Building a Community of Inquiry (CoI) using Moodle

With Examples of Effective Teaching Practices from Amherst Faculty

The Dean's Retreat 2018,
Breakout Session, August 30 2018, 2.30pm to 4pm

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Session Structure

ATS Overview & What is CoI? (10 minutes)

Demo & Discussion - Teaching Examples using Moodle (35 minutes)

Hands-On Activity & Take-aways (45 minutes)
High Level of Faculty Engagement – 2017-2018 data

HOW WE ENGAGE

- Workshop: 34%
- 1:1 Consultation: 11%
- Project: 4%
- Q&A: 51%

1292 Faculty & Student Interactions 2017-18

We Provide:
- Individual Consultations
- Project Support
- In-Class Workshops & Support
- Institution-wide Workshops
- Special Interest Groups
- Department-Specific Sessions

Last updated August 2018

FACULTY SNAPSHOT, 2017-18

- 55% Amherst Faculty engaged with ATS
- 78% of Amherst courses used Moodle to deliver content
- 50% of Amherst courses used Moodle for participatory activities

1- April 2018 total number of faculty = 291 (223 full-time and 68 part-time)
2- e.g. E-reserves and/or syllabus. Amherst faculty also use alternate platforms to develop and deliver course content.
3- e.g. Discussion forums, wikis, questionnaires, embedding multi-media, or sharing Open Educational Resources.
The Community of Inquiry (CoI) theoretical framework represents a process of creating a deep and meaningful (collaborative-constructivist) learning experience through the development of three interdependent elements – social, cognitive and teaching presence.

Cognitive Presence is the extent to which learners are able to construct and confirm meaning through sustained reflection and discourse (Garrison, Anderson, & Archer, 2001).

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).

Social presence is “the ability of participants to identify with the community (e.g., course of study), communicate purposefully in a trusting environment, and develop inter-personal relationships by way of projecting their individual personalities.” (Garrison, 2009)
## Workshop Info

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Expected Outcomes</th>
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<tr>
<td><strong>Learn</strong> about the Community of Inquiry (CoI) framework</td>
<td><strong>Describe</strong> the CoI framework and its applications for the teacher practitioner</td>
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<tr>
<td><strong>Familiarize</strong> with the array of Moodle tools and learn about methodologies to integrate Moodle effectively</td>
<td><strong>Recognize</strong> effective teaching practices that apply Moodle tools to achieve CoI</td>
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<td><strong>Identify</strong> teaching scenarios where you might apply Moodle tools effectively</td>
<td><strong>Generate</strong> task-design ideas that apply Moodle tools meaningfully to achieve course goals</td>
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<td><strong>Apply</strong> Learning design using Moodle to promote collaborative and inclusive learning</td>
<td><strong>Explore</strong> concrete strategies to use Moodle features for community building within and beyond the course</td>
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Did you Know?

Moodle Features

- Banners
- Discussion Forums
- Embed Media
- Welcome
- NameCoach
- Wikis
- Workshops
- Grades
- Rubric
- Questionnaire
A Moodle Course for this workshop

www.amherst.edu/go/coimoodle (login required)

Examples from the Amherst Classroom
Social Presence
Semester: spring 2018
Faculty – Jagu Jagannathan, Harris Daniels, Nick Horton

Moodle Tool - Namecoach

CoI Subscales for Social Presence
- affective expression
- open communication
- group cohesion

Pedagogical Intent
- the connected learner
- intercultural communication
- inclusiveness
Moodle Tool - Wikis

Triggering Event, Exploration, Integration, Resolution
Promoting collaboration, Creativity, UDL

Col Subscale for Cognitive Presence
Pedagogical Intent

Cognitive Presence
Course: Chem 100, Molecular Gastronomy and Food Science: from Test Tubes to Taste Buds
Semester: spring 2018
Faculty – Pat O’Hara

Pedagogical Intent
Promoting collaboration, Creativity, UDL

Molecular Gastronomy
Template for a general post - make sure your post has one “science” and one “relationship to syllabus” section and either a CREATIVE/MEDIA or a SOCIAL SCIENCES/HUMANITIES section.

CREATIVE/MEDIA (option 1)
Each post must contain a creative element. This could be photos, graphics, videos, animations, poems, haikus, or anything else. This content must be related to the trigger event.

RELATE TO SYLLABUS (required)
Each post must contain a theme that integrates the lab and the readings, theory, or additional content. For Lab 1, here are some examples of possible questions. You must be able to answer these questions:

- Why is supporting a local rather than a national vendor for pork important to the community?
- In what capacity was your children’s pork product used in a school or other organization?

200 words max, but include citations

Experiment 4: Sous Vide

The Science of Sous Vide (Student AI)

There are two distinctive elements to sous vide cooking which are interesting from a scientific perspective: the vacuum-sealing of food to prevent damage due to oxygen exposure, and the lower temperature cooking that it allows. I will focus on the latter of these two.

The primary effect that heat has on our food is through the denaturing of proteins. Different proteins denature in different ways. The proteins in egg white are gelatinized when heated, becoming opaque, while the proteins in meat shrink and gel, changing the texture of the meat.

