



Cultivating Deep Learning Using Discussion Boards

Rob Rose
Instructional Designer
University of North Florida

In this
workshop, you
will be able
to...



Identify the characteristics of discussion board prompts that support deep learning, knowledge construction, and sustained discussion



Create your own discussion prompts that generate deep learning, knowledge construction, and sustained discussion

What is the goal or purpose of a discussion activity?

- Social constructivism
- Combat the tendency toward the isolation of online learning

Parallels between face-to-face and online discussions



Interesting
study

Sadaf, A., Richardson, J. & Ertmer, P. A. (2011).
Relationship between question prompts and
critical thinking in online discussions. In *annual
meeting of the Association for Educational
Communications and Technology*, Jacksonville,
FL. (Vol. 10, pp. 978-1)

Question Prompt	Description
Playground	Questions require the interpretation or analysis of a specific aspect of the material, or “playground,” for discussion. Students are free to discover and interpret the material.
Brainstorm	Questions ask students to generate a number of conceivable ideas, viewpoints, or solutions related to a specified issue. Students are free to generate any or all ideas on the topic.
Focal	Questions relate to a specific issue and require students to make a decision or take a position and justify it. Students are asked to support one of several possible positions
General Invitation	Questions invite a wide range of responses within a broad topic in an open or unfocused discussion.
Lower-Level Divergent	Questions require students to analyze information to discover reasons, draw conclusions, or make generalizations
Analytical Convergent	After reviewing content, students must produce a straightforward conclusion, summarize the material, or describe a sequence of steps in a process. Answers require analytical thought but lead to a single correct answer.
Shotgun	Multiple questions that may contain two or more content areas
Funnel	Prompt begins with a broad opening question followed by one or more narrower questions.
Critical Incident	Presents a scenario or case study; students are asked to propose solutions to the issues presented in the scenario/case study.

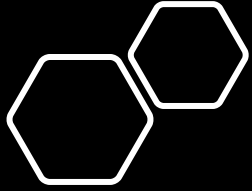
Question Prompt	Description
Playground	Questions require the interpretation or analysis of a specific aspect of the material, or “playground,” for discussion. Students are free to discover and interpret the material.
Brainstorm	Questions ask students to generate a number of conceivable ideas, viewpoints, or solutions related to a specified issue. Students are free to generate any or all ideas on the topic.
Focal	Questions relate to a specific issue and require students to make a decision or take a position and justify it. Students are asked to support one of several possible positions
General Invitation	Questions invite a wide range of responses within a broad topic in an open or unfocused discussion.
Lower-Level Divergent	Questions require students to analyze information to discover reasons, draw conclusions, or make generalizations
Analytical Convergent	After reviewing content, students must produce a straightforward conclusion, summarize the material, or describe a sequence of steps in a process. Answers require analytical thought but lead to a single correct answer.
Shotgun	Multiple questions that may contain two or more content areas
Funnel	Prompt begins with a broad opening question followed by one or more narrower questions.
Critical Incident	Presents a scenario or case study; students are asked to propose solutions to the issues presented in the scenario/case study.

Playground prompt

In the first paragraph of the web article, “Attributes of Good Listening,” the author states that, “You cannot be a good leader unless you are a good listener.” In 1-2 paragraphs explain in your own words what the author means by this. How are the two (listening and good leader) related? Do you agree or disagree? Explain your reasoning.



Question Prompt	Description
Playground	Questions require the interpretation or analysis of a specific aspect of the material, or “playground,” for discussion. Students are free to discover and interpret the material.
Brainstorm	Questions ask students to generate a number of conceivable ideas, viewpoints, or solutions related to a specified issue. Students are free to generate any or all ideas on the topic.
Issue	Questions relate to a specific issue and require students to make a decision or take a position and justify it. Students are asked to support one of several possible positions.
General Invitation	Questions invite a wide range of responses within a broad topic in an open or unfocused discussion.
Lower-Level Divergent	Questions require students to analyze information to discover reasons, draw conclusions, or make generalizations.
Analytical Convergent	After reviewing content, students must produce a straightforward conclusion, summarize the material, or describe a sequence of steps in a process. Answers require analytical thought but lead to a single correct answer.
Shotgun	Multiple questions that may contain two or more content areas.
Funnel	Prompt begins with a broad opening question followed by one or more narrower questions.
Critical Incident	Presents a scenario or case study; students are asked to propose solutions to the issues presented in the scenario/case study.



Brainstorm prompt

Families of children with hearing loss often turn to the internet for information regarding hearing, hearing loss, intervention practices, and communication modalities (i.e., oral communication, signing systems and ASL). (1) Discuss some of the potential benefits and dangers of relying on internet information for parents. (2) Tell how you would help parents evaluate what they read on-line.

