

Online Course Essentials | Engagement

Course provides opportunities for active learning and student-to-student interaction.

The Practical Inquiry Model (Garrison, Anderson & Archer, 2001) outlines four stages of cognitive presence that guide deeper, more reflective learning in online and blended environments:

- **Triggering Event:** A problem, issue, or question sparks inquiry. Instructors often introduce challenges that initiate learning, while students may also surface issues through discussion. Teaching presence is key to focusing the discourse on meaningful learning outcomes.
- **Exploration:** Students explore and reflect on the problem, often moving between private reflection and collaborative discussion. This divergent phase includes questioning, brainstorming, and sorting relevant information.
- **Integration:** Learners begin making sense of ideas, constructing meaning through continued discourse and reflection. Instructor guidance is vital in this phase to challenge thinking, address misconceptions, and model critical analysis.
- **Resolution:** Students apply what they've learned through reflection, problem-solving, or group consensus. Clear expectations support effective application and signal readiness to move on to new challenges.

This resource offers activity suggestions, examples, and tools to help you integrate each stage into your teaching practice immediately.



Triggering Event

Activity Ideas WHAT IS IT, AND WHY USE IT?	Examples	Associated Tools
Course Readings Students are directed to read selected content—such as textbook sections, scholarly articles, or blog posts—chosen to spark curiosity or puzzlement, either inherently or through instructor-provided guiding questions.	- Course text is collaboratively annotated; the instructor encourages students to critically analyze author’s assumptions. - News articles related to course content are provided to show how theory relates to practice to complicate initial understandings	- ICON pages - links to content presented alongside accompanying text (e.g., guiding questions) - Perusall
Videos Students watch thought-provoking videos—recorded by the instructor or curated from the web—that provide background information and pose a central question or challenge to spark inquiry.	- Professionally recorded, scripted lecture videos are designed for brevity and engagement, often including time-stamped quizzes and prompts that encourage reflection and application. - Activities like virtual field trips or experience-based video prompts help students connect course concepts to real-world contexts, highlighting tensions between theory and practice.	- DOE Media Studio - UICapture Video Quizzing - UICapture Screen Capture – voiceover narration of recording on your desktop Ed.ted.com - can search library or create your own lessons with their videos
Interactive Data Students view and/or interact with visual representations of data that can challenge their assumptions on a given topic or issue	- Students are sent to Gapminder to investigate public datasets - Instructor creates interactive presentation using data	Gapminder.org

Exploration

Activity Ideas WHAT IS IT, AND WHY USE IT?	Examples	Associated Tools
Concept-Checks • Short scans of student understanding. Serves to both actively engage students as they monitor their own understanding, and provide the instructor insight into student progress • Often used during synchronous online meetings, but can also be used during asynchronous learning to guide student attention and to keep the instructor informed about student learning	• Muddiest Point - asks for the “most confusing” concept, best at the end of a class session • One-Sentence Summary - Summarize the topic into one sentence • One-Minute Paper - students write for one minute -- (e.g., “what was the most important thing you learned today for your group project?”)	• Microsoft Word Online – student groups are assigned contribute to ongoing list of class-wide discussion questions • ICON discussions - can be used both synchronously and asynchronously to gauge students’ grasp of problem before moving to further exploration
Class-Wide Discussion • Both online and during synchronous videoconferencing class meetings, discussions are where students participate in collective question-posing and preliminary meaning-making • Focus on brainstorming during this stage to generate a large number of ideas for identifying key questions and exploring relevant information.	• Pre-Class Questions- students submit questions about the reading or other course material for discussion prompts selected by the instructor • Perspective Taking - ask students to adopt the perspective of someone else to generate relevant questions • <u>Pass the Paper</u> - students write a response to prompt and encourage to post their own questions	• Zoom • Microsoft PowerPoint Online (during synchronous Pass the Paper exercise) • ICON Discussions (asynchronous text-based posts) • Ed.ted.com

Small Group Work • When used at this stage, these can highlight the interplay between individual reflection and class-wide discussion. Individual ideas are presented in groups and class-wide “report outs” highlight productive divergence when exploring a given problem or situation.	• Impact Matrices (aka “For Corners”) - used in D40 Week 3 “Your Online Students” activity. Simple cross-matrices with two variables to determine the impact of factors. • Scavenger Hunt - well-suited for online courses. Students search the web for examples and resources related to topics. • Interviews - can be especially helpful for providing ideas of how theory relates to practice. Students identify interviewee and formulate questions that illustrate how experts/novices understand or approach a topic	• Zoom (synchronous class sessions - can use Annotations for Impact Matrices activity) • Zoom (interviews – students can host their own meetings to record their interview) • ICON Discussions – for scavenger hunt, a representative from each group submits findings for the rest of the class to view
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Integration

