RETHINKING LEARNING ACTIVITIES AND ASSESSMENT

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Thank You For Joining Us

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"In case you do not already know it, teaching online is different from teaching in the traditional classroom. You cannot just take what you do in a face-to-face class and "put it online." In fact, because online learning is so different from traditional classroom learning, the online learning revolution has forced us to look more closely at how courses are constructed and how students learn. Ultimately, this forced selfreflection of sorts will hopefully result in better instruction in of **both** the concrete and online kind." (Pollock, 2013, p. 3, emphasis added).



Goals for Today's Session

In this session, we will:

- 1. Discuss the differences between learning activities and assessment.
- 2. Highlight the importance of having activities/assessments that include peer-to-peer interaction.
- 3. Identify the best types of assessment for your online or blended course.
- 4. Provide strategies for integrating active learning exercises.
- 5. Provide examples of how to adapt a FTF assignment into an online format.
- 6. Discuss Quizzing/Testing Strategies.



COMPARING ACTIVITIES AND ASSESSMENTS



Comparing Learning Activities and Assessments

- Why do we "lump" these together?
- Activities (these are the cognitive challenges that we present to students through which they ... either on their own or with others... make sense of new information and problem solve to meet challenges they face in the classroom
- Assessment (we are always assessing as teachers)

 Formative Assessment
 Summative Assessment



The Quiz Tool in D2L

The quiz function in D2L is great (if not a little complicated)

- Reading comprehension checks (or check for video comprehension)
- Many lower-demand tasks

 Surveys are good a collecting class data (Learning Styles Assessment) and other formative tasks and assessments.

Note: Look for the Upcoming Quizzes Training



Some Features of the Quiz Tool **Reading Comprehension** • Use the Question Library • Set up question pools to deter cheating Set up a time limit to deter cheating Allow multiple attempts Give automated feedback to students that redirect them to your course resources



D2L Survey Tool

- Get anonymous feedback on your course.
 Various and sundry "Housekeeping Tasks" (ex. Determine when students can meet synchronously online).
- Quick formative assessments of students' prior knowledge or listening comprehension.



Note on Formative Assessments and Engagement

- The #1 issue based on Marquette's Spring 2020 transition to online survey, for synchronous and asynchronous, for both instructors and students was engagement
- Formative assessments are another opportunity to engage with students in a meaningful way (Instructor Presence)



Quiz tool and High Stakes Testing

- We encourage to use more frequently but lower stakes exams.
- Use Question Pools and Timer to deter cheating.
- Lockdown browser.
- Respondus Monitor will video record students while taking the exam



ENGAGING STUDENTS WITH TASKS AND ASSESSMENTS ONLINE



What do We mean by "Active" and How do We Achieve this?

- Active Engagement can be denoted by physical activity or cognitive activity.
- Teaching Presence is the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes. (Anderson, Rourke, Garrison, & Archer, 2001).



Peer to Peer Activities and Assessments

In cognitive constructivism, ideas are constructed in individuals through a personal process, as opposed to social constructivism where ideas are constructed through interaction with the teacher and other students. While they are fundamentally different both types will ultimately form overall constructivism or constructed learning elements for students to easily grasp; the main concept being that ideas are constructed from experience to have a personal meaning for the student. To be effective, both theories of constructivism need to be explicit in communicating concepts so that students can connect to them. Teachers need to understand these theories, as well as, know how to incorporate constructivist teaching methods, strategies, tools and practices to develop an effective learning environment. (Kalina & Powell, 2009)





INCORPORATING PEER-TO-PEER ENGAGEMENT

What sorts of activities do you think create student-to-student engagement?



Setting Expectations for Engagement: The Assignment Description

- When When do you want the students to do work?
- Background and Resources What background information do the students need to know prior to completing the assignment?
- What What is it that you want the students to do?
- Expectations What specific expectations do you have of the students?
- How How will the students do the work or submit the finished work?



Role Play - Discussion

Role play has great potential from many aspects. You can ask your students to Role Play as the Devil's advocate, Muse, Summarizer where they are "required" to look at a complex topic from a perspective that they may not have experience considering (e.g. a Muse has difficulty playing the Devil's advocate role). Another way to get your students to Role Play is to assign them to positions that are related to their field (e.g. in health care, you may have a role for a patient, nurse, doctor, technician, radiologist).

