A Faculty Toolkit for Transforming eLearning into Active Learning

Category: Professional Development; Educational Tools

Section 1: Introduction

1.1. The Challenge: Moving from Passive to Active eLearning

As health professions education continues its expansion into digital spaces, faculty face the critical challenge of ensuring their online courses do more than just deliver information. The goal is to cultivate deep engagement, sharp clinical reasoning, and robust professional identity formation. This resource provides a practical, evidence-based framework for transforming standard eLearning modules into dynamic, active learning environments.

1.2. The Framework: The Community of Inquiry (CoI)

This toolkit is grounded in the Community of Inquiry (CoI) framework, a robust and widely validated model for effective online learning. The CoI model posits that meaningful education occurs at the intersection of three core elements: Teaching Presence, Cognitive Presence, and Social Presence.[1] By intentionally designing for these three "presences," educators can create an online environment that fosters meaningful, learner-centered engagement.[2]

1.3. How to Use This Toolkit

This resource is designed as a ready-to-implement package for faculty development. It provides a conceptual overview, step-by-step instructional strategies, and a full suite of downloadable materials that can be used to redesign an existing online module or build a new one from scratch.

Section 2: Three Strategies to Foster Active Learning

Informed by the CoI framework, these three practical strategies integrate common eLearning resources to support active learning. Each strategy is enhanced with tips for leveraging Artificial Intelligence (AI) to streamline faculty workflow and deepen student engagement.

Strategy 1: Build Teaching Presence with an Instructor Kick-off Video

The "Why": Begin each learning module with a short, informal video message from the instructor. This simple act humanizes the course, builds connection, and directs student attention to the most critical concepts for the week.[3] Asynchronous instructor presence has been shown to improve learner attention, motivation, and even neural synchrony.[4]

Implementation Steps:

1. **Record a 3-5 minute video** using your institution's LMS or a simple recording tool.
2. **Frame the week's content:** Highlight key video lessons or readings.
3. **Point out a "tricky concept"** that learners often struggle with.
4. **Connect the content** to a real-world clinical practice scenario or a personal anecdote.

Enhance with AI: Use reliable AI tools to generate a brief script, simplify the explanation of a complex topic, or create discussion prompts based on your video's content.

Strategy 2: Activate Cognitive Presence with Content & Retrieval Practice

The "Why": Use curated video lectures and low-stakes quiz questions to provide foundational knowledge and support retrieval-based learning. The act of retrieving information, such as answering quiz questions after watching a video, has a strong evidence base for improving long-term retention and comprehension.[5]

Implementation Steps:

1. **Assign a curated playlist** of videos and readings tailored to your learning objectives.
2. **Embed low-stakes recall questions** directly into your LMS or assign them as a formative quiz.
3. **Review analytics** on question performance to identify common areas of difficulty that can be addressed in a synchronous session or a follow-up announcement.

Enhance with AI: Use a reliable AI question generator to produce formative questions aligned with your content. A lesson plan generator can help identify relevant videos and readings based on your learning objectives.

Strategy 3: Foster Social Presence with Application Activities

The "Why": Once students have a foundational understanding, deepen their learning with structured, collaborative application tasks. These activities move students beyond passive consumption and require them to engage in the higher-order thinking essential for clinical practice.

Implementation Options:

- **Case-Based Clinical Reasoning Discussions:** Use clinical case questions as the basis for discussion. Prompt learners to propose a differential diagnosis, justify their reasoning, and recommend a management plan. This fosters real-time problem-solving and peer-to-peer learning.
- **Jigsaw on "Grand Topics":** Divide students into "expert groups" to master a specific sub-topic. Then, re-form them into "teaching groups" where each member teaches their topic to their peers. This method has been successfully adapted for powerful online learning.[6]
- **Collaborative Annotation:** Have students use a shared document or an integrated tool to comment on and discuss an article or case study together.

Enhance with AI:

- Use AI tools to **generate new clinical cases** for discussion or to help plan an active learning session.
- Encourage students to use an **AI Tutor** to work through practice questions, receiving scaffolded hints that reinforce their reasoning process before they engage in group discussions.

Section 3: The Resource Toolkit: Templated Materials

This section provides tangible materials repurposed from a faculty development workshop, now designed for broad, asynchronous use. They are ready to be downloaded and implemented.

3.1. Instructor's Preparation Checklist

Objective: This checklist guides you through the essential steps to redesign a standard online module into an active learning experience using the Community of Inquiry (CoI) framework.

Phase 1: Planning & Design (1-2 weeks before module launch)

- **[ ] Define Module Objectives:**
  - Identify 2-3 key learning objectives for the week. What should students know or be able to do by the end of the module?
- **[ ] Plan Your Instructor Kick-off Video (Builds Teaching Presence):**
  - Outline talking points for a brief (3-5 minute) video.
  - Identify one "tricky concept" to highlight.
  - Think of a clinical anecdote or real-world connection to make.
- **[ ] Select Foundational Content (Builds Cognitive Presence):**
  - Curate a focused list of essential videos, readings, or concept pages.
  - Prepare 3-5 low-stakes retrieval practice questions to check for understanding.
- **[ ] Design the Application Activity (Builds Social & Cognitive Presence):**
  - Choose an activity model that promotes problem-solving (e.g., Case-Based Reasoning, Jigsaw, Collaborative Annotation).
  - Draft a clear, engaging prompt that requires higher-order thinking like analysis or justification.
  - Create a simple 3-point rubric to clarify expectations for the activity.

