Creating & Facilitating Effective Discussion Boards

What are discussion boards?

Online discussions are a common feature of online, hybrid, or distance-learning courses. While not an exact replica of an in-person discussion, well-designed online discussions can have many of the same educational benefits as traditional discussions.

According to the Online Learning Consortium (OLC), online discussions engage students in three distinct forms of interaction:

- 1. **Student-to-student interactions** (students learn from one another);
- 2. **Student-to-instructor interactions** (students learn from a subject matter expert);
- 3. **Student-to-content interactions** (students apply what they have learned in other elements of the course to direct and enhance the discussion).

Types of Discussions

There are two types of discussions that lend themselves well to online instruction: (1) Asynchronous discussions and (2) Synchronous discussions. Both have benefits and drawbacks. Asynchronous discussions are arguably more common due to the time flexibility they provide participants (i.e., students and instructors can participate on their own time).

The following table compares synchronous and asynchronous discussions:

	Synchronous Discussions	Asynchronous Discussions
Tools/Platforms	Canvas Breakout Rooms (Conferences), Zoom, Collaborate, GoToMeeting, chat rooms, tweets	Threaded discussion forums (e.g., Canvas)
Similarity to traditional classroom teaching	More similar	Less similar
Spontaneity	Thinking "on your feet"	More reflective (not immediate)
Pedagogical strengths	Good for lectures, information transmission, Q&A forums	Good for extended discussion, knowledge construction, organizing discussion, developing academic discourse



Synchronous Discussions

Asynchronous Discussions

Flexibility for students	More than the classroom, less than asynchronous	Very flexible
Dominant communication style	One to many	Many to many
Teacher-student ratio	Better for larger groups	Better for smaller groups (large groups could create subgroups)

a. Modified from OLC Workshop: Creating & Facilitating Effective Online Discussions

Goals of Discussion Boards

As with any learning environment or activity, if you choose to implement discussion boards in your online course, you should identify the goals associated with your discussion. Each discussion can have its own unique goal or they can be sequenced to align with your course learning outcomes.

Consider the following examples when you design your discussion boards:

- Do you want students to clarify their understanding of a particular concept?
- Do you want students to develop a cogent argument to support an opinion?
- Do you want students to *collaborate* with one another so as to develop a sense of community?
- Do you want students to create new ways of thinking about a topic?

Depending on the goals of your planned discussion, you might opt for one type of discussion or another, as discussed next.

Types of Discussion Boards

There are two primary types of discussion boards: Asynchronous and Synchronous.

Advantages of Asynchronous Discussions

Here are some advantages of asynchronous discussions:

- 1. Are generally more convenient and flexible when compared to synchronous discussions;
- 2. Are effective at promoting more meaningful reflection and deep thinking on discussion topics;



- 3. Provide students and instructors more time to read and reflect on the responses of others in the course;
- 4. Allows **all** students to voice their opinions, including introverted, shy, or unconfident speakers.

Advantages of Synchronous Discussions

Here are some advantages of synchronous discussions:

- 1. They are more similar to traditional classroom discussions when compared to asynchronous discussions;
- 2. Synchronous discussion tools (e.g., microphones, webcams, etc.) allow students to interact in real time and take into account non-verbal cues, such as body language or tone;
- 3. Allows for immediate feedback from peers and/or the instructor;
- 4. Is better suited for online lectures or Q&A sessions.

Creating Good Questions

Good questions are aligned with *learning outcomes*. The table below can help you to create questions that are aligned with learning outcomes at various cognitive levels.

