

# Better Thinking With Q-Tips

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# Why Have a Focus on Critical Thinking?

- Our goals for the B.A. program, as stated on our department Web page, include this phrase:
- The Bachelor of Arts degree in Psychology is designed ... to enhance their skills in communication, quantitative analysis, and **critical reasoning** (emphasis added).

# The QQTP Method

- The teaching technique described in this slide show was created by Patricia Conner-Greene.
- For more detail read her article:
- Connor-Greene, Patricia A. (2005). Fostering Meaningful Classroom Discussion: Student-Generated Questions, Quotations, and Talking Points. *Teaching of Psychology*, 32, 173-175.

# Academic Program Review

- In the 2007 Psychology undergraduate Academic Program Review report, a summary of data from our faculty survey stated:
- “...the faculty believes that we do a poor job of teaching students to think as scientists. . . . although this is rated as the single most important goal of our undergraduate program.”

# Academic Program Review (2)

- The report also concluded that
- “A majority of faculty report that they teach critical thinking skills but we do not have information about how this is accomplished. We believe that many faculty members would benefit from information about techniques and methods to enhance their teaching of critical thinking.”

# Report of External Reviewer

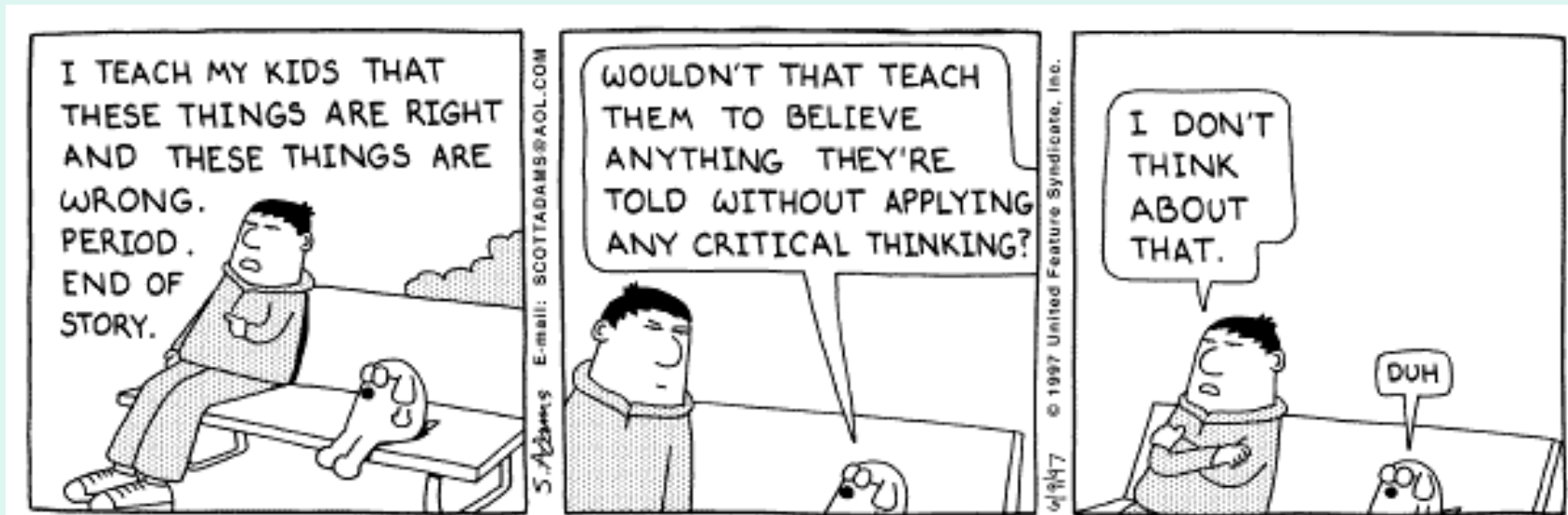
- Randolph Smith, editor of *Teaching of Psychology*, reviewed the undergraduate program in April, 2007.
- His final report stated, “If the department truly wishes to have its students develop critical thinking skills, then there should be a consensus on what critical thinking is, how to develop it, and how to assess it.”

# APA Guidelines for the Undergraduate Major

- Approved August, 2006 by the APA Council of Representatives
- Goal 3: Critical Thinking Skills in Psychology
- Students will respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.
- Source:  
[http://www.apa.org/ed/psymajor\\_guideline.pdf](http://www.apa.org/ed/psymajor_guideline.pdf)

# What is Critical Thinking?

- Whatever Dad says?