Before midnight on Wednesday: (When)

After watching the film, 12 Angry Men, (**Background**) you will work in groups of three. (**How and What**) Each student in your group will be assigned to one of the following roles: juror 1 (guilty), Juror 2 (not-guilty) and the foreman (neutral).

As you consider the "question" at hand, each of you will make arguments defending your positions. Remember that you are here to analyze the behaviors of the accused and the other jurors. Your argument will come strictly from a behavioral standpoint, be sure to reference the concepts from the textbook (**Resources**).

Each student will post their argument to the discussion. (How)



Successful Online Activities and Assessments are Often Based On:

- Student-centered learning, where the diverse learning needs of students, rather than the need to push through content, are at the center of the learning process.
- Problem-based learning, where students are given a problem or scenario that requires students to formulate questions, analyze evidence, connect evidence to pre-existing theories, derive conclusions, and reflect on their learning.
- Experiential learning, where students learn by engaging in authentic learning activities, that is, ones that replicate situations or problems they might encounter in real life or in a work situation.



Comparing Well Made and Poorly Made Online/Hybrid Activities

Low Demand Tasks

- Reproducing previously learned facts.
- Are not ambiguous have a clear procedure to follow.
- Have no connection to underlying concepts.
- Are focused on producing a "correct" answer.
- Requires either no explanation or merely procedural explanation

High Demand Tasks

- Strategically use a procedure to develop a deeper understanding of concepts.
- Expressed using multiple representations.
- Unpredictable solution paths.
- Require students to analyze the task before attacking a problem.
- Require significant cognitive effort and may involve some level of anxiety.



Qing's Problem

The Front and the back of a storage shed is shaped like an Isosceles right triangle. With two sides of length 10 ft. The storage shed is 40 feet long. Determine the volume of the storage shed.



Qing solves the problem as follows:

- 1. He uses Pythagorean Theorem to determine that the length of the unknown side of the front view is $\sqrt{200}$
- 2. Qing uses this information to find the height of the structure. Here is his work:

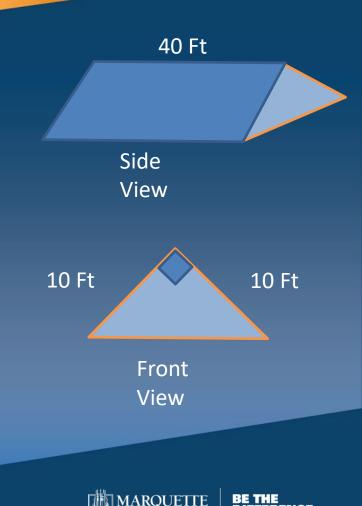
•
$$\left(\frac{\sqrt{200}}{2}\right)^2 + h^2 = 10^2$$

•
$$h^2 = 100 - \frac{200}{4} = 100 - 50 = 50$$

•
$$h = \sqrt{50}$$

- 3. Qing determines that the floor area of the shed is $40 \cdot \sqrt{200}$
- 4. Qing calculates that the volume of the shed is given by the floor area of the shed times the height of the triangle, or:

 $40 \cdot \sqrt{200} \cdot \sqrt{50}$



Inflation Problem – Lower Demand

The CPI is a tool that economists use to describe how prices change from year to year but it can also be useful as a tool to change dollar values from nominal to real numbers. The primary reason for doing this is that from year to year, prices for the same item tend to rise. So when we compare nominal values, we might not be (to abuse the phrase) comparing "apples to apples." This problem is meant to demonstrate this idea in a more or less trivial situation.

 Calculate the value of \$100 in 1980 and 2000 to \$100 in 2020 using CPI

Inflation Problem – Higher Demand Step 1

- Follow this link. The table you open shows the box office revenue generated by movies in each of its opening weekends. What you will notice are two things: 1. The movie box office revenue is not adjusted for inflation. 2. Most of the top revenue earners are from recent years.
- Opening weekend box office receipts are often used as a way of gauging a movie's popularity. It's a proxy for how many tickets are sold, therefore, how many people attending the movie – ergo popularity.
- However, with insight about inflation, you should interpret these numbers with caution. Lets consider why:



Inflation Problem – Higher Demand Step 2

- Answer the following question in your discussion post:
 - Do a quick Google search of movie ticket price history. You don't have to cite your source, but confirm your instinct- what has happened to movie ticket prices over time?
 - Why might numbers that are not adjusted for inflation be mis-leading?
- Now for a little calculating (refer to practice video for help)
 - Assume that we want to adjust numbers to 2019 prices. Find your movie's opening weekend box office receipts and release year using the Mojo.com table above. Then, use <u>this table's</u> Annual Average CPI to find the correct CPI for 2019 and your movie's release year. When you adjust the nominal value of your movie to 2019 prices you can round CPI and your answer to the nearest whole numbers.