Phase 2: Module Setup & Communication (1 week before launch)

- **[ ] Build the Module in Your LMS:**
  - Record and upload your Instructor Kick-off Video.
  - Post the foundational content and retrieval practice quiz.
  - Set up the Application Activity using the appropriate LMS tool (e.g., a "post-first" discussion board for a case study).
- **[ ] Communicate the Weekly Plan:**
  - Post a clear announcement outlining the week's structure, tasks, and deadlines.
  - Explain the purpose of the application activity and how it connects to the foundational content.

Phase 3: Facilitation & Assessment (During and after the module)

- **[ ] Plan for Synchronous Sessions (Optional but Recommended):**
  - Design the session as an "active workout," not a passive review.
  - Prepare an activity like a live diagnostic case, an ethical dilemma debate, or a student-led review.
- **[ ] Prepare for Feedback:**

- Review student submissions in the application activity to identify common misconceptions.
- Plan to provide group feedback on common themes via a wrap-up announcement and individual feedback focused on the student's reasoning process.

3.2. AI Policy and Assignment Design Worksheet

(Editable Word Document Format)

Objective: This worksheet guides you through developing a course-specific AI policy and redesigning an assignment to leverage AI for deeper learning while maintaining academic integrity.

Part 1: My Course AI Policy

Reflect on the three models below and draft a policy statement for your syllabus. Remember the 4 P's: **Permission** (when is AI allowed?), **Privacy** (never input protected health information), **Proof** (students are accountable for accuracy), and **Process** (require students to show their work).

Choose Your Policy Model:

- **[ ] Zero Tolerance:** AI tools are not permitted for any graded assignments.
- **[ ] AI with Disclosure:** AI tools are permitted for specific tasks (e.g., brainstorming, grammar check), but all use must be cited or acknowledged.
- **[ ] AI Integrated:** AI tools are required for certain assignments, and the process of using them is part of the grade.

My Draft Syllabus Policy Statement: ``

Part 2: Assignment Redesign

Transform a traditional assignment into one that uses AI to foster higher-order thinking (Analyzing, Evaluating, Creating). Use a "brain-first" approach where the student's critical judgment is the focus.

The "Before" Assignment: (Briefly describe a current assignment that is vulnerable to being completed by AI, e.g., "Write a paper summarizing the pathophysiology of Type 2 Diabetes.") “Before” assignments would be inserted here

The "After" AI-Engaged Assignment: (How can you redesign this? Have students critique AI output, use AI to generate options they must then justify, or adapt AI content for a specific clinical context?)

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Part 3: Explaining the "Why" to Students

How will you explain the pedagogical purpose of using AI in your redesigned assignment?

My Explanation for Students: ``

3.4. Sample Case Study Package: Mr. David Thompson

(Printable PDF Format)

Objective: This ready-to-use package provides a complete clinical case for a case-based reasoning activity. It includes learning objectives, the case itself, guided questions for students, and a facilitator guide with a rubric for assessment.

Learning Objectives

By the end of this activity, students will be able to:

1. Apply clinical reasoning to assess a patient with potential cardiac symptoms.
2. Prioritize differential diagnoses based on subjective and objective data.
3. Identify appropriate next steps for diagnostic evaluation.
4. Formulate a preliminary, evidence-based management plan.

Patient Case: Mr. David Thompson

- **Chief Complaint:** "I've been having this pressure in my chest for a few days, especially when I walk up stairs or get stressed."
- **History of Present Illness:** Mr. Thompson, a 58-year-old male, reports a 5-day history of intermittent chest pressure described as a "tightness" or "squeezing" sensation. It occurs primarily with exertion and is relieved by rest within 10 minutes. The discomfort is 6/10 in intensity and has become more frequent in the past two days.
- **Past Medical History:** Hypertension, Hyperlipidemia, Type 2 Diabetes Mellitus (last A1C: 7.8%).

- **Family History:** Father died of an MI at age 62.
- **Social History:** Smoked 1 pack/day for 25 years (quit 3 years ago). Sedentary lifestyle.
- **Vitals (Recent):** BP: 148/92 mmHg, HR: 88 bpm, BMI: 32.

Guided Clinical Reasoning Questions (For Students)

1. **Differential Diagnosis:** Based on Mr. Thompson's presentation, develop a prioritized list of at least three possible diagnoses. Justify why you placed your top diagnosis first.
2. **Urgency & Red Flags:** What "red flag" symptoms or risk factors in this case are most concerning? Based on your assessment, would you recommend immediate referral to an emergency department, an urgent outpatient workup, or routine primary care management? Justify your decision.
3. **Diagnostic & Management Plan:** What are the top 2-3 diagnostic tests you would order next? Formulate a preliminary management plan that includes both pharmacologic and non-pharmacologic interventions.

