Tools and Tricks for Engaging Online Students

Dr. Deborah Taylor
Kansas City Kansas Community College
dtaylor@kckcc.edu
Welcome

• Quick introductions
  – Who, What, Where

• A Little Background Information
What do we mean by “engagement”? 
What do we mean by “engagement” in an online class?

• Interaction
• Activity
Learning

- is a process not a product.
- involves change in knowledge, beliefs, behaviors, or attitudes – over time and is lasting.
- is not something done to students but rather something that students themselves do.

• *How Learning Works: seven research-based principles for smart teaching* / Susan A. Ambrose [and others]; foreword by Richard E. Mayer.
5 DO’S FOR ENGAGING YOUR STUDENTS

01 Stay Relevant.
All content, headings, and subheadings should be relevant to the course.

02 Stay Organized.
Keep the screen neat and clutter-free. You never want to distract the student from your content.

03 Keep it Interesting.
Both your content and your design should be interesting to the student.

04 Remain Up-To-Date.
Update your course often to ensure your content is always accurate.

05 Add Interactions.
Only add interactions that are necessary, such as links, videos, or file downloads.
An Engaging Course Is:

- Relevant (learner oriented)
- Organized (easily navigated)
- Interesting (duh)
- Current (no missing links, technology is up-to-date)
- Include Interactions (student-student, student-instructor, student-content)
  - Quantity and variations differ for each course
• There is NO ONE way to teach your course
• Each course is unique
• Each instructor is unique
• HOWEVER
• Some consistency in structure and design helps students as they move from course-to-course
Community of Inquiry

Teaching Presence
- Instructional Design & Organization
- Setting the curriculum
- Establishing time parameters
- Utilizing the medium effectively
- Establishing netiquette

Social Presence
- Interaction
- Continuing a thread
- Referring to others’ messages
- Asking questions
- Complimenting
- Expressing agreement and appreciation

Cognitive Presence
- Exploration
- Divergence
- Information exchange
- Suggestions
- Brainstorming
- Conclusions

Supporting Discourse
Types of Interaction

• Student-Student
• Student- Instructor
• Student-Content
Student-Student

• Discussion Boards
  – Guided Introductions
    • Who you are, your major, career goals, “one fun thing” and include a photo (builds community)
  – Module (unit, weekly)
    • Relevant – can vary (reinforces course content)
    • Grading Rubric provided

*Most important interaction in my study for promoting student success
Grading Rubric for Posting

- Grading Rubric for Posting
  3 points total
  2 points if on time and accepted by instructor
  1 point for responding to another student's post. (Must be relevant and add to the content and not just an "I agree" type post.)
- (if your post is not accepted, you will receive an email from me and your post will be deleted). (See below for requirements for acceptance.)

- Accepted posts must fit the following criteria:
  - aligns with the directions
  - is unique (if someone has chosen your topic, you need to choose another one)
  - is composed of at least three sentences
  - has only minor grammatical and spelling errors
  - is accurate
  - is on time - no initial posts will be given points if they are more than one week late
Other student-student interaction possibilities

• Group work
• Course wiki
• Chat
• Peer evaluations
• Other?
Student-Instructor

• Direct
  – Discussion: not too early nor too much
  – Announcements: brief and timely
  – Email: as needed
  – Introduction: picture and video?
  – Journals: private (instructor only), directed (rubric), 1st
  – Feedback: timely, positive, relevant, encouraging

• Indirect
  – Course Design
  – Course Navigation
  – Course Materials and Activities

Your course is a reflection of YOU!
Learning Principle #7

“To become self-directed learners, students must learn to monitor and adjust their approaches to learning”

• Eberly Center for Teaching and Excellence at CarnegieMellon
• http://www.cmu.edu/teaching/principles/learning.html
Journal Example

• After reviewing exams
• Private – Instructor only
• After reviewing your results for Exam 1 tell me:
  – 1) were you satisfied with your score?
  – 2) what did you do to study for this exam,
  – 3) what will you do differently for the next exam?
• After last exam
  – 3) what will you take with you from this class for your next science course?

Important to respond to 1st - see rubric
Journal Rubric

• 3 points
• 1 point for each question
• But to earn point – must answer questions 2 & 3 with specific activity
• Can earn missing point(s) with a second correct post
• Feedback I try to comment on first and others as needed
Design

• Clear and obvious navigation
• Chunk
• Backwards design (Wiggins & McTighe)
• Folders are your friend (up to a point)
• Relevant Material Only (no clutter)
• START HERE folder and link
ABOUT THIS CLASS

Click on the START HERE button in the menu on the left to get started with the class. Below is some important class organization information that I think you will find helpful.