Question Prompt	Description
Playground	Questions require the interpretation or analysis of a specific aspect of the material, or “playground,” for discussion. Students are free to discover and interpret the material.
Brainstorm	Questions ask students to generate a number of conceivable ideas, viewpoints, or solutions related to a specified issue. Students are free to generate any and all ideas on the topic.
Focal	Questions relate to a specific issue and require students to make a decision or take a position and justify it. Students are asked to support one of several possible positions.
General invitation	Questions invite a wide range of responses within a broad topic in an open or unfocused discussion.
Lower-Level Divergent	Questions require students to analyze information to discover reasons, draw conclusions, or make generalizations.
Analytical Convergent	After reviewing content, students must produce a straightforward conclusion, summarize the material, or describe a sequence of steps in a process. Answers require analytical thought but lead to a single correct answer.
Shotgun	Multiple questions that may contain two or more content areas.
Funnel	Prompt begins with a broad opening question followed by one or more narrower questions.
Critical Incident	Presents a scenario or case study; students are asked to propose solutions to the issues presented in the scenario/case study.

Focal prompt

If you recall back to the first chapter in the Ford book, in her story about Gerald's tires, she talks about Gerald's employees taking a personality test—the Myers Briggs test. Do you think this would be beneficial when hiring new employees where you work? Use the discussion board to debate your perspective.

What did this
study
demonstrate?

What did this
study
demonstrate?

If the goal of the online discussion is to facilitate *higher levels of critical thinking...*

What did this
study
demonstrate?

If the goal of the online discussion is to facilitate *higher levels of critical thinking...*

Critical Incident questions types work the best

Question Prompt	Description
Playground	Questions require the interpretation or analysis of a specific aspect of the material, or “playground,” for discussion. Students are free to discover and interpret the material.
Brainstorm	Questions ask students to generate a number of conceivable ideas, viewpoints, or solutions related to a specified issue. Students are free to generate any or all ideas on the topic.
Focal	Questions relate to a specific issue and require students to make a decision or take a position and justify it. Students are asked to support one of several possible positions
General Invitation	Questions invite a wide range of responses within a broad topic in an open or unfocused discussion.
Lower-Level Divergent	Questions require students to analyze information to discover reasons, draw conclusions, or make generalizations
Analytical Convergent	After reviewing content, students must produce a straightforward conclusion, summarize the material, or describe a sequence of steps in a process. Answers require analytical thought but lead to a single correct answer.
Shotgun	Multiple questions that may contain two or more content areas
Funnel	Prompt begins with a broad opening question followed by one or more narrower questions
Critical Incident	Presents a scenario or case study; students are asked to propose solutions to the issues presented in the scenario/case study.

What did this
study
demonstrate?

If the goal of the online
discussion is to
exchange ideas...

What did this
study
demonstrate?

If the goal of the online
discussion is to
exchange ideas...

Focal prompts work the
best

What did this
study
demonstrate?

The lowest level of
thinking came from...

What did this
study
demonstrate?

The lowest level of
thinking came from...

The Brainstorm and
General Invitation
questions

Question Prompt	Description
Playground	Questions require the interpretation or analysis of a specific aspect of the material, or “playground,” for discussion. Students are free to discover and interpret the material.
Brainstorm	Questions ask students to generate a number of conceivable ideas, viewpoints, or solutions related to a specified issue. Students are free to generate any or all ideas on the topic.
Focal	Questions relate to a specific issue and require students to make a decision or take a position and justify it. Students are asked to support one of several possible positions.
General Invitation	Questions invite a wide range of responses within a broad topic in an open or unfocused discussion.
Lower-Level Divergent	Questions require students to analyze information to discover reasons, draw conclusions, or make generalizations.
Analytical Convergent	After reviewing content, students must produce a straightforward conclusion, summarize the material, or describe a sequence of steps in a process. Answers require analytical thought but lead to a single correct answer.
Shotgun	Multiple questions that may contain two or more content areas.
Funnel	Prompt begins with a broad opening question followed by one or more narrower questions.
Critical Incident	Presents a scenario or case study; students are asked to propose solutions to the issues presented in the scenario/case study.

Full results from this study

Percentage of Critical thinking levels expressed by students for different question prompts

	Critical Incident	Play-ground	Funnel	Shotgun	Brainstorm	General Invitation	Lower Divergent	Focal	Analytical Convergent
Triggering	6%	5%	3%	4%	6%	21%	5%	4%	17%
Exploration	31%	41%	44%	29%	56%	61%	22%	39%	13%
Integration	28%	47%	48%	66%	38%	17%	69%	55%	55%
Resolution	34%	6%	4%	1%	0%	0%	4%	1%	5%



Okay, so now what?

