

TOK Networking Session

Meadowbrook High School

Friday, February 19, 2010

Notes from the TOK Curriculum Committee meeting: see handout

The Knowledge Issues Document (available on the OCC):

Using the charts: Start at the bottom. The real-life situation and the topic are in the two bottom boxes. The upper boxes help you understand what knowledge issues look like. Class activity suggestion: work through several of these from the first chart with the class, then they had to take their own presentation idea and fill in a blank version of the chart with the exact same kinds of information, so that for their own topic they were having to develop excellent KI. (See handout from team at George Marshall; converted the chart to a planning document for the presentation.)

Knowledge Issues: anything that relates to the making of knowledge. This includes obstacles to making knowledge as well as mechanisms that help us construct knowledge. They can come from any of the Areas of Knowledge and/or Ways of Knowing. (Think "How do I know?" and "Why don't I know?")

Practice Scoring Session:

(See handouts for two sample essays with detailed comments about where marks were awarded or deducted for each criterion; feel free to use these documents with teachers or students, but please do NOT remove the disclaimer. If you print only the second essay, print the disclaimer page as well.)

Sample Essay 1

Range of scores awarded by participants: 9-27 (that is E - B). This illustrates the difficulty of trying to apply the criteria! Practice and experience is required.

Two basic problems with the essay :

- A) The student describes WHAT she does in various situations, but does not analyze HOW she does it. So she states, for example, that she uses reason in the situation with her boyfriend, but she does not do a detailed assessment of what type of reason was used, how it was used, and whether it was effective or not in providing the knowledge needed in that situation.
- B) The student strays off-topic too often by focusing to an inappropriate degree on emotion as a way of knowing. The essay would likely have scored better had the title been "Evaluate the strengths and weaknesses of emotion as a way of knowing." Marks for Criterion C are awarded only for relevant material; all irrelevant material is ignored in awarding those marks.

For this essay: first consider what is being asked of the student: "Evaluate the strengths and weaknesses of reason as a way of knowing. What do we want to see from the student as we begin to examine this essay?"

- Definition of reason—language such as inductive reason vs. deductive reason
- Assessment of HOW reason functions to make knowledge
- Discussion/examples of reason helping to make knowledge; ditto reason failing to help make knowledge
- Examples that require reasoning (not emotion, which is what we got)

Strengths of this essay::

- Knower's perspective; using personal examples
- Tried to make a link between reason and emotion
- Tried to include a subject area

*Generally: if a student has made an attempt to do what is required by the various criteria, he or she is going to get into the 2-3 range. If the attempt fails, then the score isn't going to make it to the 4-5 range, but so long as the attempt was there, that is better than a 0 or 1.

Weaknesses:

- Examples seem to be more suitable to using emotion than to using reason
- Redundancies—tends to repeat "reason is" over and over; repeats the claim of the title numerous times
- Failure to analyze
- Perhaps chose the wrong title to write to

Some general advice that came from an unknown TOK teacher last year: "The essay should sound as if the kid had taken a TOK class." We interpret this to mean both that the student should be able to reflect about knowledge issues AND that the student should have a good working vocabulary of terms related to the topic at hand. So, for instance, when talking about reason, a student should be able to accurately identify, discuss, and/or apply the difference between induction and deduction.

How do we choose GOOD materials from all the available materials?

- ☐ Materials that focus on knowledge issues, rather than on controversy primarily. A great example is the Led Zeppelin assignment from Wes Boucher. Claim is that Led Zeppelin, before they became famous, performed at Wheaton. There is no tangible evidence. All based on memory. They were a bunch of drug crazed high school students then, right? Here is the link to the *Washington Post* article:
<http://www.washingtonpost.com/wpdyn/content/article/2009/03/08/AR2009030801927.html>. The handouts are attached. This activity focuses on the question of what constitutes sufficient sources for knowledge-making in History. Both the article and the activity questions move beyond the issue of "Did Led Zeppelin play Wheaton or not?"
- ☐ Materials that comprise a range of Knowledge Issues--especially including exploration of how we DO make knowledge, in addition to how we fail. Avoid the trap of entrenched skepticism! One example: The last chapter of *Blink* by Malcolm Gladwell presents an example of women playing traditionally "male" instruments in classical symphony orchestras. This shows how over time orchestras have come to rely on screened auditions as a means of eliminating anti-female bias and focusing on the caliber of the talent instead.

- ❑ Materials that experienced teachers have used year after year:
 - ✓ Sam Wineburg: "Why Study History?" First chapter of his book *Historical Thinking and Other Unnatural Acts*. This chapter available online at:
http://www.temple.edu/tempresstitles/1518_reg.html
 - ✓ E.H. Carr: "The Historian and His Facts," the first chapter of his book: *What is History?* The chapter is available online at:
<http://www.cscsarchive.org/dataarchive/otherfiles/TA001043/file> or
http://www.cooperativeindividualism.org/carr-edward_historians-and-their-facts.html
 (Note: copyright is sketchy here; these sites tend to disappear. Recommend purchasing the book, which can be done quite cheaply from Amazon.com:
http://www.amazon.com/What-History-Edward-Hallet-Carr/dp/039470391X/ref=sr_1_1?ie=UTF8&s=books&qid=1266886003&sr=8-1
 - ✓ NOVA: *Elegant Universe* Episode 3 on String Theory; raises questions about what a theory is. Handouts for this activity attached.
 - ✓ NOVA: *The Proof* the story of Andrew Wiles' solution to Fermat's Last Theorem. Great resource for role of emotion in mathematics, as well as the notion that knowledge of the same thing can be different in different eras. Clear demonstration of the fundamental necessity of absolute proof in mathematics. This is not yet available on DVD; you can get it used from Amazon Marketplace:
<http://www.amazon.com/The-Proof-Nova-VHS/dp/B00001U0JX>