Facilitator Guide (For Instructor Use)

- **Key Teaching Points:** This case is designed to help students differentiate between stable vs. unstable angina and recognize the cumulative impact of comorbidities (HTN, DM, HLD) on cardiovascular risk.
- **Debrief Questions:**
    1. How did you determine that Mr. Thompson's symptoms were more likely cardiac rather than gastrointestinal or musculoskeletal?
    2. If his initial ECG is normal, does that rule out cardiac ischemia? What would be your next step?
    3. What are the risks of under-triaging this case in a telehealth setting?

- **Sample Grading Rubric (3-Point Scale):**

Criteria	Proficient	Developing	Needs Improvement
1. Clinical Judgment / Analysis	Provides a well-prioritized differential diagnosis with clear, evidence-based justification.	Lists plausible diagnoses but with limited prioritization or justification.	Fails to identify the most likely diagnosis or provides a weak rationale.
2. Use of Evidence / Support	Accurately identifies key red flags and uses data from the case to support the proposed diagnostic and management plan.	Identifies some relevant data but misses key red flags or provides a plan with limited support.	Plan is not supported by evidence from the case; reasoning is unclear or superficial.
3. Clarity & Professionalism	Response is well-organized, clearly written, and uses professional terminology correctly.	Minor issues with organization or clarity.	Response is poorly organized, difficult to follow, or contains significant errors.

Section 4: Evidence of Impact and Faculty Reception

The principles and strategies contained in this toolkit were presented in a 90-minute virtual workshop for an international audience of health professions faculty. The session, focused on leveraging evidence-based pedagogy and AI for assessment, was attended by educators with a wide range of prior familiarity with the topics.

Post-session feedback demonstrates the toolkit's relevance and potential impact:

- High Participant Satisfaction: Attendees reported a high degree of satisfaction and value. On a 10-point scale, the average likelihood to recommend the session to a colleague was 8.8.
- Positive Qualitative Feedback: Written feedback was overwhelmingly positive, with participants describing the workshop as an "excellent session," "very useful and informative," and praising the "outstanding preparation and delivery." One attendee noted the "presentation was logical and well put together."
- Broad Relevance and Accessibility: The content resonated with a diverse audience. Participants' self-reported familiarity with the strategies ranged from "Not familiar" to "Very familiar," indicating the material is accessible and valuable for faculty at all levels of experience.
- Stimulated Interest in Further Application: The workshop successfully sparked interest in applying these concepts to specific use cases, with faculty requesting future sessions on creating personalized learning plans, developing clinical case scenarios, and using AI for test preparation.

This positive reception from a faculty audience validates the practical value of the toolkit and confirms that its contents are relevant, engaging, and impactful for educators in academic medicine.

References

1. Garrison DR, Anderson T, Archer W. Critical inquiry in a text-based environment: Computer conferencing in higher education. *Internet High Educ*. 2000;2(2-3):87-105.
2. Turk M, Ekmekci E, Mentzer N. The community of inquiry framework in synchronous and asynchronous online learning environments: A systematic review. *TechTrends*. 2022;66:629–40.
3. Pacansky-Brock M, Smedshammer M, Vincent-Layton K. Humanizing online teaching to equitize higher education. *Curr Issues Educ*. 2020;21(2).
4. Bay-Cheng C, He Y, She Q, Liu Y, Zhang D. Onscreen presence of instructors in video lectures affects learners' neural synchrony and visual attention during multimedia learning. *Proc Natl Acad Sci U S A*. 2024;121(15).
5. Latimier A, Riegert A, Peyre H, Ly ST, Casati R, Mazancieux A, et al. Does retrieval practice benefit learning for all students? A meta-analysis. *Educ Psychol Rev*. 2021;33:817–53.
6. Anderson B, Cudney C. Using a Modified Online Jigsaw Technique to Address COVID-19 Related Topics during the Pandemic Lockdown. *J Eff Teach High Educ*. 2025;7(2):62-82.

Weekly Module Redesign Worksheet

Course Name: _____
Weekly Module Topic: _____
Use this worksheet to apply the principles from today's session to redesign one of your weekly asynchronous modules. The goal is to intentionally foster **Teaching, Social,** and **Cognitive Presence**.

Part 1: Instructor Presence Kick-off

How will you connect with students and set the stage for the week?

My 3-Minute Video Idea:
(What key concepts will you highlight? What real-world connection can you make? What's one "tricky concept" to point out?)

Part 2: The Application Activity (Replacing the Discussion Board)

How will you move students from passive posting to active problem-solving?

