Contents of issue 48

November 2003

Articles and Lessons

The relevancy of TOK by Rick Bisset
Easy ways for your students to realize that TOK is useful.

The Quest by K.A.M. Hatcher
A poem about the eternal quest for knowledge.

Constructing a TOK course--literally! by Bill Frere
Bill is building another thematic course. See it happening by visiting his blog, as of January 2004.

Hyperlinks for presentations: an interview with Manjula Salomon
Manjula's way of doing presentations ensures that students are passionate about their topics.

Nine tips on good TOK presentations by Nick Alchin.
A good document for students to read!

A case against equating ethics and morality by Jerry Chris
Why it is a good idea to mention ethical theories in TOK.

Can law-breaking be justified? Civil disobedience and knowledge by Steven Huxley
A lesson in ethics and politics based on a case study.

Some further comments for the TOK curriculum review committee by Ricardo Navia
A reply to the questionnaire posted on the OCC in February 2003.

The TOK Shelf

Nicholas Alchin's Theory of Knowledge: Teacher's Book by George Spanos
A panoramic view of the book, and an in-depth description of chapter 9

A tale of three texts: how one teacher is getting to know TOK by Tim Waples
Tim describes his experiences with TOK textbooks by Tomkinson, Woolman, and now Alchin.

A review of Hugh Robertson's Student Projects by Marilyne Sinclair
Some parts of this general text can be very useful to the TOK student.

Worth Clicking (more details about the links below)

- The political compass
- The yuk factor (Taboo)
- The argument clinic
- What if Einstein was wrong?
- Reaching for the stars: an interview with George Walker
Forum Bits

From the editor: First issue of Forum online (based on the last print issue, 48A)

Bits & pieces
- Birllaint Obsrevatoin
- Round the world with the TOK wheel
- Inadvertent student humor from May 2003 essays
Reader responses to Forum No 48

Responses to articles from *Forum* issue No. 48

Readers' comments about the articles in this issue will be referenced on this page. You may provide feedback by using any of the methods listed.

Counterclaim by Nick Alchin to "Birlaint Obsrevatoin...", submitted on 11 November 2003:

"A slpmie, macinahcel ioisrevnn of ianretnl cretcarahs araepps sneiciffut to csufnoe the eadyrevy oekoolnr."

Forum is jointly published online at www.adastranet.net/forum/ by the International Baccalaureate Organization and Lena Rotenberg Educational Consultant, © 2000-2003. Forum is a peer-reviewed publication aiming to offer original, thoughtful articles promoting Theory of Knowledge (TOK) teaching, in a fashion that is immediately useful to teachers. It is published twice per year in English (November and May) and twice per year in Spanish (February and August). Page last modified 13 November, 2003.
A good grabber for a TOK lesson is about as hard to come by as a good friend. Even though we teachers feel that we have a good message when we begin a lesson, the relevancy of TOK occasionally eludes our students. Perhaps that, in itself, is a good lesson to use.

As someone who attempts to model what I teach, I have reflected on how to best grab my students' attention. As a firm believer in the Socratic method, I have tried to answer many questions on this issue: "How can I make this lesson relevant? What are the students interested in hearing? What can I do to better illustrate the significance of TOK?" and more bluntly, "Why would anyone want to learn this stuff?"

Since "man is indeed the measure," perhaps the best way to approach a discussion with students about the relevancy of TOK would be to begin by stating that it is invented. Someone sat down and wrote it. And, at various times throughout history, other individuals have sat down and written their answers to tough questions, too. For example, any decent library will contain stacks of books on religion, relativism, and skepticism--to name just a few. These were all attempts by people to make sense of the world.

TOK often begins with the premise that knowledge is defined as a claim that is justified, true, and believed; hence the well-known maxim, Knowledge = JTB. [Ed.: This is one definition of knowledge; there are others.] As with other systems that try to make sense of the world, JTB is put forth as a given. Descartes put forth a similar given with his famous declaration "I think, therefore I am." Einstein postulated, "Nothing can travel faster than the speed of light." Euclid put forth his well-known axioms defining a point, a plane, and a line. As well, stoicism and reductionism have their central tenets and principal assumptions. All systems do. And of course there are the religious principles of Christianity, Buddhism, Islam, Hinduism, etc., each containing its own set of "givens."