- ❑ Materials that cross boundaries of WofK and Aof K. See handouts for sample activities that help students track comparisons/contrasts among sections. See also Carrie Henly's website for handouts from her TOK presentations at San Francisco in 2008 and Québec City in 2009. These presentations dealt, respectively, with how to make connections among WofK and AofK, and identifying the structure of subject areas and making comparisons among them. The websites includes the overview PPT from the presentations, handouts and sample work from both students and teacher.
<http://home.comcast.net/~cphenlymbk2006/ibnapresentation.htm>
<http://home.comcast.net/~cphenlymbk2006/ibnapresentation2009.htm>

- ❑ Activities in which the student engages in the making of knowledge in a given Area of Knowledge.
 - ✓ One suggestion for a History Lesson: Some years when we are discussing History as an Area of knowledge, I assign the class to write the history of a day in the life of the school I pick a random day from earlier in the school year, not a special day that would be memorable or outstanding, but a regular day. This is assigned after we have discussed bias, historiography, and various other aspects of the subject. They may use any sources they like, find out what happened in as many aspects of school life as possible and then write a description of the school based on that day excluding as much as possible, prior knowledge or their own over-interpretation. They are always interested when they find things that they missed, good sources overlooked, events that were considered important by others. We are a K through 12 school and there is, for example, usually almost nothing about lower school and little about middle school. Little about the faculty maybe some administrative news, very little though. Lots of tests and sports maybe "history" The easier something is to find out, the more likely it is to become part of "history." They find that time constraints limit what they are able to find and they find lots of conflicting accounts of events.

- ✓ Another history example: The Checks Lab (see Carrie Henly's website for her TOK presentation in San Francisco in 2008. This lesson was adapted from a lesson by Judi Loundagin at ENSI: The Evolution and the Nature of Science Institutes. Link above.)
 - ✓ A science example was provided by Bonnie McLaughlin at Atlee HS; it is included in the handouts.
 - Consider the relationship between materials used in class and the examples in the essay: Students are penalized for using the same examples that their classmates have used, so students should be instructed never to use in their essays the examples that were covered in class; thus, class examples provide a great opportunity to expose students to events and ideas that they are not already familiar with. An example is the pair of essays provided by Gary Powell; they deal with differing views of science. Handout attached.
-

Session for New Teachers:

Theory of Knowledge Course Companion—excellent resource. Teachers present at the workshop do not use that book as a text, but several use it as a resource for themselves or as a take-home use-at-home resource for students. Available from a variety of sources--IBO store, Oxford University Press, IB-Source, and so on. Can get it from Amazon as well.

<http://www.amazon.com/Theory-Knowledge-Course-Companion-International/dp/0199151229>

What is TOK?

TOK is a course in which we examine the mechanisms by which we make and evaluate knowledge in a wide variety of human endeavors. This investigation includes obstacles to knowing, as well as the means by which we attempt to overcome those obstacles.

- ✚ Interesting conundrum in the title of the course: What's a theory and what is not a theory? According to a scientist, a theory is a conclusion that has been tested by experimentation. So should it be "Hypothesis of Knowledge"?
- ✚ It is not a philosophy course; it is a course to improve thinking...an in-depth look at inquiry.
- ✚ It aims to create independent thinkers.
- ✚ It presumes the existence of reality and the need to comply with the limitations that a reality imposes in order to have power over our own lives.

Within any given Area of Knowledge, then, we want to know:

- ✚ What is the content of that AofK? (What kind of knowledge do we try to get when working within that area?)
- ✚ What are the means of making knowledge? (The specific organized processes, such as the scientific method, as well as the more general function of the Ways of Knowing)
- ✚ What are the difficulties inherent in the attempt to make knowledge?
- ✚ What are the mechanisms we have developed in order to overcome those obstacles?

Specific Example: History

- ✚ We want to know what has happened in the past and, often, why.
- ✚ Obstacles: we have no access to the events themselves. We must rely on artifacts left from the events; thus, we are subject to the limitations inherent in bad memory, incomplete information, biased perspectives, deliberate obfuscation, and so on.

- ✚ In order to try to overcome these obstacles we rely on confirmation from multiple sources, thorough checking of facts, multiple interpretations from many perspectives, redundancy of information, openness to re-interpretation based on new facts, and so on.
-

How do we build in Internationalism?

- ✚ Ask students to consider questions of knowledge from different perspectives; can use newspapers around the world.
 - ✚ *Obsession* DVD—played on American fears of Islamic fundamentalists; paid for by funds from Israel. Sent to American households during the last election, especially in swing states.
-

What pitfalls should we avoid?

- ✚ Presentation: see May 2008 SAR; biggest problem is failure to differentiate between real-life situation. Notes on the presentation: Time limits: 1 student = 10 minutes; 2 students = 20 minutes; 3 or more students = 30 minutes. Planning document is required, but you can use another document of your own devising. See attached handouts with charts/planning documents developed by George Marshall teachers.
 - ✚ Over-simplification: trying to treat AofK or WofK as if they were completely separate and functioned independently; see San Francisco and Québec City presentation handouts mentioned above for lesson ideas on how to work on seeing connections between and among
-

Grading:

School systems give a grade for the class based on whatever system you wish to use. The school system grade is independent of the IB grade.