Choose Your Activity Model:

- [ ] **Case-Based Clinical Judgment:** Students analyze a case and justify their clinical judgment.
- [ ] **Jigsaw on "Grand Topics":** Student groups become "experts" on sub-topics and teach their peers.
- [ ] **Collaborative Annotation:** Students comment on and discuss an article or document together.
- [ ] **Concept Map Curation:** Students visually map a concept and explain their map to their peers.
- [ ] **Other Idea:** _____

My New Activity Prompt:
(Draft the instructions you will give students for your chosen activity. Ensure it requires higher-order thinking like analysis, justification, or evaluation to demonstrate clinical judgment.)

Part 3: Simple Rubric for the Application Activity

How will you clarify expectations and assess student work?

Criteria	Proficient	Developing	Needs Improvement
1. Clinical Judgment			

/ Analysis			
2. Use of Evidence / Support			
3. Clarity & Professionalism			

Part 4: Making the Optional Synchronous Session "Can't-Miss"

How can you use this time for an active "clinical workout" rather than a passive review?

My Synchronous Session Idea:
(e.g., Live diagnostic case, ethical dilemma debate, student-led case presentation)

Application Activity Setup Guides

A Practical Guide for Faculty

This document provides logistical instructions for setting up the application activities discussed in the "Beyond the Board" workshop. The focus here is on the technical setup within a learning management system (LMS) like Canvas.

For help or more tips, please contact your campus's instructional design or course design specialist.

1. Case-Based Clinical Reasoning Setup

This activity asks students to analyze a clinical case and justify their reasoning. Here are three ways to set it up.

Option A: Graded Discussion (Post-First)
This setup is ideal for individual assessment where you want each student's initial thoughts before they are influenced by others.

1. **Create a Discussion:** In your course module, create a new "Discussion."
2. **Add Prompt & Case:** Paste the clinical case and your assignment prompt into the text editor.
3. **Set Options:**
   - Check the box for **"Graded."**
   - Check the box for **"Users must post before seeing replies."** This is the most critical step for this method.
   - Consider checking "Allow threaded replies" so students can easily respond to each other.
4. **Add Rubric:** Attach the simple rubric you developed so students know the criteria for success.

Option B: Small Group Discussion
This is best for fostering collaboration and peer feedback in a more intimate setting.

1. **Create Groups:** Go to People > Groups. Create a new "Group Set" (e.g., "Weekly Case Groups"). Either manually or automatically create the small groups (4-5 students is ideal).
2. **Create a Group Discussion:** When you create a new "Discussion," check the box for **"This is a Group Discussion."**
3. **Assign Group Set:** Select the Group Set you just created from the dropdown menu.

4. **Post and Grade:** Add your prompt and rubric. Each group will have its own private discussion space, but you can view all of them and grade from SpeedGrader.

2. Jigsaw on "Grand Topics" Setup

The Jigsaw is a powerful two-phase activity. Setting it up correctly in the LMS is key to its success.

Phase 1: "Expert/Home Groups" (e.g., Week A)
In this phase, students with the same topic collaborate to become experts.

1. **Create Expert Group Set:** Go to People > Groups. Create a new "Group Set" and name it something clear, like **"Jigsaw Phase 1: Expert Groups."**
2. **Manually Create Groups by Topic:** Create your groups within this set and name them by topic (e.g., "Expert Group A - Asthma," "Expert Group B - COPD," "Expert Group C - Pneumonia"). Manually assign students to each expert group.
3. **Create the Expert Discussion:** Create a new "Group Discussion" and assign it to the "Expert Groups" set.
4. **Post Prompt:** Your prompt should guide them to become experts. *Example: "In this private group space, your goal is to become the class expert on [Asthma]. Discuss your assigned reading, share key takeaways, and clarify confusing points. Prepare a 'Top 5 Things an NP Must Know' list that you will teach to your next group."*

Phase 2: "Mixed/Away Groups" (e.g., Week B)
In this phase, students teach their topic to their new group members.

1. **Create Mixed Group Set:** Go back to People > Groups. Create a *second* "Group Set" and name it **"Jigsaw Phase 2: Mixed [or Away] Groups."**
2. **Manually Create Mixed Groups:** Create new groups within this second set. This time, manually assign students to ensure that each "Away Group" has **one member from each of the original expert groups** (i.e., one student from the Asthma group, one from COPD, etc.).
3. **Create the Home Discussion:** Create a *second* "Group Discussion" and assign it to the new "Home Groups" set.
4. **Post Prompt:** Your prompt now focuses on peer teaching. *Example: "Welcome to your Home Group! Your task this week is to teach your topic to your peers and learn from them in return. Each member should post their 'Top 5 Things to Know' list for their expert topic. Then, as a group, discuss how these conditions might present differently in a clinical setting."*

3. Collaborative Annotation Setup

This activity encourages students to engage directly and deeply with a text.

Option A: Individual Annotation

Internal to Canvas:

1. Upload the document you want students to annotate to your Files.
2. If your Files tool is not hidden from students, set the files "publish" setting to "Only available to students with a link." This ensures that students will only be able to access the file via the assignment.
3. Go to Assignments. CLick Add Assignment and enter the Assignment details.
4. Under Submission Type, select Student Annotation. Select the file you want students to annotate.