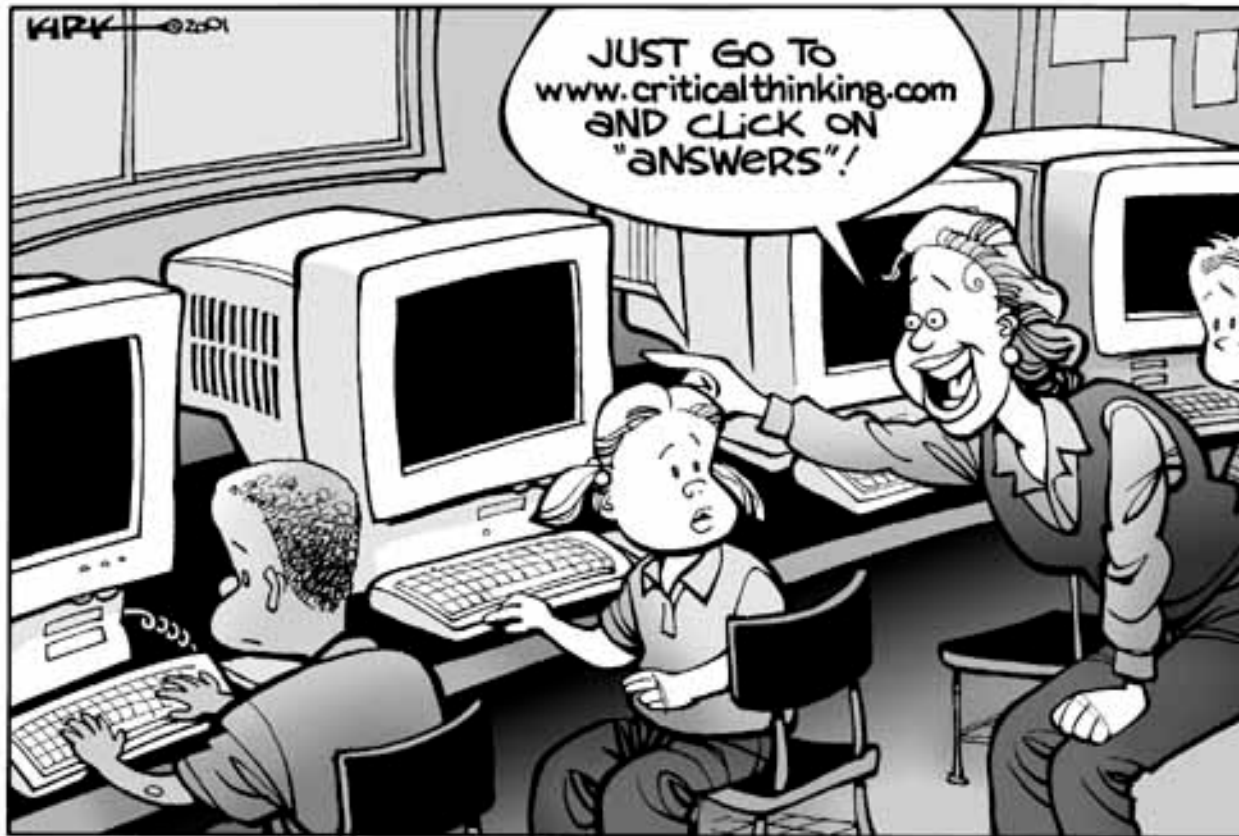


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# What is Critical Thinking?

- Whatever Wikipedia says?



# What is Critical Thinking?

- Re-inventing what already exists?



# What is Critical Thinking?

- Components of critical thinking are listed in the 2006 report of the APA Task Force on Strengthening the Teaching and Learning of Undergraduate Psychological Sciences

# Using Q-Tips for Critical Thinking

- How many ways can you think of to use Q-Tips to improve students' critical thinking?

# Better Thinking With Q-Tips



# The QQTP Assignment

- Question
- Quotation
- Talking Points

QQTP = “Q-Tip”

# Goals of the QQTP Assignment

- Encourage reading of assignments on at least a weekly basis
- Stimulate student engagement with the concepts and implications of the readings
- Increase meaningful participation in class discussion
- Address APA critical thinking components: Questioning skills, Use of evidence in psychology, Argumentation skills

# The Question Task

- **Question**
- As you read the assignment, note the points at which a question come to mind about the methods or conclusions of the research. If it helps, try turning section headings around, putting them in question form. Write a thoughtful question that invites analysis, synthesis, or evaluation of the material, or makes connections between the readings and previous discussion or readings.



# The Quotation Task

- **Quotation**
- Select a quotation that is especially pertinent or relevant to the main points of the readings. The quotation should be neither too short (1-2 lines) nor too long (10-12 lines). Remember to put the source in parentheses after the quote (who said it, what book or article and what page).

# The Talking Points Task

- **Talking Points**
- Write talking points that show you have thought seriously and critically about the readings. Let me “see inside your head” as you think about, accept, reject, or otherwise engage the reading material. You do not need to answer your question here, but you may talk about it if you wish. Write at least three detailed talking points, covering several different topics from the readings. If there is a library article assigned, include a TP on it.

# Using QQTP in Class Discussion (1)

- Smaller Classes
  - Three volunteers write their Questions on the board.
  - Class votes on one of these to discuss.
  - Groups of 3-4 students spend 10 minutes in discussion of the chosen question.
  - Groups report conclusions as instructor writes these on board.
  - Whole-class follow-up discussion of answers.

# Using QQTP in Class Discussion (2)

- Larger Classes
  - Instructor chooses a question for discussion as he/she grades QQTP papers.
  - Alternatively, instructor chooses three and has class vote for one to discuss.
  - Groups of 3-4 students spend 10 minutes in discussion of the chosen question.
  - Groups report conclusions as instructor writes these on board or just summarizes them orally.
  - Whole-class follow-up discussion of answers.