These declarations, postulates, principles, precepts, and axioms are presented as self-evident absolutes in each respective system. However, fascinating results are obtained when the fundamental premise is not accepted as "a given." For example, non-Euclidian geometry is based on the counter-axiom to Euclid's fifth postulate; namely, that parallel lines do intersect. (Every time you fly on an airplane, you should silently thank the person who sat down and wrote this system of making sense of flying in a straight line on a curved surface!) An interesting tangent is to point out that students too can develop "a system." Why, someday, we may be teaching Ben-ism, or Angela-ism, or Mary-ism in schools around the world! (To have fun with this tangent, simply substitute the name of any student in your class and add ",-ism.")

A good grabber would let students know that TOK, in its own way, is just another attempt to answer questions. Obviously, it is not the only way, and it is debatable whether it is the best way. However, TOK does offer interesting and useful answers to difficult issues. For example, the relevancy of TOK becomes apparent when students are presented with questions such as: "What are you going to say when your
The relevancy of TOK

boyfriend (or girlfriend) asks you to prove your love for him (or her) by going to bed?" or "What will be your response at a party when your best friend asks you to try some little white pills?" Students may be surprised to realize that answers can be found using JTB.

In the first case, for the sake of simplicity we'll assume that the boyfriend is the pursuer and the girlfriend the pursued. To convince the girlfriend to have sex, the boyfriend would make the assertion that love equates with a physical response. His hypothetical syllogism might be:

If you love me, then you will go to bed with me.
You say you love me.
Therefore, you will go to bed with me.

In this example, the girl being asked to "prove" her love could use JTB to arrive at her answer. The justification would involve proof, evidence, facts, corroboration, testimony, data, authority, verification, etc. The truth could involve either the Coherence Test--the girl would analyze all she has learned about Platonic love; or the Correspondence Test--the girl would examine if she indeed said "I love you" to the boy; or perhaps the Pragmatic Test--the girl would evaluate what she has seen happen to other girls who agreed with boys like this. In fact, the girl could use all three Truth tests. The belief would involve her feelings, emotions, and personal experiences.

After applying JTB to the question, the girl would arrive at a knowledge claim with a high degree of certainty, and would feel confident in giving her answer. Perhaps she would say something like this to the boy: "I am sorry, but your syllogism is based on at least one false premise." Or more plausibly in today's world, she would shout, "Go suck a lemon!"

Arriving at a knowledge claim and subsequent judgment using JTB involves a considerable amount of time, effort, and research, and obviously isn't always possible. When your school principal comes to your classroom door and tells you that the building must be evacuated immediately, you are not going to use JTB. In an emergency what is needed is quick action, not long, involved reflection and introspection. Likewise, when you buy a burger you do not begin to question the salesperson, "Have you washed your hands? Do you have a cold? What kind of soap did you use to wash the cooking pans?" In fact, these types of questions would be regarded with suspicion, and you might be regarded as neurotic or obsessive about details. In this type of situation, the majority of people would simply accept the product and believe (or hope!) that it will be okay. In other words, there is a time and a place to use JTB.

This is an important point to make with the students. Once they understand that TOK contains useful tools, its relevancy to their daily lives becomes clear. Once they understand that there is a time and a place to use JTB, then different scenarios can be examined. Using a variety of real situations in the classroom allows the teacher to point out the applicability of any part of the TOK course. As a result, you will have definitely grabbed your students' attention!
"One of the concepts that students initially find unsettling is the uncertainty of knowledge. Prior to TOK they have generally failed to consider its elusive nature, the pure pleasure of inquiry, or the wonder of discovery. The search for knowledge actually ends up captivating the seeker in a strange sort of way. In "The Quest" I have attempted to express these thoughts poetically.

THE QUEST

'Twas autumn of my eighteenth year
When I, intrigued, began to hear
Minerva's owl, which came to woo
Me nightly with his question. Who
Indeed would trace the trail of truth
If not the idealistic youth?
He'd peer at me from piney perch,
Inviting me to join the search.
One eve, resolved to hesitate
No more, I ventured through the gate
Pursuing where he soared in flight.
Diana's pale, pearlescent light
But dimly lit untouched terrain
I trod. Did fate or chance ordain
The way my winged companion led?
His mistress, always just ahead,
Her heady scent borne on the breeze,
Elusive, wove among the trees
And drew us toward a distant peak
With tantalizing hide and seek
Till I at last on dawn-kissed crest
Beheld the object of my quest.
Spellbound I stood. There, bathed in light,
Minerva burst upon my sight,
Her simple beauty unconcealed,
Her sacred secrets now revealed.
I reached to claim this newly known
Alluring Wisdom as my own,
But slipping free from my embrace,
She beckoned to resume the chase
And vanished like the morning mist.
I followed, helpless to resist,
Thenceforth her faithful devotee,
The hunter captive of the prey.
Constructing a TOK course--literally!

by Bill Frere
Trinity High School, Illinois, USA

On January 2003, after almost two years from the time we decided to embark on this construction project, my wife Ginger and I were finally able to enjoy our newly remodeled kitchen and family room. I had no idea that TOK was lurking in the walls.