Level of Bloom's Taxonomy	Definition of Level	Cognitive Level	Associated Action Verbs
1. Remembering	When memory is used to produce or retrieve definitions, facts, or lists, or to recite previously learned information	Low	List, Name, Identify, Show, Define, Recognize, Recall, State
2. Understanding	Constructing meaning from different types of functions	Low	Summarize, Explain, Interpret, Describe, Compare, Paraphrase, Differentiate, Visualize, Restate
3. Applying	Learned material is used through products like models or presentations	Low	Solve, Illustrate, Calculate, Use, Interpret, Relate, Manipulate, Apply, Classify, Modify



Level of Bl Taxonomy		Definition of Level	Cognitive Level	Associated Action Verbs
4. Analyz	ing	Breaking concepts into parts and determining how they relate to one another	High	Analyze, Organize, Deduce, Choose, Contrast, Compare, Distinguish
5. Evalua	ting	Making judgments based on criteria and standards through critiquing	High	Evaluate, Estimate, Judge, Defend, Criticize, Justify
6. Creatin	ng	Synthesize parts into something new and different creating a new product	High	Design, Support, Plan, Devise, Create, Construct

Convergent versus Divergent Questions

Convergent questions are usually written at "lower order" levels (see above) and often have one best or factually correct answer. These sort of knowledge check questions or not without value, however, for the purposes of a discussion board, typically limit responses and "higher order" thinking. Accordingly, convergent questions are better suited for quizzes or essays.

Example: Explain the reasons why nutritionists recommend limiting sugar intake among individuals with diabetes.

Alternatively, **divergent questions** usually elicit higher order thinking and support differing opinions among your students. A consequence of this is that deeper thinking is promoted amongst students when divergent questions are presented, wherein students must analyze and evaluate potential answers to the question (i.e., there is no one best answer).

Example: Create a daily diet plan for someone with diabetes and justify your choices with evidence presented in class discussions. Lectures, and/or course readings.

Ineffective Questions

- 1. Yes/No: Prior to 2020, was marijuana legal in the State of Michigan?
 - **Better**: For what reasons did the State of Michigan choose to legalize marijuana sales and possession?
- **2. Factual:** Who is the top-ranking officer of the United States Army?
 - Better: What qualifications are necessary to ascend to the rank of General for the U.S. Army?



- **3. Elliptical:** If your question is not clear enough (i.e., too vague) your students will not know how to respond.
- **4. Leading:** The expected answer is hinted at or overtly stated in the question itself (ex: "Don't you think...?").
- **5. Slanted:** Closes down students who may not agree with the implied assumption (i.e., students are not encouraged to share conflicting opinions).

Effective Questions

Effective discussion questions encourage:

- 1. Reflection, interpretation, analysis, and problem-solving;
- 2. Engagement with peers;
- 3. Connections with course material; and,
- 4. Connections with personal experience.

Alternatives to the Traditional Q&A Approach

Option Example

- Debates Debates can be a good discussion tactic to generate controversy amongst the students. However, students can easily get caught up in swapping opinions and it's the instructor's role to challenge them to justify their arguments based on evidence from the course materials.
- A fundamental tenet of information security is that you must force the user to periodically change his or her password. But this practice actually undermines security. With constantly changing passwords, users are forced to write them down in an easy-to-find location or use an easy-to-guess algorithm. We are better off letting users keep the same password indefinitely. Do you agree?
- 2. Jigsaw This method breaks up complex topics into many components and asks each member of the class (or groups of students for larger classes) to choose one component, research it, and then define and describe it to the rest of the group.
- Share with students the essential question: How does pollution affect our society? Explain to students that they will be split up into groups and each group will be responsible for becoming an expert on a certain article. They will need to answer a set of questions (i.e., What is the central idea of the article? What impact is the pollution having on earth? Is anything being done to solve the problem?, etc.) that they will then share with the whole class.



Option Example

highlight the various outcomes or consequences of different concepts or decisions in response to a scenario. These types of questions allow for a variety of answers, with each one encouraging the students to dig deeper into the fundamental concepts being taught in the course. You can also add new details and revelations throughout the week to encourage additional discussion.

A 72-year-old man is admitted to the hospital for a kidney transplant. His daughter is brought in as the best available match as a donor. As the man's doctor, you discover from the pre-op lab work that the daughter is not a suitable donor because she is not his biological daughter. What, if anything, do you tell the man, his wife, or the daughter? This example provides an ideal way to explore how fundamental principles of privacy, physician honesty, and shielding a patient from harm collide in the real world.