External Tool:

Many LMS platforms have integrations (like Hypothes.is) that allow for this. Check with your instructional designer.

1. **Create an Assignment:** Select "External Tool" as the submission type.
2. **Select the Annotation Tool:** Choose the integrated annotation tool (e.g., Hypothes.is) from the list.
3. **Link the Document:** Upload or link to the PDF article or case study you want students to annotate. Students can then highlight and comment directly on the document for you to grade.

Option B: Group Annotation (Using External Tools)

A great workaround for collaborative annotation if your LMS doesn't have an integrated tool.

1. **Create Groups:** Set up small groups in your course (People > Groups).
2. **Create an Assignment:** The submission type can be "Text Entry" or "Website URL."
3. **Provide Instructions:** Instruct groups to create a copy of a shared document (e.g., in Office 365, Google Docs). They will use the "Comments" feature to collaboratively annotate the text.
4. **Submit for Grade:** One member from each group submits the link to their collaborative document for grading. This allows you to see not only the final product but also the conversation and collaboration that occurred in the document's comments.

4. Concept Map Curation Setup

This visual activity helps students organize complex information and see relationships between concepts.

Option A: Discussion Board Gallery

Best for individual creation followed by peer review.

1. **Create a Discussion:** Set up a standard discussion board.
2. **Provide Instructions:** Instruct students to create a concept map using a free online tool (e.g., Coggle, Canva, or even PowerPoint) and export it as an image (JPG/PNG).
3. **Post & Explain:** The assignment is to post the image of their concept map and write a short paragraph explaining their organizational choices.
4. **Add Peer Review:** Require students to comment on at least two peers' maps, asking a clarifying question or suggesting an alternative connection between concepts.

Option B: Collaborative Group Map

Best for having a team work together on a single, complex map.

1. **Create Groups:** Set up small groups in your course.
2. **Create an Assignment:** The submission type should be "Website URL."
3. **Instruct on Tool Use:** Direct groups to use a collaborative whiteboard tool (like Miro, Mural, or a shared PowerPoint/Google Slide).
4. **Submit & Grade:** One member submits the "share" link to the group's collaborative board. This allows you to see the final map and often the process of its creation.

WORKSHEET

AI Policy and Assignment Design Worksheet

Course name:

Use this worksheet to develop your course-specific AI policy and redesign an assignment to leverage AI for deeper learning while maintaining academic integrity.

Part 1: My course AI policy

Reflect on the three models and draft a policy statement for your syllabus. Remember the 4 P's: Permission, Privacy, Proof, and Process.

Choose your policy model:

- ☐ Zero tolerance: AI tools are not permitted for any graded assignments.
- ☐ AI with disclosure: AI tools are permitted for specific tasks (e.g., brainstorming, grammar), but use must be cited.
- ☐ AI integrated: AI tools are required for certain assignments, and the process is part of the grade.

My draft syllabus policy statement:

Part 2: Assignment redesign

Transform a traditional assignment into one that uses AI to foster higher-order thinking (Analyzing, evaluating, creating).
Use a “brain-first” approach.

The "before" assignment:
(Briefly describe a current assignment that is vulnerable to being completed by AI, e.g., "Write a paper summarizing...")

The "after" AI-engaged assignment:
(How can you redesign this assignment? Have students critique AI output, use AI to generate options they must then justify, or adapt AI content for a specific context?)

Part 3: Explaining the "why" to students

How will you explain the pedagogical purpose of using AI in your redesigned assignment?

My explanation for students:
(e.g., "In this assignment, we will use AI as a brainstorming partner. Your task, as the developing professional, is to evaluate its suggestions against the evidence and make the final, reasoned clinical judgment...")

Case Study: Mr. David Thompson – A 58-Year-Old Male with Chest Discomfort

Learning Objectives:

By the end of this case, students will be able to:

1. Apply clinical reasoning to assess a patient with potential cardiac symptoms.
2. Prioritize differential diagnoses based on subjective and objective data.
3. Identify appropriate diagnostic studies for evaluating suspected heart disease.
4. Formulate an evidence-based management plan.
5. Demonstrate clinical judgment in recognizing red flags and determining appropriate disposition.

Patient Presentation:

Patient Name: David Thompson
Age: 58
Sex: Male
Occupation: Accountant
Ethnicity: African American
Date of Visit: June 20, 2025
Setting: Telehealth visit for primary care follow-up

Chief Complaint:

> "I've been having this pressure in my chest for a few days, especially when I walk up stairs or get stressed."

History of Present Illness:

Mr. Thompson reports a **5-day history** of intermittent chest pressure described as a "tightness" or "squeezing" sensation. He states it occurs **primarily with exertion** and is relieved by rest

within 10 minutes. It is **non-radiating** and not associated with meals or position changes. The discomfort is **6/10 in intensity**, lasts several minutes, and has become more frequent in the past two days. No known injuries or trauma. He denies similar symptoms in the past.

