Best Practices for Teaching with Technology

Presented by: Dena Novak
Senior Instructional Designer
Teaching and Learning with Technology (TLT)
Today’s Learning Objectives

By the end of this session, you should be able to successfully:

➢ Identify the challenges of LMS-supported instruction
➢ Recognize the unique needs of your students
➢ Explain strategies to address the needs of your students
➢ Highlight features in an LMS which can address the challenges of online and LMS-supported learning
Part one:
The Technology Driven Classroom
The Technology-Driven Classroom

➢ Incorporating technology impacts both learning and teaching
➢ Use the change of strategy as an opportunity to re-think and re-design the course.
➢ Capitalize on the features of your LMS to create an engaging learning experience.
Questions to ask yourself:

<table>
<thead>
<tr>
<th>Fully Online</th>
<th>Tech-Enhanced F2F/Hybrid</th>
</tr>
</thead>
<tbody>
<tr>
<td>● What are my learning goals?</td>
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</tr>
<tr>
<td>● What tools can I use to help students meet my learning goals?</td>
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</tr>
<tr>
<td>● How can I adapt my content and activities to work in the online setting?</td>
<td>● How can I adapt my teaching maximize student learning during in-</td>
</tr>
<tr>
<td>● What elements should be synchronous? Asynchronous?</td>
<td>class meetings?</td>
</tr>
<tr>
<td></td>
<td>● What activities should happen in class? Online?</td>
</tr>
</tbody>
</table>
Part two:

Five Needs of Students
Need #1: Technical Guidance

➢ Assume your students know nothing about navigating an LMS.
➢ Compose Getting Started and Course Essentials modules with clear technical guidance and tutorials.
Bad Technical Guidance
Good Technical Guidance

Introduction to Teaching Online
01:002:003:04 – Spring 2017

Instructor: Joe Yankus
Location: Online
Instructor email: jyankus@rutm.edu
Office Hours: Virtual, Thursdays 3pm - 5pm
Syllabus: [link]

Welcome to the course!

All course content is available via Modules.

Course Description:

This course provides an introduction to computer network and internet technologies. It emphasizes the distinction between various logical concepts and entities such as networks, the Internet at large, and the World Wide Web. Universal protocols and services such as SMTP, HTTP, DNS, and SNMP are explored. In addition, students will learn to deconstruct and identify components of common technologies. The context of these technologies within society and business is also introduced.
Importing from Canvas Commons

➢ Click the Canvas Commons icon
➢ Search “TLT” in the search bar
➢ Select the “Course Essentials” module
➢ Import into your course
Need #2: Frequent Communication

➢ Minimum of one e-mail per week.
➢ Supply context for the coming week’s material.
➢ Include personal touches and avoid boilerplate messages.
Hi Class,

Welcome to Module 2! This week, we will explore some of the tools you can use to record video lectures for your online courses. These various tools range in complexity from very simple to quite complicated. For our purposes, we'll focus on the simpler products and how at the press of a button your webcam can enable you to engage your students through video lectures.

Professor Yankus
Welcome to Module 2!

Hi Class,

Welcome to Module 2! This week, we will explore some of the tools you can use to record video lectures for your online courses. These various tools range in complexity from very simple to quite complicated. For our purposes, we’ll focus on the simpler products and how at the press of a button your webcam can enable you to engage your students through video lectures.

I enjoyed last week’s discussion and I’m happy so many of you agree with the need to increase student engagement in online courses. Michael, your experience of the “vanishing professor” really illustrated the need for frequent student contact, especially in online courses. I think we can all use that as an example of what not to do when teaching online!

Please let me know if you have any questions while progressing through this week’s content. Based on last week’s quiz results, I suggest re-watching the Adult Learning Theories video to ensure you are clear on the major differences between these theories.

Professor Yankus
Instructor Presence in Online Courses

➢ **Persona:** This consists of the instructor’s personality, teaching style, and interests—all the characteristics that go into the students’ impression of the instructor.

➢ **Social:** This refers to the connections instructors make with the students and those that students make with each other to build a learning community.

