Online Course Content Development and Course Design Process

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What do Online Students Expect?
- Excellent quality online instruction
- Clearly defined student assignments
- Faculty responsive to student needs
- Timely feedback from faculty about student progress

National Online Learners Priorities Report (2011)

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F2F to Online Shift

<table>
<thead>
<tr>
<th>F2F</th>
<th>Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class hours and a classroom</td>
<td>Flexible time and space</td>
</tr>
<tr>
<td>Flexible prep time</td>
<td>Front loaded design process</td>
</tr>
<tr>
<td>Physical presence (Students attend class)</td>
<td>Online presence (Students actively participate)</td>
</tr>
<tr>
<td>More interpersonal communication</td>
<td>Instructions must be explicit in writing, audio or video</td>
</tr>
<tr>
<td>&quot;Sage on the stage&quot;</td>
<td>&quot;Guide on the site&quot;</td>
</tr>
<tr>
<td>Instructor and students facilitate</td>
<td>Instructor and students leverage technology to facilitate social interaction</td>
</tr>
<tr>
<td>social interaction</td>
<td>Instructor feedback provided, as needed</td>
</tr>
<tr>
<td></td>
<td>Frequent instructor feedback is critical</td>
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Course Design Standards
The Quality Matters Rubric includes eight general standards:
1. Course Overview and Introduction
2. Learning Objectives (Competencies)
3. Assessment and Measurement
4. Instructional Materials
5. Learner Interaction and Engagement
6. Course Technology
7. Learner Support
8. Accessibility

- http://www.qmprogram.org/rubric

MSU’s Course Design Model

Orientation, Assessment, Content, Interaction, OCIA
Learning Units

• One week of learning activities contains all the elements a student needs to achieve the learning outcomes.

• Guides learners through a sequence but flexible in supporting students’ preferences

• Contains Learning Objectives, Unit Requirements, Perspective, Subject Content, Interaction, and Assessment.

• Offers consistency between courses
Unit Learning Objectives

- What will students be able to do by the end of the learning unit?
- Do the unit objectives match what students actually do?
- Are the objectives measurable?
- Do objectives build up, increasing in difficulty and complexity?
- Is the number of learning objectives manageable from a student perspective?

Defining Learning Objectives

- Characteristics essential to clear objectives:
  - Behavior
  - Criterion
  - Condition
- Bloom’s Taxonomy
  - Cognitive (Knowledge)
  - Affective (Attitude)
  - Psychomotor (Skills)

Bloom’s Taxonomy

<table>
<thead>
<tr>
<th>Original Domain</th>
<th>New Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation</td>
<td>Creating</td>
</tr>
<tr>
<td>Synthesis</td>
<td>Evaluating</td>
</tr>
<tr>
<td>Analysis</td>
<td>Analyzing</td>
</tr>
<tr>
<td>Application</td>
<td>Applying</td>
</tr>
<tr>
<td>Comprehension</td>
<td>Understanding</td>
</tr>
<tr>
<td>Knowledge</td>
<td>Remembering</td>
</tr>
</tbody>
</table>

Learning Objectives

By the end of this learning unit, you will be able to:
- Identify internal and external data sources used in your school setting.
- Analyze the relationship between school climate and student learning through group blogs.
- Create a presentation that demonstrates the components of school culture to a real-world situation.

Web 2.0 Apps to Support Bloom’s Revised Taxonomy, Assembled by Kathy Schrock
http://www.schrockguide.net/bloomin-apps.html

Interactive Bloom’s Revised Digital Taxonomy Wheel & the Knowledge Dimension by Ammar Merhi
http://eductechalogy.org/swfapp/blooms/wheel/engage.swf
Orientation Requirements

- Provide a brief overview of what the student will be doing in the learning unit.
- Clarify what is required and optional.
- Include specific due dates and times for all assignments, (for example, Thursday, February 14 at 11:59pm EST/EDT).
- Consider student response time so that students can benefit from other students’ feedback.

Requirements: Example

- Unit 1 Requirements
  - A. Consider the questions posed in the “Perspective” section below.
  - B. Complete the readings listed below. (Due by 11:59pm Wednesday, prior to participating in discussion forums)
  - C. Participate in the group based discussion forum. (Due by 12 noon, Sunday)
  - D. Introduce yourself through the Cyber Cafe. (Due by 12 noon, Sunday)

Perspective

- Get students interested in content.
- Help build relevant connections with students’ prior knowledge, personal lives, work, experience, and expectations.
- Use problem-based scenarios relevant to the unit subject to encourage students to think about solutions.
- Share other relevant links, ideas that connect to the unit’s material.

Perspective: Example

- The issue of religion in the schools is a political one. Most districts choose to avoid the situation altogether by ensuring that religious holidays are devoid of any reference. Few school districts are willing to entertain any controversy regarding religion in the school. However, notwithstanding such hesitation, the Lemon Test gives clear guidance on how the cultural context of religion can be presented within the public school context. Please review your district board of education’s policies regarding religious holidays and events. Has your district become more or less conservative regarding its approach to the religious holidays?

Questions to Think About:
- If a principal hired a kindergarten teacher who was also a nun, could that teacher wear her religious garb when teaching in the public school context? Why?
- If a teacher has a religious faith which requires him/her to pray every day at 11:00 a.m., is the district required to arrange his/her schedule so that he/she is free to pray every day at 11:00 a.m.?
### Perspective: Example

Download a transcript of this video here: [CMT120_Unit_1_Perspective_on_Computer_Performance](http://example.com)

### Content

- Identify content that best aligns to your objectives.
- Use a variety of sources such as readings, multimedia, animations, screen captures, simulations, cases, inductive reasoning exercises, audio recordings, and interactive decision trees.
- Integrate user-generated content.
- Consider integrating textbook publisher provided materials.
- Ensure materials are accessible & copyright is clear.