Past Medical History:

- Hypertension x 10 years
- Hyperlipidemia
- Type 2 Diabetes Mellitus (A1C last month: 7.8%)
- GERD
- No previous myocardial infarction or angina diagnosed

Surgical History: Appendectomy at age 20

Family History:

- Father died of an MI at age 62
- Mother has type 2 diabetes and heart failure

Medications:

- Lisinopril 20 mg daily
- Atorvastatin 40 mg daily
- Metformin 1000 mg BID
- Omeprazole 20 mg daily

Allergies:

- No known drug allergies

Social History:

- Smoked 1 pack per day for 25 years; quit 3 years ago
- Drinks 2–3 beers on weekends
- Sedentary lifestyle
- No illicit drug use
- Lives with spouse; both are employed

Review of Systems:

- **Cardiac:** Chest pressure with exertion; no palpitations or syncope
- **Respiratory:** Mild dyspnea with exertion; no cough or wheeze
- **GI:** Occasional reflux at night; no nausea or vomiting
- **General:** Denies fever, chills, weight loss

Physical Examination (via telehealth and recent office vitals):

- **BP:** 148/92 mmHg
- **HR:** 88 bpm, regular
- **RR:** 18/min
- **SpO_2:** 98% on room air
- **BMI:** 32

- **General:** Alert and oriented, appears slightly anxious
- **Cardiac:** Normal S1/S2, no murmurs or gallops appreciated remotely
- **Lungs:** Clear to auscultation bilaterally (reported from prior in-office visit)
- **Extremities:** No edema, no cyanosis

Initial Lab Work (from 1 week ago):

- A1C: 7.8%
- LDL: 142 mg/dL
- HDL: 38 mg/dL
- Triglycerides: 210 mg/dL
- BUN/Creatinine: WNL
- TSH: Normal

Guided Clinical Reasoning Questions:

1. **Identify the most likely cause of Mr. Thompson's symptoms.**
    - What key features support a cardiac vs. non-cardiac cause of his chest pain?
2. **Develop a prioritized differential diagnosis list.**
    - Include at least three possible diagnoses.
3. **What red flags suggest this patient may need urgent evaluation or referral?**
    - Would you refer to the emergency department, schedule outpatient stress testing, or manage in primary care?
4. **What diagnostic tests would you order next and why?**
    - Include labs and imaging or cardiac testing as appropriate.
5. **Formulate a preliminary management plan.**
    - Include pharmacologic and non-pharmacologic interventions.
    - Consider lifestyle changes, risk factor modification, and follow-up needs.

Instructor Note (Facilitator Guidance):

This case is intentionally ambiguous to allow for development of **clinical judgment**. Students should be encouraged to:

- Identify **what data is missing** (e.g., troponins, ECG)
- Differentiate between **stable vs. unstable angina**
- Recognize the **implications of comorbidities** (HTN, DM, HLD) on cardiovascular risk
- Explore **shared decision-making** and patient education in treatment planning

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Expected Outcomes (for Discussion or Assignment Rubric):

A strong student response should:

- Recognize that the symptom pattern is **consistent with stable angina**
- List differentials such as GERD, costochondritis, or atypical chest pain, but justify why CAD is most likely
- Recommend ordering an **ECG and troponin levels** (in-person or urgent referral)
- Recommend **stress testing or cardiology referral** depending on local protocols and risk stratification tools (e.g., ASCVD risk)
- Address need for **aspirin, beta-blocker/statin optimization**, and **glycemic control**
- Educate on **smoking history, physical activity, and diet modification**

Debrief / Follow-Up Questions (For Synchronous or Asynchronous Discussion)

These questions are intended to promote deeper analysis and critical reflection.

Clinical Reasoning & Judgment

1. How did you determine that Mr. Thompson's symptoms were more likely cardiac rather than gastrointestinal or musculoskeletal in origin?
2. Which comorbidities most increased his cardiovascular risk, and how did they influence your plan?
3. What are the risks of under-triaging this case in a telehealth setting? What signs would require urgent in-person assessment?

Diagnostic Thinking

4. If Mr. Thompson’s ECG is normal, what would your next step be? Does a normal ECG rule out cardiac ischemia?

5. How would you differentiate stable angina from acute coronary syndrome (ACS) in primary care?

Patient-Centered Care

6. What strategies would you use to educate Mr. Thompson about his risk and the importance of follow-up care?

7. How would you modify your communication approach for different levels of health literacy or cultural beliefs around heart disease?

Systems-Based Practice

8. What local resources or referral systems could support Mr. Thompson (e.g., cardiology, smoking cessation, diabetes education)?