➢ **Instructional:** This is the role the instructor plays in guiding students through the learning process.

https://www.facultyfocus.com/articles/online-education/creating-a-sense-of-instructor-presence-in-the-online-classroom/
Instructor Presence in Online Courses

➢ Communicate often
  ➢ Plan to send emails 1-2x per week, minimum
  ➢ Provide timely feedback
  ➢ Be responsive and flexible

➢ Remember: you are only as present as you make yourself!
Need #3: Organization & Guidance

➢ Module Introductions help students manage their time and provide transparency.
  ➢ Provide an overview of the week with a list of assignments, due dates, etc.
  ➢ Include reminders about “housekeeping” items, upcoming items, etc.
➢ Especially key for the fast-paced summer term!
Bad Module Layout

Module 1: Introduction to Adult Learning

- Module 1 Readings
- VoiceThread 1: Introductions
- Discussion 1: Your Experiences with Teaching Adults
- Reflection 1: Pedagogy vs. Andragogy
Module 1: Introduction to Adult Learning

Learning Objectives

By the end of this module you will be able to:
1. Complete the creation, setup, use troubleshooting, and setting up of a WordPress site to support a digital age education and environment for all students.
2. Model effective classroom management and collaborative learning strategies to facilitate teacher and student use of digital tools and resources, and access to technology-rich learning environments.
3. Use digital communication and collaboration tools to communicate locally and globally with peers.
4. Inspire and participate in the development and implementation of a shared vision for the comprehensive integration of technology-enhanced learning for adults by creating a plan for learning, teaching strategies, and activities for maximizing adult learning about technology.

Activity Table

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points/Weight</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>none</td>
<td>Day 1</td>
</tr>
<tr>
<td>Reading</td>
<td>none</td>
<td>Day 3</td>
</tr>
<tr>
<td>Discussions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VoiceThread 1: Introductions</td>
<td>25 pt (each)</td>
<td>Day 4 (Replies: Day 5)</td>
</tr>
<tr>
<td>Discussion 1: Your Experiences with Teaching Adults</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflection 1: Pedagogy vs. Andragogy</td>
<td>100 (15%)</td>
<td>Day 7</td>
</tr>
</tbody>
</table>
Need #3.5: Instructions & Expectations

➢ Set clear and specific guidelines and expectations for each assignment, including discussions.

➢ Omitting this information leads to students guessing what earns a satisfactory grade.

➢ If you expect peer responses, these require specific prompts as well.
Bad Discussion Prompt

Module 2 Discussion: Adult Learning

Discuss this week's readings and how they relate to you. Be specific!
Module 2 Discussion: Adult Learning

Joseph Yenius

Jan 26 at 2:50pm

This week's readings provided an in-depth review of adult learning theories and how those theories can be integrated into your instruction.

In 200-300 words, answer the following questions. Include at least one direct quote from any of this week's assigned readings. For more information on grading, review the Discussion Forums Rubric.

Describe one or more experiences that you have had teaching a concept to an adult. This can be any task that you taught a friend, relative, or colleague at work. Think carefully.

(1) Did you do or say anything that was different from teaching a task to a younger person?
(2) Did you use any special strategies?
(3) Were you successful or unsuccessful? Why?
(4) What would you do differently in the future when teaching an adult?
Need #4: Feedback

➢ Students need **robust, constructive, frequent, and timely feedback**.

➢ Each grade should include justification and explanation, not just a letter or number.
  ➢ This can be achieved through rubrics, written comments, and audio/video feedback.
Bad Feedback
Good Feedback
Need #5: Active Learning

➢ Significantly improves recall of information, both short-term and long-term (Prince, 2004)

➢ Increases exam performance and decreases failure rates when compared with traditional lecture (Freeman, 2014)


<table>
<thead>
<tr>
<th>Online Classroom</th>
<th>Technology Enhanced Classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Conferencing</td>
<td>Clickers</td>
</tr>
<tr>
<td>Text-based Chat</td>
<td>PollEverywhere</td>
</tr>
<tr>
<td>Virtual Group Workspaces</td>
<td>Panopto</td>
</tr>
</tbody>
</table>