During summer vacation I decided to re-think what I'd been doing in my TOK course for the past seven years. The only thing I knew I wanted to keep was a thematic approach that I've used several times, which has enabled me to arrange all the Ways of Knowing (WoKs) and Areas of Knowledge (AoKs) around a unifying theme. This approach is comfortable for me, and provides a common frame of reference to which students can anchor themselves.

The first time I tried a thematic approach was with the theme "flying." I had first-year TOK students put together a model airplane, which enabled them to examine reason, perception, language, knowledge, belief and truth [Ed.: see "Building a model airplane: A unifying analogy for TOK", Forum 35, August 1996]. The second time the theme was "air pollution," more specifically the ozone layer [see "TOK--A thematic approach--Phase II", Forum 42, August 1999]. The third time the theme was water and water pollution [see "Water, water everywhere", IB World, December 1998, pp. 28-29, reprinted at the water project website.]

In the process of re-examining my TOK course, I tossed most of what I had done out the window (kitchen sink included). Besides the thematic approach, I only kept the following ideas: (1) Keep the theme simple, and start with something basic. (2) Continue to use the construction of a model as a hands-on approach to TOK (I've used model planes, cars, and boats). (3) Incorporate a field trip experience that demonstrates how manufacturing a simple object depends on most of the WoKs and AoKs. (Whenever I give presentations about TOK, I use the example of a pencil: a simple object that has a math, a science, an art, a history, and a logic to it.) I wanted my new approach to be just as basic.

Thus I began to search the Internet for model kits different from the ones I've used before, and happened on model framing kits for houses! Using balsa wood, students will be able to build the framework for a basic two-bedroom house in four different styles, which will provide us with some variety.

Upon deciding on the construction theme I started to brainstorm (what I'll wear on the first day of class, possible field trips, guest speakers, Habitat for Humanity as a joint CAS venture, resources, texts, website, etc.), and became increasingly enthusiastic about building a course based on building a house.

In my excitement I did something that I may come to regret: I shared my ideas with a certain Forum editor. Lena Rotenberg convinced me to keep a reflective daily journal of this project as a blog (weblog), to enable other teachers to accompany the entire process of building a thematic course, rather than only seeing the finished product as a published article. I promised her that I'd be candid in journaling what I do; that I'd
mention the objectives I intend to meet with each lesson (especially the problems of knowledge I wish to cover, assignments, readings), report on what actually happened in class, and evaluate results, reflecting on what I could have done better. Lena used very underhanded persuasive methods to elicit this promise ("For my birthday gift, you can either do this daily journal, or buy me a Toyota Prius"), but I will follow through.

My course will begin on January 27 and end on March 26. (My school operates on a block schedule of four 90-minute classes per day: TOK is offered as one block in Junior Year, and one block in Senior Year.) Even though there are still a few months before the course starts, I will attempt to document the planning process, as well as the course itself. (You're welcome, Lena!)

I invite you along on this TOK journey, and welcome any comments or questions you may have. Follow the link to the weblog that should be up and running by the middle of December 2003, at www.mrfrere.com. [Ed.: Please visit the OCC to get the username and password you'll need to access the blog.] I hope to see you there!

back to top
Hyperlinks for presentations: an interview with Manjula Salomon

by Manjula Salomon
Jakarta International School, Jakarta, Indonesia

Written by Lena Rotenberg, Forum editor

From the Editor: At the IBAEM conference for experienced TOK teachers held in Oxford in September 2001, I had the privilege of attending Manjula Salomon’s session on presentations. Her approach was so innovative—and so surprisingly different from what she had submitted to Forum only a few months earlier (“Follow-up: The Jakarta model”, 45, November 2001)—that I’ve been anxious to make it known to a wider audience. Below is Manjula’s approach in the form of an interview conducted over the telephone in July 2003. Tested by two years in the classroom, her methods continue to impress me, even more so than they did when I first heard of them.

