# Bloom's Taxonomy (Updated)

## Formulating Discussion Board Questions: How to Keep Them Active!

(Eds.). (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. New York: Longman.

Competence	Skills Demonstrated	<b>Question Cues</b>		
Remember	<ul> <li>observation and recall of information</li> <li>knowledge of dates, events, places</li> <li>knowledge of major ideas</li> <li>mastery of subject matter</li> </ul>	List, define, tell, describe, identify, show, label, collect, examine, tabulate, quote, name, who, when, where, etc.		
Understand	<ul> <li>understand information</li> <li>grasp meaning</li> <li>translate knowledge into new context</li> <li>interpret facts, compare, contrast</li> <li>order, group, infer causes</li> <li>predict consequences</li> </ul>	Summarize, describe, interpret, contrast, predict, associate, distinguish, estimate, differentiate, discuss, extend		
Apply	<ul> <li>use information</li> <li>use methods, concepts, theories in new situations</li> <li>solve problems using required skills or knowledge</li> </ul>	Apply, demonstrate, calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment, discover		
Analyze	<ul> <li>see patterns</li> <li>organization of parts</li> <li>recognition of hidden meanings</li> <li>identification of components</li> </ul>	Analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, explain, infer		
Evaluate	<ul> <li>compare and discriminate between ideas</li> <li>assess value of theories, presentations</li> <li>make choices based on reasoned argument</li> <li>verify value of evidence</li> <li>recognize subjectivity</li> </ul>	Assess, decide, rank, grade, test, measure, recommend, convince, select, judge, explain, discriminate, support, conclude, compare, summarize		
Create	<ul> <li>use old ideas to create new ones</li> <li>generalize from given facts</li> <li>relate knowledge from several areas</li> <li>predict, draw conclusions</li> </ul>	Combine, integrate, modify, rearrange, substitute, plan, create, design, invent, what if?, compose, formulate, prepare, generalize, rewrite		

Adapted from: Bloom, B.S. (Ed.) (1956) Taxonomy of educational objectives: The classification of educational goals: Handbook I, cognitive domain. New York; Toronto: Longmans, Green. Updated with: Anderson, L. W., Krathwohl, D. R., Airasian, P. W., Cruikshank, K. A., Mayer, R. E., Pintrich, P. R., Raths, J., & Wittrock, M. C.

#### **Steps to Designing a Good Question**

- 1. Identify what needs to be learned.
- 2. Develop a question that assesses that knowledge.
- 3. Administer the question to small group of students or colleagues (Try it out!).
- 4. Analyze the results and make modifications
- 5. Give question to students.
- 6. Analyze the results to determine if material was learned.
- 7. Make modifications for next time.
- 8. Repeat.

#### **PEAR Approach**

Personal – Having a personal connection

Experience – related to their lived experience,

Active – they must do something (upper levels of Bloom/Anderson et al.)

**Reflective** – and think about how it impacted them.

#### **Extend It!**

- Connect your question to the reading
  - o Ask them to analyze concepts in the readin
  - Have them make connections between theory or practice and personal lives
  - Ask them to experiment with concept in th reading
  - Have them tell what they would do differently
- Argue the opposite of a classmate's position
- Respond to a classmate and tell why you agre or disagree.
- Provide model responses
- Develop rubrics for assessment

### **Techniques for Engaging Synchronous Discussions**

# Seven Strategies for Engaging Students in Synchronous Discussions

- 1. Provide an agenda and list of questions ahead of time so that students can think about them
- 2. Clearly communicate your expectations and ground rules for their participation (TILT)
- 3. Allow for student creativity and input by asking them to generate questions for discussion
- 4. Start each session with an icebreaker
- 5. Use the chat window strategically by putting the prompts in and allow it to serve as a back-channel
- 6. Consider hosting shorter sessions with fewer students
- 7. Incorporate individual and peer feedback.

Modified from www.CatlinTucker.com

#### Creating Community for Engaged <u>Discussion</u>

**Online Profiles** – humanize and personalize your course

**Welcomes** – post a welcome video and introduction discussion

**Icebreakers** – use icebreakers frequently (https://symondsresearch.com/icebreakers-for-online-teaching/)

**Start as you mean to go on** – get them talking Day 1

Example Rubric for Scoring Participation & Making Expectations Clear

	Exceeds expectations	Meets expectations	Approaches expectations	Does not incl
Timely and active participation	Posts initial response before due date. Posts, replies, and asks questions four or more times throughout the week	Posts initial response by the due date. Posts, replies, and asks questions two or three times throughout the week	Posts initial response after the due date. Posts, replies, or asks questions once during the week.	Posts initia response after due date or doc post respons
Thoughtful and complete response to question(s)	Fully responds to the question(s). Post is supported by connections to the reading and real-life examples.	Fully responds to the question(s). Post is supported by connections to the reading or real-life examples.	Partially responds to the question(s). Provides vague or incomplete connections to the reading or real-life examples.	Does not pos response o response is va off topic, c repetitive.
Thoughtful contributions to the learning community	Posts thoughtful questions or novel ideas to peers that generate new ideas and group discussion.	Asks questions or posts thoughtful responses to generate a single peer's response.	Posts minimal or vague responses to peers that do not motivate a response (e.g., "I agree with you, Sherry!").	Does not pos response and does not repl peers.

<u>Techniques for Structured Synchronous Discussions:</u> Think-Pair-Share, TQE - Thoughts, Questions, Epiphanies, Snowball, Jigsaw, Hotseat/Five Minutes of Fame, Collaborative Note-Taking, Hat full of Quotes, Fishbowl, Debate, Case Studies, Classroom Response Systems that capture all opinions like Mentimeter/Slido, World Café, Cocktail Party.