### Content: Presentation Tools

- Diagrams (Microsoft Office SmartArt)
- Annotated materials (screen shots, PDFs, documents)
- Narrated presentations/screen capture/audio only:
  - NJVID: [http://njvid.net/](http://njvid.net/)

### Content: Diagrams

- waterfront
- downtown
- building
- river
- bridge
- park

### Content: Diagrams

- critique/define
- pre-conference
- analysis
- observation
- post-conference
Content: Camtasia Relay & NJVID

Content: Camtasia Relay & iTunes U

Content: SoftChalk

Content: Simulations

Content: Embed Videos

Content: Audio Recordings
Importance of Social, Interactive Learning

- Online learning should facilitate interaction
- Social, interactive learning is vital to cognitive development
- Higher-order learning originates and develops as interaction is built and enhanced
- Interaction types essential in online courses (Moore, 1989): Learner-content, Learner-instructor, Learner-learner, Learner-self (Soo & Bonk, 1998)
- There is a strong relationship between interaction, social presence and learning (Anderson, et al, 2001).

Interaction Tools in LMS

- Discussion Forums/Cyber Café: Community building, idea discussion, and as an open social space.
- Blogs: Collaboration projects, feedback, etc.
- Wikis: Knowledge sharing and building, etc.
- Groups: Group collaboration, teamwork and support, collaborative projects, etc.
- Blackboard Collaborate: Asynchronous collaboration using text, audio, and visual components.

Interaction

- Offer opportunities for students to interact with the content, each other, and yourself.
- Use instructional strategies and activities that promote active learning and facilitate students’ interaction with the content and each other.
- Facilitate a social learning community.
- Consider team based learning.
- Incorporate technology based tools that support interaction.
- Clearly state the instructor’s plan for providing feedback on assignments.

Interaction: Discussion Example

- Unit 1 Discussion
  - In small groups, respond to the following Discussion Forum question:
  - Pursuant to the Courts’ decision in Punxsutawney, what are the legal and financial implications for school districts? Comment on at least two of your classmates’ posts.
  - The group leader will then post a summary of the group discussion on the course-wide Discussion Forum.

“No interaction” equals “no learning”

(Gunawardena, 1995)
Interaction: Blog Example

Instructional Strategies

<table>
<thead>
<tr>
<th>How We Learn</th>
<th>Instructional Strategies</th>
<th>Online Instructional Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>We learn by listening</td>
<td>Direct Instruction and Self-directed Instruction</td>
<td>Online audio clips, audio in PowerPoint, online conferences</td>
</tr>
<tr>
<td>We learn by seeing</td>
<td>Direct Instruction and Self-directed Instruction</td>
<td>PowerPoint Slides, online video clips, tutorials</td>
</tr>
<tr>
<td>We learn by asking</td>
<td>Questioning Strategies and Cooperative Learning</td>
<td>Monitoring in Chat</td>
</tr>
<tr>
<td>We learn by exploring, modeling, researching, and practicing</td>
<td>Experiential Learning</td>
<td>Case studies, simulations, computer-based activities, hands-on activities, reflection assignments</td>
</tr>
<tr>
<td>We learn by reading</td>
<td>Direct Instruction</td>
<td>Instructor's lectures in notes, PowerPoint, Word or PDF document format, articles, web resources, textbook</td>
</tr>
</tbody>
</table>


Assessment

- Allow students to demonstrate that they have achieved the objectives you challenged them to master in each unit.
- Set clear expectations for online course participation.
- Incorporate formative, resulting in feedback, or summative, resulting in a grade, assessments.
- Vary the types of assessment tools.
- Provide grading rubrics.

Assessment: Common Grading

Final Grade

- Participation: 20%
- Project: 35%
- Blog: 15%
- Exams: 15%
- Presentation: 15%

- Grading shifts to include projects, group work, participation in Discussion Forums, and other collaborative activities.
Getting Started
1. Select a course to work on during this workshop
2. Focus on one learning unit
3. Gather your materials (syllabus, course schedule, etc.)

Steps to get started
- Divide your course into week-long learning units
- Use the number of weeks your new online/hybrid course may take (i.e. 8 weeks in online programs, 16 weeks for traditional semester-long courses, 3 week or other lengths for other sessions)
- Use these worksheets to guide your work:

Instructional Designers can help by…
- Guiding you through the steps of course development
- Assisting you to identify learning objectives
- Advising on how to match instructional strategies to learning objectives
- Recommending appropriate technologies to enhance online instruction and learning activities
- Helping you develop assignments for different content areas
- Providing consistent, detailed responses to your content development needs
- Building your courses using the Montclair template
- Designing and uploading the course components to the Learning Management System (LMS)
- Providing technical expertise on the presentation of course content and activities
- Ensuring that the overall design requirements are carried through to the completed course website

How to Transform Your Course
- Organize your course into sections:
  - Welcome, Syllabus, About Instructor, Course Schedule, Learning Units, Cyber Cafe, Tech Help
  - Chunk your course into learning units
- Within each learning unit:
  - Design and Create the Orientation
  - Design and Produce the Content
  - Design and Create Meaningful Interactions
  - Design and Create Assessments
### Recommended Resources

- **MSU's Resources:**
  - Technology Training & Development Services: [http://tti-training.montclair.edu/](http://tti-training.montclair.edu/)
- **Technology Resources:**
  - NJVID: [http://www.njvid.net/](http://www.njvid.net/)

### References


### References (cont.)


### Questions

- Carolyn Demefack: [demefackc@mail.montclair.edu](mailto:demefackc@mail.montclair.edu)