9. How would your management plan differ if this patient were uninsured or underinsured?

📊 Rubric: Case Study Grading Criteria (Total: 100 points)

Category	Exceeds Expectations (Full Points)	Meets Expectations (Partial Points)	Needs Improvement
1. Differential Diagnosis (20 pts)	Develops a well-prioritized differential with clear rationale (e.g., stable angina, GERD, costochondritis)	Provides plausible differential diagnoses but with limited prioritization	Few or inaccurate differentials provided
2. Recognition of Red Flags (15 pts)	Accurately identifies clinical red flags and need for possible urgent referral	Identifies some red flags but lacks clarity on urgency	Misses key red flags; underestimates risk

3. Diagnostic Plan (15 pts)	Proposes appropriate next steps (e.g., ECG, troponin, stress test); justifies rationale	Suggests tests but with limited explanation or incorrect prioritization	Diagnostic plan is vague or inappropriate
4. Management Plan (20 pts)	Comprehensive plan with pharmacologic, lifestyle, and referral components tailored to patient	Basic plan included but lacking depth in lifestyle or follow-up	Plan is incomplete or not evidence-based
5. Patient Education & Communication (10 pts)	Clearly integrates patient education and culturally sensitive communication	Includes some education points, but lacks depth or cultural awareness	Education/communication not addressed
6. Clinical Reasoning Clarity (10 pts)	Demonstrates logical flow and integration of data; shows insight	Shows some reasoning but lacks depth or integration	Reasoning is unclear, inconsistent, or superficial
7. Professional Writing & APA (if required) (10 pts)	Well-organized, minimal errors, citations formatted correctly (if applicable)	Minor writing or formatting issues	Poorly written or unstructured, APA not followed

Session 1: Beyond the Board: Fostering Deep Engagement (90 Mins)

Slide 1: Title Slide (2 mins)

- **Title:** Beyond the Board: Fostering Deep Engagement in the Asynchronous Classroom
- **Subtitle:** Evidence-Based Strategies for Graduate Nursing Education
- **Presenter:** Sara Keeth, PhD, PMP
- **Date:** [Date of Training 1]

Slide 2: Today's Roadmap (2 mins)

- **Agenda Items:**
    - Interactive Welcome & Your Challenges
    - Our Framework: A Deep Dive into the Community of Inquiry (CoI)
    - The "Active & Present" Weekly Template
    - **Workshop I:** The Application Activity
    - **Workshop II:** The Case Study Clinic
    - Strategies for Effective Feedback
    - Making Synchronous Sessions "Can't Miss"
    - Q&A and Action Planning

Slide 3: Interactive Welcome (5 mins)

- **On-screen prompt:** Use the chat or polling tool:
    1. *"On a scale of 1-5 (1=low, 5=high), how would you rate student engagement in your asynchronous activities today?"*
    2. *"In one or two words, what is your biggest challenge with traditional discussion boards?"*
- (A word cloud graphic appears and populates with responses)

Slide 4: A Deep Dive into the Community of Inquiry (CoI) (10 mins)

- **Visual:** The classic CoI Venn diagram.
- **Title:** Our Evidence-Based Why
- **Key Points:**
    - Foundational model for effective online learning (Garrison, Anderson, & Archer, 2000).
    - Continues to be validated as highly effective in recent systematic reviews (Turk, Ekmekci, & Mentzer, 2022).
    - Our goal is to intentionally design for **Teaching, Social,** and **Cognitive Presence**.

Slide 5: The "Active & Present" Weekly Template (10 mins)

- **Title:** A Predictable Structure for Deep Engagement
- **Part 1: Instructor Kick-off Video (Fostering Teaching & Social Presence)**
    - **Why it Works:** "Humanizes" the course to foster connection and equity (Pacansky-Brock et al., 2020). Instructor presence enhances learner attention (Bay-Cheng et al., 2024).
- **Part 2: Content & Retrieval Practice (Building the Foundation for Cognitive Presence)**
    - Use low-stakes quizzes to leverage the "testing effect" for long-term retention.
    - This is a robust strategy that benefits learners at all levels (Latimier et al., 2021).

Slide 6: The Heart of Engagement: The Application Activity (10 mins)

- **Title:** From Posting to Problem-Solving
- **Alternatives to the Traditional Discussion Board:**
    1. **Case-Based Clinical Reasoning:** Students post differential diagnoses and justifications.
    2. **Jigsaw on "Grand Topics":** Successfully adapted for powerful online learning (Anderson & Cudney, 2025).
    3. **Collaborative Annotation:** Students comment directly on an article or case study.
    4. **Concept Map Curation:** Students create a concept map and explain it to their peers.

Slide 7: Workshop: The Case Study Clinic (25 mins)

- **Part 1: Instructions (5 mins)**
    - "We are going into breakout rooms for 15 minutes."
    - "In your group, read the provided clinical case."
    - "**Task 1:** Draft ONE engaging discussion prompt for this case that promotes clinical reasoning."
    - "**Task 2:** Create a simple 3-point rubric for assessing student responses to your prompt."
- **Part 2: Breakout Rooms (15 mins)**
- **Part 3: Share Out & Discussion (5 mins)**

Slide 8: Giving Effective Feedback (10 mins)

- **Title:** Feedback that Feeds Forward
- **Key Strategies:**
    - **Ask, Don't Just Tell:** Use Socratic questioning in feedback to prompt deeper thinking.
    - **Group Feedback:** Address common misconceptions in module announcements.
    - **Focus on Process:** Give feedback on reasoning, not just the final answer.