Physiology is the study of what the various parts of the body do and why. The ongoing theme of physiology is homeostasis - the dynamic constancy of the internal environment, in other words the "active, dynamic physiological control processes that must fight changes in order to maintain relatively constant conditions within our body." We will look at the various control systems, what activates them and how they are regulated.

Summer classes are shortened in length, but still cover the same material and things move very quickly here. You will need to study some every day and check in each day if you want to do well in the class.

This course is taught entirely online. You should have taken chemistry, biology, anatomy, or A&P before taking this class.

Plan to check in several times a week and work on learning the material daily.

We will be using a publisher website for your ebook and for your homework assignments. You MUST purchase access to this site. It is MUCH cheaper than buying the book alone. I emailed you the information, but when you click on the McGraw-Hill link on the left, it will take you to the site. There is a free 14 day trial, but you MUST purchase the access code before this expires. You will want to always access the site via Blackboard so that it records your grade in the Blackboard Grade Book. Th ewebsite for Human Physiology by Fox, 13th Edition - you do NOT need to buy this in the bookstore, but if you want a hard bound book, you can use an older book, but be sure you match up the topics and not the chapter numbers for your posting assignments. I will also have a book on reserve in the KCC Library, you can not remove it from the library, but you may use it (bring your KCC ID to check it out for in library use.

STRUCTURE OF THE CLASS:
The class is entirely online, all assignments are set up on deadlines.

There are 4 exams, 4 journal postings, 11 discussion postings and 10 homework assignments in Connect (the website by McGraw-Hill).

EXAM Information * see important information below
You must submit the exam promise quiz before you will be able to take the exams. There will be an online exam for each unit and this will be under a definite time line. The exams are timed and will automatically submit when time is up or when the exam closes. Also remember that all exams should be taken without using any materials or resources

There will be 4 exams:

- 50 questions each
Getting Started - click here

Enabled: Statistics Tracking
This folder contains information to get you started in the class. In it you will find:

1) a course management statement to read.

2) a link to the introduction discussion area where you will need to post your introduction and reply to one or two other students’ posts.

3) a link to the plagiarism activity that you need to do.

4) a link to the academic honesty statement quiz that you need to complete.

5) a link to the scavenger hunt quiz that will help you learn how to maneuver through the course and

6) an assignment guide due date check list so that you will know what is due when for the entire semester.

Please do all of these little activities as quickly as you can so that you can move on to the real content of this class.

A general discussion area

Enabled: Statistics Tracking
Post any general questions here, sometimes other students can answer your questions faster than I might.

dt
Student-Content

- Rubrics
- Scavenger Hunt Quiz
- Folders for Chunking
- DUE DATE List and Link
- Hide Folders Until Needed
- Interactive Resources
Rubrics

• Scoring tool
• Reflects instructor’s expectations
• Guidelines for students
• Promotes consistency in grading
• Reduces grading time
• Reduces “why this grade?” questions
• Does take time to build but worth it
Scavenger Hunt Quiz

• Points count towards grade – may take multiple times until full points awarded
• Important course information
• Not just syllabus information, but some “how to” things as well
• Forces finding specific details about course
• Example: Are you allowed to use your notes on test? Yes or no and then have feedback with correct answer.
DUE DATES
<table>
<thead>
<tr>
<th>DUE DATE</th>
<th>ASSIGNMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 3</td>
<td>Scavenger hunt quiz &amp; Exam Promise Quiz Due</td>
</tr>
<tr>
<td>June 3</td>
<td>Introduction in discussion area &amp; reply</td>
</tr>
<tr>
<td>June 4</td>
<td>Homework 1 and Mod 1 Discussion posting &amp; reply</td>
</tr>
<tr>
<td>June 5</td>
<td>Homework 2 and Mod 2 Discussion posting &amp; reply</td>
</tr>
<tr>
<td>June 8</td>
<td>Homework 3 and Mod 3 Discussion posting &amp; reply</td>
</tr>
<tr>
<td>June 10</td>
<td>EXAM 1 opens on June 8</td>
</tr>
<tr>
<td>June 11</td>
<td>Journal post for Exam 1</td>
</tr>
<tr>
<td>June 12</td>
<td>Homework 4 Mod 4 Discussion posting &amp; reply</td>
</tr>
<tr>
<td>June 16</td>
<td>Homework 5 and Mod 5 Discussion posting &amp; reply</td>
</tr>
<tr>
<td>June 19</td>
<td>Homework 6 and Mod 6 Discussion posting &amp; reply</td>
</tr>
<tr>
<td>June 22</td>
<td>EXAM 2 –opens on June 20</td>
</tr>
</tbody>
</table>
Interactive Tools