**Both**

- Discussion Forums
- Self-check quizzes (eg. Quizlet, LMS Quizzing)
- Collaborations (Google Docs, etc.)
- VoiceThread
- Kaltura (instructor, student-made)
- Blogs & Wikis
Active Learning Resources

➢ Digital Classroom Services Active Learning Community
  ○ https://dcs.rutgers.edu/active-learning/community

➢ Active Learning Resource Guide
  ○ https://dcs.rutgers.edu/active-learning/teaching-tools
Part three:
Three Components of Effective Course Design
Component #1: Backwards Course Design

➢ Focus: What we want students to learn to do, not what material we want to teach them.
➢ Begin with the end goal and work backwards, designing material meant to achieve that end goal.
Component #2: Chunking

➢ Present your material in a paced, digestible format.

➢ Less is more!
  ➢ Good: Five 10-minute lectures
  ➢ Bad: One 50-minute lecture
Component #3: Accessibility

➢ ALL content must be accessible to ALL learners, regardless of disability

➢ Key considerations:
  ➢ Searchable PDFs
  ➢ Alt-text for images
  ➢ Captions/transcripts for videos
  ➢ Formatting is consistent, uses heading styles
  ➢ Avoid relying on color to convey info
Accessibility Resources

➢ Office of Disability Services
   ➢ https://ods.rutgers.edu/faculty

➢ Rutgers Course Accessibility Guidelines

➢ WebAIM
   ➢ https://webaim.org/articles/
### Bonus Tip: Calculating Learning Time

<table>
<thead>
<tr>
<th>Course weeks</th>
<th>Hours per week</th>
<th>Total course hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>9</td>
<td>135</td>
</tr>
<tr>
<td>6</td>
<td>22.5</td>
<td>135</td>
</tr>
</tbody>
</table>

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<tbody>
<tr>
<td>15</td>
<td>12</td>
<td>180</td>
</tr>
<tr>
<td>6</td>
<td>30</td>
<td>180</td>
</tr>
</tbody>
</table>

2. Rochester Institute of Technology: [https://www.rit.edu/academicaffairs/tls/course-design/online-courses/time-task](https://www.rit.edu/academicaffairs/tls/course-design/online-courses/time-task)
3. Charleston Southern University: [http://www.csuniv.edu/facultyandstaff/curriculumcommittee/determiningcredithours_online_courses.pdf](http://www.csuniv.edu/facultyandstaff/curriculumcommittee/determiningcredithours_online_courses.pdf)
### Bonus Tip: Calculating Learning Time

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readings</td>
<td>2-3 minutes/page</td>
<td>20-30 pages = 1 hour</td>
</tr>
<tr>
<td>Video Lectures</td>
<td>20 minutes/15-min video</td>
<td>3 15-min videos = 1 hour</td>
</tr>
<tr>
<td>Slide Presentations (e.g., Powerpoints)</td>
<td>2 mins/screen</td>
<td>20-30 slides = 1 hour</td>
</tr>
<tr>
<td>Discussion Forum Posts (Original Post + Responses to 3 Classmates’ Posts + Responses to Responses)</td>
<td>1-2 hours</td>
<td>Original Post + Responses to Classmates’ Posts = 2 hours</td>
</tr>
<tr>
<td>Writing Assignments</td>
<td>1.5 hours/page</td>
<td>5 page paper = 7.5 hours</td>
</tr>
<tr>
<td>Research Papers</td>
<td>3 hours/page</td>
<td>15-20 page paper = 45-60 hours</td>
</tr>
</tbody>
</table>
Questions?
Part four:

Resources
Instructional Design & Technology Support

➢ Office of Instructional Design
  ➢ oid@docs.rutgers.edu

➢ Help Desk
  ➢ help@canvas.rutgers.edu

➢ Additional Trainings
  ➢ https://tlt.rutgers.edu/learning-opportunities
Contact

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848-445-8791