Slide 9: Making Synchronous Sessions Count (10 mins)

- **Title:** From Optional Review to Unmissable Workout
- **High-Value Activities:**
    - **Live Diagnostics:** Present a new, unfolding case and use polls at decision points.
    - **Ethical Dilemma Debates:** Use a case with no clear right answer.
    - **"Stump the Professor":** Let students bring their hardest questions.

Slide 10: Q&A and Action Planning (6 mins)

- **Key Takeaways:**
    - Ground your course design in the **Community of Inquiry**.
    - Replace generic discussion boards with **active, problem-solving tasks**.
    - Use feedback and synchronous time to deepen, not just repeat.
- **Action Planning Prompt:** "What is ONE strategy you will try in the next term?"

Session 2: AI in Graduate Nursing Education: Wise & Ethical Use (90 Mins)

Slide 11: Title Slide (2 mins)

- **Title:** AI in Graduate Nursing Education
- **Subtitle:** Wise, Ethical, and Effective Use
- **Presenter:** Sara Keeth, PhD, PMP
- **Date:** [Date of Training 2]

Slide 12: Interactive Welcome (5 mins)

- **On-screen prompt:** Use the chat or polling tool:
    - *"In one word, what is your biggest **hope** about AI in your classroom?"*
    - *"In one word, what is your biggest **fear** about AI in your classroom?"*
- (A word cloud graphic appears and populates with responses)

Slide 13: What is AI and How Does it Work? (10 mins)

- **Title:** Demystifying the Tools
- **Key Concepts:**
    - Large Language Models are sophisticated "next-word predictors."
    - **"Hallucinations"** are plausible but incorrect or fabricated information. We must teach students to assume AI output is a "confident but unverified first draft." (Ji et al., 2023)

Slide 14: An Ethical Framework: The 4 P's (15 mins)

- **Title:** Permission, Privacy, Proof, and Process
- **Visual:** Four columns with icons and "Do/Don't" lists.
    1. **Permission & Purpose (Transparency)**
    2. **Privacy & Professionalism (HIPAA)**
    3. **Proof & Polish (Verification)**
    4. **Process (Show Your Work)**

Slide 15: Talking to Students About AI (10 mins)

- **Title:** Partnership over Policing
- **Key Strategies for Framing the Conversation:**
    - **Acknowledge its power:** "This is an amazing new tool, let's learn how to use it professionally."
    - **Focus on Integrity:** Connect AI use to the core values of nursing ethics and professional accountability.
    - **Emphasize Learning:** "My goal is for you to learn. Let's talk about how this tool can help or hinder that goal."

Slide 16: The Real Solution: Smarter Assessment Design (5 mins)

- **Title:** Moving Up Bloom's Taxonomy
- **Visual:** A pyramid diagram of Bloom's Revised Taxonomy (Anderson & Krathwohl, 2001).
- **Key Idea:** AI excels at lower-order tasks (Remembering, Understanding). Our assignments must target higher-order tasks (Applying, Analyzing, Evaluating, Creating).

Slide 17: Assignment Redesign: From Old to New (5 mins)

- **Title:** Example in Action
- **Two columns:**
    - **Old Assignment:** "Write a 3-page paper on the pathophysiology of heart failure." (Lower-order task)
    - **New, AI-Engaged Assignment:** "Prompt an AI to explain heart failure pathophysiology. Then, write a 2-page paper that:
        - a) **Evaluates** the AI's explanation for accuracy and completeness.
        - b) **Analyzes** its weaknesses and provides a better, more detailed explanation with diagrams.
        - c) **Creates** a new argument supported by 3 scholarly sources."

Slide 18: Workshop: The AI-Engaged Assignment (25 mins)

- **Part 1: Instructions (5 mins)**
    - "Now that you've seen an example, it's your turn."
    - "We are going into breakout rooms for 15 minutes."

    - "**Task:** Redesign one of your current assignments to be 'AI-engaged' by focusing on a higher-order skill like evaluating, analyzing, or creating."
- **Part 2: Breakout Rooms (15 mins)**
- **Part 3: Share Out & Discussion (5 mins)**

Slide 19: Creating a Clear & Fair Syllabus Policy (10 mins)

- **Title:** Setting Clear Expectations
- **Discussion:** Present three models for AI policies. Clear institutional policies and faculty training are essential for ethical integration (Mhlanga, 2023).
    1. **Zero Tolerance**
    2. **AI with Disclosure:** A practice that foregrounds academic integrity (Cotton, Cotton, & Shipway, 2023).
    3. **AI Integrated**

Slide 20: Open Forum: Concerns & Opportunities (6 mins)

- **Title:** Looking Ahead
- **Facilitated Discussion Prompts:**
    - "What is one opportunity with AI that excites you for our students?"
    - "What is a remaining concern that we, as a faculty, need to address together?"

Slide 21: Thank You & Resources (2 mins)

- **Thank you for your participation!**
- **Contact Info:** Sara Keeth, PhD, PMP
- **Link to a shared resource folder with:**
    - This presentation
    - The planning document
    - All references with links.