Activity Ideas WHAT IS IT, AND WHY USE IT?	Examples	Associated Tools
Mapping • Students begin to refine their thinking by constructing a visual representation of their understanding and/or solutions to a given problem • Many of these projects could be drafted in this stage for peer review, and finalized for the next stage (Resolution)	• Concept Maps - Students write keywords for topic and organize them into categories; connections are drawn between categories • Timelines - preceding events for a given topic annotated to provide critical analysis of topic or phenomenon • Storyboards - visual representation of multi-step concept, a narrative explanation, and/or critical analysis of a problem • Infographics - relations between key concepts and complex ideas represented in a succinct and compelling visualization • Map Creation - students plot historical events or occurrences of a given topic	• PowerPoint – most familiar tool for students; also works well for small group assignments. • Microsoft provides many free mapping templates, and a web search provides additional template options.
Proposals • Students are encouraged to “try out” solutions to identified problems and/or identify most promising theses. Potential for multiple solutions and accompanying rationales can be provided to move forward with appropriate scope and/or focus.	• Annotated Bibliographies - not only identifies the source but also describes and evaluates how useful, relevant, and accurate the source is for a given thesis/project • Models/Diagram/Schematics - build real or virtual models or schematic to demonstrate how components work together in a given system	• Microsoft Word and IOCN Speedgrader (to leave annotated feedback on the bibliography) • Microsoft provides many free diagramming templates • Additionally, students can use household items to create a model, and then take pictures to

		submit to ICON using the Canvas mobile app
Small Group Project • May be same or different groups from Exploration phase, depending on how closely connected learning activities are to larger assignments, and desire for more varied student interactions • Students work together to create something that prepares students for a group or individual final assignment	• A Class Wiki - students collaboratively author pages using text, images, audio and video. Can work on Wikipedia or class-specific wiki where students can link multiple wiki pages together to create a class website. • Field Reports - Students collect a variety of media (notes, photographs, audio/video recordings, illustrations) to identify and categorize common themes in relation to their research problem. They begin to interpret results and pose preliminary solutions.	• Microsoft OneNote (available through Ulowa O365 subscription) can be shared with students using an edit link – sections and pages can be organized and edited by the class. • WikiEdu provides guidance for Wikipedia editing assignments • Students can use their smartphones to capture media for field reports, which can be posted to a collaborative Padlet board

Resolution

Activity Ideas WHAT IS IT, AND WHY USE IT?	Examples	Associated Tools
Presentations • Final recommendations or solutions to an identified problem are communicated in a compelling and convincing manner	• Video Presentations - helpful for larger classes where synchronous presentations take too much class time. Provides students a shareable artifact of their learning • Poster Presentations - mimics work in professional organizations and provides students a shareable artifact of their learning. • Mappings (finalized) - continuation of mapping exercises from Integration phase	• Students can log into UICapture and use the screen recording and webcam recording features to create a video presentation with presentation slides and narration • Microsoft provides many free poster templates, and various free online tools such as Canva.com provide options for creating posters • Microsoft provides many free mapping templates
Project Implementations • Focus on application to personal and professional lives. Opportunity for real-world experiences to inform findings. • Implementation goals may include 1) eliminating unnecessary components or refining solutions, 2) aiding decision making by simulating 'what if' scenarios	• Project Planning Documents - white papers, business plans, etc. • Service Learning - students participate in real-world projects and reflect on lessons learned • Executive Summaries of Field Reports	• Microsoft provides many free project planning templates • Students can export their finalized Field Report Padlet to PDF for turning into an ICON assignment as an appendix to their executive summary for key stakeholders

Reflections • May be “part 2” of a small group project, where students are asked to provide a detailed account of their individual process, contributions to larger group, and meaningful takeaways	• Discussion - especially helpful for collectively reflecting on progress and understanding why some problems persist and/or concepts remain open to interpretation • Reflection Paper - students connect lessons learning to their own personal and professional interests and identify further areas for improvement • Journals - extension of reflection paper, with potential for multiple checkpoints throughout a course	• ICON discussion board provides time for thoughtful posts on students’ hectic schedule at the end of a semester. Usually necessary for instructor to send a summary of main points as a send-off for students at end of the term • Microsoft Word – for reflections and journals. May decide to ask students to submit multiple entries to the same document for a multi-part journal throughout the semester
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