



Foundations of Teaching in the Social Sciences

Fall 2015

Week 1, August 26, 3:30-4:45 (Notre Dame Room, LaFortune)

- Understanding your role, communicating expectations, and preparing for the first day of class

Week 2, September 2, 3:30-4:45 (Montgomery Auditorium, LaFortune)

- Preparing, structuring, and facilitating discussion sections and presentations

Week 3, September 9, 3:30-4:45 (Notre Dame Room, LaFortune)

- Grading and responding to student work

Week 4, September 16, 3:30-4:45 (Montgomery Auditorium, LaFortune)

- Teaching for critical thinking

Each workshop attended counts toward your “Striving for Excellence in Teaching” or “Advanced Teaching Scholar” Kaneb Center certificate

Facilitators:

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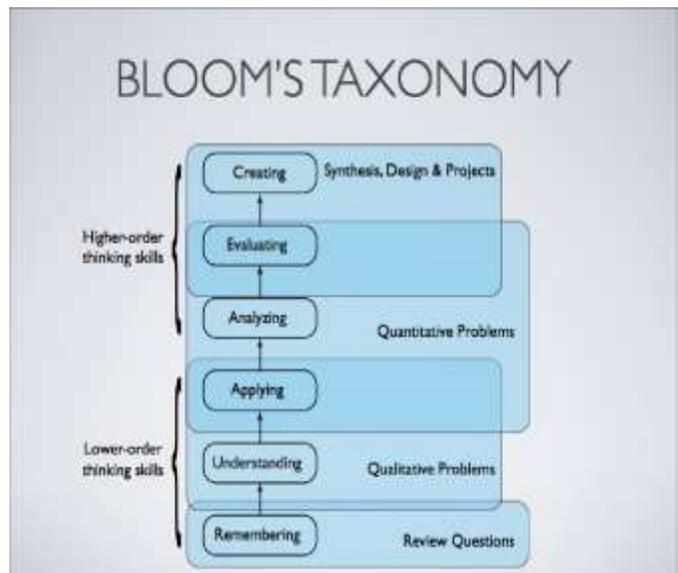
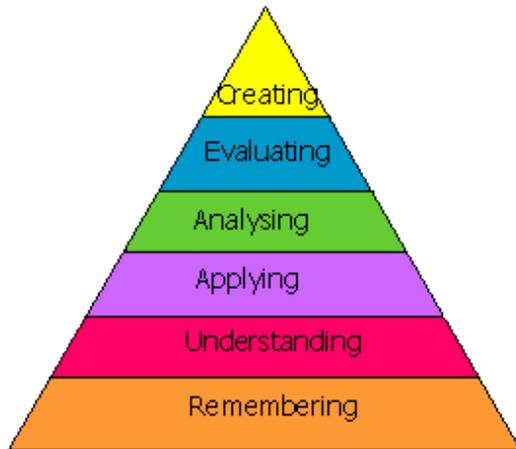
Andre Audette; aaudette@nd.edu

Week 4 Outline:

- Welcome and introductions
- Asking the right questions; Bloom’s Taxonomy
- Engaging students through active learning
- Teaching for problem-solving
- This week in teaching
- Wrap up

Bloom's Taxonomy

Bloom's Taxonomy is a useful classification of educational objectives and can help you evaluate what types of questions you are asking students and what level they are working at.



Below are examples of questions using Bloom's taxonomy for the topic of voting behavior.

LEVEL	VERBS USED	EXAMPLE
Remembering: can the student recall or remember the information?	define, duplicate, list, memorize, recall, repeat, reproduce, state	<i>What percentage of Americans voted in 2012?</i>
Understanding: can the student explain ideas or concepts?	classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase	<i>Describe two costs and two benefits of voting.</i>
Applying: can the student use the information in a new way?	choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write	<i>Propose one way the United States could reduce the costs of voting.</i>
Analyzing: can the student distinguish between the different parts?	compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test	<i>Compare the Michigan and Rochester models of voting behavior.</i>
Evaluating: can the student justify a stand or decision?	appraise, argue, defend, judge, select, support, value, evaluate	<i>Defend the merits of the Michigan model of voting behavior.</i>
Creating: can the student create a new product or point of view?	assemble, construct, create, design, develop, formulate, write	<i>Design a replacement for the electoral college system.</i>

Using Bloom's Taxonomy

Name a topic in your discipline that you'd like to think about using Bloom's taxonomy.

Design questions about your topic that illustrate the following criteria in Bloom's taxonomy. Also try targeting different learning styles as you design your questions.

I. **Remembering**

II. **Understanding**

III. **Applying**

IV. **Analyzing**

V. **Evaluating**

VI. **Creating**

Active Learning Handout

Identify active learning techniques that fit the student learning objective.