Even small changes in the heat that eggs are cooked at can completely change their consistency and texture!
Teaching Presence

Course: ENG 284, Coming to Terms: Media
Semester: spring 2018
Faculty – Pooja Rangan

Moodle Tool - Discussion Forums

Col Subscales for Teaching Presence
Design and Organization, Facilitation, and Direct Instruction

Pedagogical Intent
Flipped Approach, Individual Voice, Generating Ideas

Pre-Class Response 5 (Responses will be due from everyone by Wednesday 9PM)
Bulletin Board for Assignment 3, Post by 9PM the day before class
Pre-Class Response 9
Moodle Help: Forums
Linking Teaching and Cognitive Presence

Course: FYSE113, Genocide
Semester: fall 2017
Faculty – Ellen Boucher

Pedagogical Intent:
- Research skills through group work
- Promoting learner autonomy (and avoiding didactic instruction)
- Self-discover the messiness of learning

Moodle Tool - Wikis

Cambodian Genocide Wiki

Rise of the Khmer Rouge

The Khmer Rouge, or the Communist Party of Kampuchea, first came to power in 1975 after a five-year civil war that began with the fall of Prince Sihanouk, Cambodia's head of state, and ended when the Khmer Rouge army, led by Pol Pot, took control of Phnom Penh, a major Cambodian city. After gaining control, the Khmer Rouge began establishing their ideal Communist Cambodia. The party's goal was to completely abolish social classes in the country and create a society where rich and poor did not exist. To do this, they destroyed and outlawed the country's money, free market, public buildings, and services, the practice of religion, and all forms of private property. The army also began relocating Cambodian citizens to labor camps in the countryside, where they were expected to take on harsh agricultural work. In these camps Cambodians were physically abused, starved, and exhausted, and were often overtaken by disease, resulting in many deaths.

In 1976, Cambodia was officially renamed Democratic Kampuchea. Pol Pot declared this year to be “Year Zero” or the year of his utopian communist society's creation. He also sought to cut off the country from the rest of the world. The new totalitarian government officials of the Khmer Rouge regime continued to target anyone who was suspected of being an enemy of the state, or allegedly held ties to the Khmer Republic. Specifically targeted were those who were perceived as intellectuals, on the basis that they could be intelligent enough to lead an uprising or a revolution. Under the Khmer Rouge, Cambodians could be sent to jail for gathering in a group of just three or more people, or being suspected of disparaging family relations and viewed the regime as their effective “mother and father.” They were also forced to produce three tons of rice per one hundred acres each year throughout the entire country, which meant over twelve-hour workdays and harvesting all year long. By the end of the regime's four-year reign, approximately 1.7 to 2.2 million Cambodians were killed at the hands of Pol Pot and the Khmer Rouge.

The Khmer Rouge takes control of Phnom Penh on April 17, 1975.
Your teaching scenario to build CoI?

1. Describe your teaching objective
2. Identify a moodle tool that would best meet your teaching objective
3. Discuss/ Design the Learning task
Sum up the Group discussion

1. Share your ideas
2. Identify at least one concrete method you plan to apply in the classroom.

How can Academic Technology Services provide follow-up support for you?
Community of Inquiry Framework

Col Framework

Social Presence

Teaching Presence

Cognitive Presence
Our sincere thanks to the following faculty for generously sharing their teaching examples:

- Prof. Pat O’Hara, (Chemistry, Biochemistry-Biophysics)
- Prof. Pooja Rangan, (English, Film, and Media Studies)
- Prof. Ellen Boucher, (History, European Studies)
- Prof. Jagannathan Kannan, (Physics and Astronomy)
- Prof. Harris Daniels, (Mathematics and Statistics)
- Prof. Nick Horton (Statistics and Data Science)
If time permits, we will discuss peer-feedback and rubric too.

the End!
Peer-feedback

Example Workshop

Manual allocation  Random allocation  Scheduled allocation

The allocation already exists

Participant is reviewed by
Add reviewer  Choose user...  
Susan Test

Add reviewer  Choose user...  
Joe Test

Participant
Joe Test
Joe's Paper
No grade yet

Susan Test
Susan's paper
No grade yet

Participant is reviewer of
Add reviewee  Choose user...  
Susan Test

Add reviewee  Choose user...  
Joe Test
<table>
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<tr>
<th>Rubric</th>
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<tbody>
<tr>
<td><strong>Grade</strong></td>
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</table>
| Thesis | There is no thesis.  
0 points |
| Synthesis | The parts to be integrated are not clear and/or relevant. The connections between the parts are weak.  
1 points |
| | The thesis is present, but must be uncovered or reconstructed from the text of the paper.  
2 points |
| | The thesis is obvious, but there is no single clear statement of it.  
3 points |
| | A clear statement of the main conclusion of the paper.  
4 points |
| | The paper integrates most relevant parts from various places into a mostly coherent whole. The connections are strong.  
5 points |
| | The paper successfully integrates all relevant parts from various places into a coherent whole. The connections are excellent.  
6 points |
| Notify students | Save changes | Save and show next | Reset |