# Using QQTP in Class Discussion (3)

- Any Size Class
  - Throughout the class period, as different topics are introduced, ask students to read aloud their Questions or Talking Points that are relevant to those topics.
  - Involve the whole class in responding to those Questions or Talking Points.

# Side Benefits of QQTP

- Students write at home—no class time
- Generalizable to many different class sizes, types, and topics
- Gives instructor a quick “read” on thinking and writing level of individual students
- As low-tech as you can get

# How Are QQTP Papers Graded in Smaller Classes (N=30)?

- Your QQTP papers will be graded on a 10-point scale.
- Be careful not to miss a week in turning in a paper.
- At the end of the semester, the lowest one of the paper scores will be dropped.
- All points will then be added to reach the final total QQTP score (100 pts. Possible.)

# 10-Point Grading Scale

- **9-10 points:** Outstanding (a thoughtful question that invites analysis, synthesis, or evaluation, or makes connections between this reading and previous discussion or readings; an especially pertinent quotation; talking points that show you have thought seriously and critically about the readings.)
- **7-8 points:** Good (question that goes beyond the reading but does not invite deep or critical thinking; relevant quotation; talking points that show a moderate level of critical thinking about the readings)
- **6 points:** Marginal (confusing question or one that can be answered simply from the facts in the readings; relevant quotation; talking points that show a low level of critical thinking about the readings)
- **1-5 point:** Poor (illogical or irrelevant question; irrelevant quotation; fewer than three talking points or talking points that are too brief and reflect very little thought)
- **0 points:** Not handed in on time



# How Are QQTP Papers Graded in Larger Classes?

- Six of your QQTP papers will be graded on a 20-point scale.
- All of your other QQTP papers (approximately 6 of them) will not be graded but will earn 2 “extra” points if they appear satisfactory.
- You will not know from week to week whether your paper will be selected for grading, so be careful not to miss a week in turning in a paper.
- At the end of the semester, the lowest of the 20-point paper scores will be dropped.
- All points will then be added to reach the final total QQTP score (100 pts. plus “extra” possible)

# 20-Point Grading Scale

- **18-20 points:** Outstanding (a thoughtful question that invites analysis, synthesis, or evaluation, or makes connections between this reading and previous discussion or readings; an especially pertinent quotation; talking points that show you have thought seriously and critically about the readings.)
- **15-17 points:** Good (question that goes beyond the reading but does not invite deep or critical thinking; relevant quotation; talking points that show a moderate level of critical thinking about the readings)
- **12-14 points:** Marginal (confusing question or one that can be answered simply from the facts in the readings; relevant quotation; talking points that show a low level of critical thinking about the readings)
- **1-11 points:** Poor (illogical or irrelevant question; irrelevant quotation; fewer than three talking points or talking points that are too brief and reflect very little thought)
- **0 points:** Not handed in on time

# Class Handout: Top Ten Ways to Lose Points on QQTP Assignments

- 10. Make as many spelling errors as possible.
- 9. Make punctuation errors like as in this example not putting any commas in sentences that contain one two or three different phrases or are really long or contain lists of concepts names places or research areas.
- 8. Make lots of grammatical errors, for example, leaving the out of the sentence.

# Top Ten Ways (2)

- **7. Leave the plural “s” off the words scientist and psychologist as in the sentence, “Many scientist are psychologist.”**
- **6. Ask a simple Question that takes little thought; for example, “What is Kurt Lewin’s first name?”**
- **5. After the Quotation, don’t tell anyone where the quote came from—especially don’t give away who said it, in what book or article, and on what page.**
- **4. In writing Talking Points, stop after one or two TP’s to make sure you don’t write at least three of them.**

# Top Ten Ways (3)

- 3. In writing Talking Points, just summarize or quote the textbook, being careful NOT to include any of your own thoughts, reactions, and reflections.
- 2. Whatever you do, do NOT write a Talking Point based on the library article(s).
- 1. Hey, you deserve a break today—just don't turn in that QQTP!

# Evaluation of QQTP

Connor-Greene (2005) reported QQTP evaluations from two upper-division undergraduate classes. She used a 5-point scale with 5 as highest rating. Students were asked whether QQTP helped them understand the readings and prepare for class discussion.

# QQTP Evaluation (2)

- Mean ratings for the value of “creating a question” ranged from 4.07 to 4.40.
- Mean ratings for the value of “selecting a quotation” ranged from 3.43 to 3.73.
- Mean ratings for the value of “writing talking points” ranged from 4.28 to 4.56.
- Students clearly saw more learning benefits from writing Questions and Talking Points than from selecting a Quotation.
- This pattern was replicated in two student evaluations by Zachry in fall 2006 and reflected in student free-response comments.

# References

- American Psychological Association, Task Force on Strengthening the Teaching and Learning of Undergraduate Psychological Sciences (2008).
- Connor-Greene, Patricia A. (2005). Fostering Meaningful Classroom Discussion: Student-Generated Questions, Quotations, and Talking Points. *Teaching of Psychology*, 32, 173-175.