004). Student satisfaction depends on course structure.
7. Online [Cl@ssroom](#) (April 2004). Varied online learning opportunities improves student interaction, interest.
8. Ouellette, R.P. 1999. The challenge of distributed learning as a new paradigm for teaching and learning. <http://polaris.umuc.edu/-rouellet>