What
makes a
good
discussion
question?

What
makes a
good
discussion
question?



It is connected to the intended purpose and the learning objectives to be achieved (i.e., Blooms taxonomy)

What makes a good discussion question?



It is connected to the intended purpose and the learning objectives to be achieved (i.e., Blooms taxonomy)



It will push students to deepen their thinking and understanding by engaging in the discussion

What makes a good discussion question?




It is connected to the intended purpose and the learning objectives to be achieved (i.e., Blooms taxonomy)




It will push students to deepen their thinking and understanding by engaging in the discussion



Promotes divergent rather than convergent thinking



Convergent Questions	Divergent Questions
Typically written at the lower-order level	Elicits higher-order or differing responses
Has one correct or best answer	Promotes deep thinking
	Leads students to analyze and evaluate alternate answers



Convergent Questions

What is the common theme in this text?

What happened as a result of those actions?

What were the long-term consequences of this action?

What was the reason why this happened?

Divergent Questions

What different strategies could be used to solve this problem?

What is another way of looking at this?

Which side of this debate do you agree with the most?

How will Covid-19 change how we work in the future?



Top Three Discussion Strategies

Debate strategy

Case Study strategy

Role-based strategy

Debate Strategy – Revising a Discussion Prompt

Initial prompt that needs work:

What is the most significant insight that you took from the textbook reading this week on classroom management?
How can you apply that learning to your own classroom?

Debate Strategy – Revising a Discussion Prompt

Initial prompt that needs work:

What is the most significant insight that you took from the textbook reading this week on classroom management? How can you apply that learning to your own classroom?

BECOMES →

Detention and In-/Out-of-School Suspension are perhaps the most utilized tools for classroom management in American public schools. Should they be included in a teacher's approach to managing their classroom? Take and defend your position in the discussion conversation and include support from the reading to back up your argument.

Case Study Strategy – Revising a Discussion Prompt

What is the most significant insight that you took from the textbook reading this week on classroom management? How can you apply that learning to your own classroom?

Case Study Strategy

What is the most significant insight that you took from the textbook reading this week on classroom management? How can you apply that learning to your own classroom?

BECOMES →

After reading the attached case study describing the scenario experienced by Ms. Jones and her student, what steps would you take to address this management problem if you were the teacher?

Use of Discussion Roles

Role	Description
Discussion Facilitator	Start off the discussion by responding to the instructor's questions based on the assigned readings and raising what you see as the most important issues. Keep the discussion moving in a productive direction and get it back on track if the group strays from the main track or the discussion seems to stall.
Inventor	Generate fresh and creative ideas and new perspectives on the questions being discussed that have not been brought up yet in the discussion.
Elaborator	Expand or provide some support for an idea someone else has already put out in the discussion.
Questioner	Push others to go deeper and elaborate on their ideas through asking questions. You may want to ask questions such as "Why do you think X?" or "What implications does your point have for Y?"
Devil's Advocate	Take a contrary position to one (or more) of your classmates' ideas and make a reasonable defense as to why this is a logical position to take.
Synthesizer	Make connections between posts, pull comments together, and push the conversation forward (maybe in new directions).



Top Three Discussion Strategies

Debate strategy

Case Study strategy

Role-based strategy

A word about rubrics



The diagram illustrates a rubric table structure. It consists of a header row with two horizontal lines for a title, and two data rows. Each data row has four columns. The first column of each data row contains two horizontal lines for criteria. The second and fourth columns of the first data row, and the fourth column of the second data row, contain a checkmark, indicating specific criteria are met.

Criteria		✓	
			✓

- Focus might include
 - The quality and insight of the contribution
 - The integration or course content
 - The interactions between participants
 - All of the above
- Consider capturing a qualitative and quantitative aspect (Baker, 2011)
- Consider the ratio of points for the initial post and subsequent replies
- [Helpful discussion rubric resources](#)

Alternatives to Traditional Discussion Boards



Flip™

Alternatives to
Traditional
Discussion Boards

Perusall[®]

Graphic Organizer Tool

Module	Original Discussion Prompt	Module Objective(s)	Do you want to revise?	Debate structure revision? Case study revision? Other revision?	Additional considerations
1	What is the most significant insight that you took from the textbook reading this week on classroom management? How can you apply that learning to your own classroom?	Describe the elements that comprise effective and appropriate classroom management strategies	Yes	Detention and In-/ Out-of-School Suspension are perhaps the most utilized tools for classroom management in American public schools. Should they be included in a teacher's approach to managing their classroom? Take and defend your position in the discussion conversation and include support from the reading to back up your argument.	Are discussion roles appropriate?
					Yes
					Prefer a video discussion format?
					No
					Is Perusal appropriate?
					No



Questions?