• Thinglink.com  build your own interactions
• Skitch.com  screen capture with annotations (need Evernote account)
• YouTube videos: search for content or build your own
• Practice Quizzes: shown to promote learning
• Scenario Based Learning and Simulations
  – Some are already out there
  – Build your own?
Practice, Practice, Practice

- Publisher content: robust but expensive
- New kid: Sapling Learning
- Build your own
- Formative assessments
- Could also be homework assignments
- MUST BE WORTH POINTS

- (Ericsson, Krampe, & Tescher-Romer, 2003)
Help Leif the Sapling Learning action figure do some push-ups. Each of these gears represents a pathway in cellular respiration. Click the info buttons to learn a little about each process. Then drag each gear to the knob that corresponds to its order in cellular respiration. Click “Check” to check your work.
Label the diagram showing homeostatic responses to blood pressure

Drag and drop the labels to the diagram showing the homeostatic response to blood pressure.

- blood pressure falls
- Sensory nerve fibers
- Rise in blood pressure
- Motor nerve fibers
- Blood pressure receptors respond
- Medulla oblongata
- Heart rate increases

Explaination:

When one goes from a lying to standing position blood pressure decreases. This is sensed by blood pressure receptors, baroreceptors, that initiate a response by sending information to the medulla oblongata via sensory neurons. The medulla oblongata analyzes the situation and send impulses via motor neurons to the heart to increase heart rate. The increased heart rate increases blood pressure. Review figure 1.6 in the text for more information.

References
Build your own?

• Time consuming
• SoftChalk
• LMS?
Scenario Based Learning and Simulations
So you must be the new intern. Welcome to the Watersedge Department of Health. I'm Leslie. What's your name?

TYPE YOUR FIRST NAME:

CONTINUE
Quarantine Office

Move the cursor around in the environment window above. As you move over certain objects, a pop-up description will appear. Click on the object to find out more about it. There may be further actions associated with the object that you can take, that will help you progress the inspection process.

Certain objects (such as the Quarantine manual) should be collected to take with you through the rest of the scenario. You can collect objects by dragging the icon to the box at the bottom.
Click to enter the Virtual Cardiology Lab

Cardiology Lab Introduction and Help

Welcome to the Virtual Cardiology Lab. The focus of tool, and at each stage, the doctor will invite you to

Making a diagnosis is, in many respects, like detective of diseases and their symptoms. Since we assume you tools. This information can be found in the "Basic Ca

Learning Objectives

- Symptoms of a selection of heart diseases,
- Tools and techniques used for diagnosis. Wh
- Principles of pedigree analysis.

Using the Virtual Lab

The lab interface is divided into two main areas: the the lab notebook window will automatically update w

Icons below the tip window indicate the current secti
Auscultation Quiz

(Answers to this quiz can be found by referencing the Cardiology Guide)

1. When a doctor uses a stethoscope, what is being monitored?
   
   a) The sound made by the electricity spreading through the heart.
   b) The sound made by the vibration of the heart and blood as pumping occurs.
   c) The sound made by the contractile molecules of the muscles of the heart as they contract.
   d) None of the above.

2. Which of the following conditions can cause irregularities in the sound of the heart?
   
   a) Moderate bradycardia.
   b) Mild mitral valve regurgitation.
   c) Mild atherosclerosis of the coronary arteries.
   d) Both a and b.

3. What is a murmur?
The cardiac cycle includes all events related to the flow of blood through the heart during one complete heartbeat.
In this lab, you will apply different solutions to the exposed frog heart and monitor the contractions using a displacement transducer. This lab is composed of three experiments. In each experiment, you will use a pipette to add frog Ringer's solution onto the heart and then add a second solution which is either cold Ringer’s, or a Ringer's solution containing acetylcholine or adrenaline. To start, click the power switch to turn on the Data Acquisition Unit.
7 Principles of Learning

1. Students’ prior knowledge can help or hinder learning.
2. How students organize knowledge influences how they learn and apply what they know.
3. Students’ motivation determines, directs, and sustains what they do to learn.
4. To develop mastery, students must acquire component skills, practice integrating them, and know when to apply what they have learned.
5. Goal-directed practice coupled with targeted feedback enhances the quality of students’ learning.
6. Students’ current level of development interacts with the social, emotional, and intellectual climate of the course to impact learning.
7. To become self-directed learners, students must learn to monitor and adjust their approaches to learning.

http://www.cmu.edu/teaching/principles/learning.html
Resources

- http://www.cmu.edu/teaching/principles/learning.html
- http://www.hhmi.org/biointeractive/cardiology-virtual-lab
- Saplinglearning.com
- http://www.mclph.umn.edu/watersedge/game.html
- Skitch.com
- Thinglink.com
- https://coi.athabascau.ca/