MOVING FACE TO FACE ACTIVITIES TO THE ONLINE ENVIRONMENT



Moving from F2F to Online

- Include: When, Background and Resources, What, Expectations, and How
 - What you need in a description for an online activity
- How will the instructor communicate additional expectations to students?
- If a peer to peer activity, how will the students interact?
- What tools do students need and do they know how to use it?
- Provide examples of excellent work or a rubric



Moving from F2F to Online Cont.

 If there are continuous interactions or sharing their work, a discussion topic may be best. If there is a submission(s) of a final product, a dropbox may be best.

• Or you can use resources outside of D2L

- You can use multiple online tools for a single activity or assessment.
- Most or all activities should have points attached to encourage participation.



Presentation - F2F

• Time: 4 – 5 minutes

- Pick a career identity a career/job you have had or one that you would like to have
- Outline due when you submit your speech
- Dress appropriately for the scenario you create
- Decide who your audience will be
- The general purpose of this speech is to inform. Pick a topic. Try to pick something you are passionate about. When you are emotionally invested in the topic, you will deliver a better presentation. You also get to pick who you want the audience to be. You can pick any scenario for your informative speech. Some general ideas might include:
 - analysis and presentation of data, e.g. market research, opinion survey, employee productivity, annual report
 - o mission/goals/history of your company/organization
 - a "How To" speech given by a subject-matter expert



Presentation - Online

- The three possible organizational plans to choose from for this informative speech are:
 - Topical (by topic) everything tied together by topic
 - Chronological (by time) in order of occurrence
 - Spatial (by location) a tour, map, etc
- The presentation slides are required for this presentation. Review this <u>example Informative</u>
 <u>Speech</u> and <u>the rubric</u> prior to recording.
- Remember to submit the <u>outline</u>, <u>slides</u>, and <u>self-assessment</u> to their respective drop boxes.
- Post your presentation video to the Speech Feedback Discussion Forum.
- Enter the feedback of your peers in the Informative Speech Feedback Discussion Forum



Mathematics Exam – F2F

Traditional Mathematics Assessment.
 Several questions that where students can determine the correct answer and show their work.



Mathematics Exam - Online

TAKING THE QUIZ

- Once the quiz starts you will see a page labeled "Question 1" Find the link to access the test itself. It will link you to a Word document with the actual test questions.
- You can print out the test and work problems below the question or simply use a sheet of paper to record your answers.
- o Be sure to show work that demonstrates the principles of the concepts being assessed.
- Please label your work and be as neat as possible.

UPLOADING ANSWER SHEET

- When you have completed the quiz, you will scan your paper(s) and upload them to your Marquette University OneDrive.
- o If you have an app or method that you like to use, please feel free to use it.
- If not, I recommend using the app Microsoft Lens (available for IOS or Android) which does a nice job linking to your OneDrive (after an initial setup process).
- Make sure you save your papers as a single PDF document
- Be sure to note where in your OneDrive you have saved your answers.

SUBMITTING YOUR ANSWER SHEET

- Once you have uploaded your answer sheet(s) to your OneDrive, return to the quiz and click the 3-link chain icon in the top left of the answer box. You will be given some options one of which will be OneDrive.
- o Select OneDrive and navigate to the place that you saved your answer sheet.
- Highlight the file containing your answer sheet and click the blue "select" button in the bottom right of the dialogue box.
- Once you see the link to your answer sheet file in the quiz dialogue box select the blue "Submit Quiz" button at the bottom of the D2L page. Do not press this button until you are confident that you are ready to submit.



Figuring Out Which Activities are Best for Your Course

- Consider what we have discussed today
 - Alignment with Learning Outcomes
 - Identify the Mode of Interaction (online live or asynchronous)
 - Active Learning
 - High Demand Tasks
 - Peer to Peer Learning
 - How students can demonstrate the learning outcomes



D2L Course Template Tour









BE THE DIFFERENCE.