4. Role Play - Role playing can be a fun and different technique to help encourage students to be creative and explore various personas. This format encourages students to look at an issue from the viewpoint of another. An instructor can assign roles based on the course objectives and allow students to respond to questions on the discussion board by answering them as their "character" would.

A History professor asks students to do some research on a person living in an urban Roman city in the first century CE. Each student creates a character and writes a diary entry or letter recording what he or she did in the course of a day or a series of days. To do this well, students need to research a few things about the professions and classes that would have existed. The students end up talking back and forth in character.

5. Chain-linked - Chain-linked discussions are started by asking one specific question. The first person to respond answers the original question, and then they must ask a new question for the second person to answer, and so on. Each student has the responsibility to do both parts; answer a question and think critically enough to apply the content in order to formulate a new question. Students will quickly figure out the advantage of participating early!

This week, we learned about the major composers of the 18th century classical period. What newly-developed instrument replaced the harpsichord and what made it different from the harpsichord? The newly-developed instrument that replaced the harpsichord was the pianoforte, now called the piano. Two things made it different: 1) Its strings are struck by felt hammers rather than plucked or stuck with steel hammers and 2) It has the ability to be played both softly and loudly. Here's my question: Why was Beethoven's 9th Symphony, especially the fourth movement, considered so controversial when it was first performed?



Option Example

6. Save the Last Word - Save the Last Word for Me is a technique that can be used in any class that involves complex reading or ideas that might be interpreted differently by people. This strategy makes it less risky for students to choose reading passages that they find to be difficult and more free to openly interpret a passage, even if they are not confident in its intended meaning. This also allows the teacher to assess what the students find complex.

Half of the students are instructed to post a quote from the reading that they didn't really understand or would like more clarification on. Then the other half of the students must offer their ideas, interpretations, and understandings of the quote. The key is that every quote must have at least two responses from two different students. After a certain amount of time, the original student who posted the quote must explain what they learned from the discussion of their quote. Then the students switch roles.

Facilitation Techniques for Discussion Boards

There are a few simple facilitation strategies you can use to ensure your discussion boards operate smoothly.

- 1. Provide an **introduction** for each discussion board topic to frame the conversation and the steer your students in the right direction.
- 2. **Be present** in your discussion but be mindful of how frequently you post. In general, you should post more often in early discussions, so as to draw attention to effective responses and to address any misconceptions; as the course gets closer to the end, however, you should allow students to lead the conversation.
- 3. Your **role** as the instructor is to facilitate and guide the conversation. Allow students to converse freely and only jump in when the conversation gets off topic, when an idea needs to be further clarified (you might address that by posing a question), and when there is an issue of Netiquette.
- 4. If you notice certain students not participating regularly, reach out to them privately to **encourage participation.** Publicly addressing these students in the discussion board itself may lead to further withdrawal.
- 5. Similarly, you may need to **rein in dominate students** who post far too long responses and/or provide so much content that they suffocate the opinions and input of others. Again, a private email or message should be sent to this type of student to address their behavior and to provide alternative solutions, such as assigning the student a unique role, such as summarizer or facilitator.



Forums As a Supplement to Discussion Boards

Discussion boards are great for engaging students about specific content, however, an online course can present unique challenges with regards to clarifying misconceptions, seeking guidance, or for sharing off-topics ideas. To address such possibilities, you might look to create a few additional forums where your students can still interact with one another or with you (the instructor).

The Online Learning Consortium has outlined a few different types of forums to address such potential concerns:

- 1. **Introduction forum** A place where students can get to know one another and where they can get to know you. Helpful for identifying students' educational backgrounds, what requisite knowledge they bring to the course, and for identifying specific educational interests they have.
- 2. **Virtual watercooler forum** A place for students to informally interact with one another to share ideas, ask questions, or get to know one other better. Can help to keep other discussion boards focused on the topic at hand.
- 3. **Help forum** A place for students to post questions or seek further clarification about a topic not explicitly addressed in another course discussion.
- 4. **News forum** A place where, depending on your course content, students can share news or other resources related to the field but not otherwise directly associated with another discussion board.