SCREEN-FREE

Individuals

- Concept map
- "Free write"
- Identify major points
- Make predictions
- "Minute papers"
- Oral presentations
- Pause & answer "why" or "how" questions
- Peer lecture on a topic
- Problem-solving tasks
- Response cards to a question
- Write creatively
- Write thesis statement/hypothesis

**Some individual or pair activities can be adapted for groups.*

Pairs

- Learning partners
- Role playing
- Team-pair-solo
- Think-pair-share

Small Groups

- Case studies
- Group discussions with assigned roles
- Jigsaw or expert groups
- Panels
- World Café

Whole Class

- Answer questions as a class
- Fishbowl

WITH TECHNOLOGY

- Blackboard discussion forum
- Blogging
- Co-edit short papers on Google Docs
- Demonstration or simulations
- Games
- Graphic representation
- Interpret a visual
- Label visuals on Flickr
- Produce an artifact
- Take polls or practice drills
- Use clickers or free software
- Use Twitter for answers or ideas
- Wiki
- Writing lab / Group Wikis

from: Tennessee Teaching and Learning Center

Active Learning Handout

Identify active learning techniques that fit the student learning objective.

Concept map

A diagram illustrating how concepts relate to one another.

http://edutechwiki.unige.ch/en/Concept_map

<http://tenntlc.utk.edu/using-visuals-mind-mapping-and-graphs/>

Fishbowl

A group of students form a circle in the middle of the room and discuss a topic. The remaining students listen and observe the dialogue.

<http://www.youtube.com/watch?v=54IEZnh82g0>

Jigsaw or Expert Groups

Each student is assigned to an original group and an expert group. The expert groups meet first and discuss a specific topic unique to each group. Then, students return to their original groups to share their expertise.

<http://edtech2.boisestate.edu/cameri/573/jigsaw.html>

Label visuals on Flickr

Flickr is a image viewing and hosting site.

<http://www.flickr.com/>

Learning partners

Students are assigned learning partners for discussion or note-sharing.

Polling Software

Students can use clicker devices or wireless applications, like Socrative, real-time polling.

<https://oit.utk.edu/instructional/tools/clickers/Pages/default.aspx>

<http://www.polleverywhere.com/>

<http://www.socrative.com/>

Team-Pair-Solo

Students begin working on a task or problem in a small group. The group then splits into pairs, and eventually the students work individually.

Think-Pair-Share

Initially student consider a problem or question on their own, but later join a partner for discussion. Ultimately, the pair reaches a joint conclusion.

Use Twitter for answers or ideas

Students can tweet responses, idea, or answers to questions. The instructor can use hashtags (#) or lists to organize the tweets, which can be viewed in real-time or the next session.

<https://twitter.com/>

Wiki

Students can collaborate to create a course Wiki.

<http://en.wikipedia.org/wiki/Wiki>

World Café

Students form small groups, each discussing a unique problem, question, or idea. After a designated period of time, all but one of the students moves to another group. The student staying behind becomes the "host" and begins a discussion with the new group on the previous topic.

For technology help—with blogs, wikis, Blackboard—see

<https://oit.utk.edu/instructional/Pages>

For more on adding visual elements: <http://tenntlc.utk.edu/using-visuals-and-visual-learning/>

Describe an active learning opportunity to engage students in the topic you described previously.

10 SUGGESTIONS FOR TEACHING PROBLEM SOLVING

Adapted from information in Teaching at Stanford: An Introductory Handbook for Faculty, Academic Staff/Teaching, and Teaching Assistants, by Nancy Plooster, TA Development Program; University of California, Santa Barbara

1. Try beginning each segment of a class by setting up a problem and explaining why it is interesting and important.
2. Rather than asking students to memorize a formula, teach them how to derive the formula and identify its parts.
3. Try the step-by-step approach to solve problems. Ask small questions along the way so that students can see how the solution is being calculated and can confront similar questions with the same strategy.
4. Encourage students to imagine ways of solving the problem before you begin to work the solution together. This takes advantage of the skills the students already have and encourages them to actively extend their knowledge.
5. When you call on students, try asking them to state a proposed method for solving the problem rather than asking them for the solution to a problem. For example, ask "how should I begin to work on this problem?" instead of "what is the answer to this problem?"
6. Encourage questions from the class and then avoid answering them directly. Make sure everyone hears and understands the question and then start working on an answer as a group.
7. If you maintain a high degree of interaction with the audience throughout the class, they may be more willing to participate and ask questions. The earlier in the class the students are encouraged to talk, the more likely it is that they will contribute for the rest of the class session.
8. Try solving the problem in two different ways. This gives students a sense of how best to approach a problem, and it may prevent mistakes. This technique also holds the students' attention because they will want to see if the answer is the same in both cases.
9. To help the students to learn to formulate problems as well as to find answers to problems, present students with situations or design problems and encourage them to develop questions for themselves. This enables students to see how work is done at higher levels in their discipline.
10. Before moving on to the new concept, try asking students specific questions about a representative problem to test for learning. Students will often avoid responding to general questions such as "Does everyone understand?" A more specific question will help you to determine how well the audience is working with the material. You may also try short, ungraded quizzes to give students practice using their problem-solving skills and to communicate to you where they are at in the learning process.