(Whenever “he,” “him,” or “his” is used, please mentally include "she," "her," or "hers.")

LR: What are the benefits of the presentation as part of the TOK assessment?

MS: First, the presentation is an opportunity for the student to engage in his own personal TOK journey, as opposed to admiring the teacher’s journey: every student gets to present a topic he is interested in. Second, at Jakarta International School (JIS) we use the presentation as a preparation for the essay. The student will engage in the same process in the essay as he did in the presentation, except that in Criterion C Links are stressed instead of Knowledge at Work. Third, the presentation is a self-evaluation for the student. His commitment and the current stage of his TOK journey become evident to all, including himself. Thus I use the term "hyperlinks," which are places from which we can make non-linear leaps into other places. The TOK presentation hyperlinks to the essay, to TOK generally, and to the student's own intellectual voyage.

LR: Many teachers I have spoken with have students do the presentation after they write their essay. Why do you do it differently?

MS: At JIS, we TOK teachers work as a team, and our policy is not to give students a lot of time to work on their essays. They first see the prescribed title list on a Monday, and the final essay is due two weeks later. Each student needs to decide, very quickly, where his strengths and interests lie.

As the student develops the presentation several things become clear to him and to the teacher: what he is interested in, the knowledge justifications he prefers, the methodological issues he’ll raise, and the underlying assumptions he is aware of. I tell students to choose the prescribed title that explores the same strengths as their presentation. The student's passion for the presentation can be borrowed for the essay, allowing him to develop arguments that go further and deeper than his presentation did.

For example, a passion for the natural sciences demonstrated in the presentation can easily be transferred to the essay and lead to a "purposeful enquiry," a strong analytical approach, and original examples (which are
LR: So, how many presentations do students make at JIS?

MS: Each student makes two or three mini-presentations throughout the course.

The first mini-presentation happens on the first week of class. I divide the students into groups of three, and ask them to draw, on the board, a diagram of what knowledge looks like, using only 6-8 words. Each student then explains their group’s diagram to the class. Students laugh with representations of knowledge such as a river with streams as tributaries, or a tree with branches and roots. By the second or third class, everyone has already made an individual 3-4 minute oral presentation: the TOK class already belongs to them. Another advantage is that I use this exercise as a diagnostic tool: I immediately learn who is shy and who is dominant or articulate.

As the course progresses, I ask two or three students to make mini-presentations on each unit. The questions for these are usually taken from the Theory of Knowledge Subject Guide. For example, two students may make a presentation about the "scientific method," each taking 3 minutes. The first student might describe the "method," and the second might present its limits, using a claim and counter-claim approach.

LR: When exactly do you have students conduct presentations for assessment purposes?

MS: Our school follows the May exam schedule. Starting in mid-November, I have two groups conduct presentations every other day, for two weeks. I allow groups of 2, 3 or 4 students. I don't encourage singles but sometimes have them.

LR: Please explain the "Hyperlinks for Presentations" document.

MS: I explain to students the ideas contained in the Hyperlinks for Presentations document, then provide students with a blank form that contains only the headings.

The first thing I ask students to do is to write a tentative question, which their presentation will answer. (At the end of the exercise they revisit and rewrite this question.)

The top left rectangle focuses student attention on "Knowledge at Work," a requirement of the presentation topic that distinguishes it from the essay. In that rectangle students explain how their topic is a concrete issue that they feel passionate about.

The top right rectangle focuses student attention on problems of knowledge (PoKs), which should be at the core of every presentation. There, students list the PoKs they've identified in regard to their concrete issue.

On the bottom half of the page students describe how they're going to approach the topic.

LR: What's the "refined question" that students are asked to provide, at the bottom of the "Hyperlink for Presentations" document?

MS: At the bottom of the document students are asked to state their "refined question," which is the desired result of this exercise. I require that every presentation be an answer to a well-formulated question that is narrow enough to be treated in the time allotted for the presentation in class (10 minutes per student). The question format directs everyone towards the knowledge issues. Current events are not to be used without concern for PoKs.

LR: How do your students pick their presentation topics?

MS: Three months in advance I start collecting newspapers and magazines. On the lesson prior to the day students pick presentation topics, I walk students through the "Hyperlinks to Presentations" document.
I give students one hour, in class, to choose a topic. I bring the printed matter into class, just in case students have forgotten to bring their own, and give each student a blank version of Hyperlinks to Presentations. I ask them to look at the magazines and find a topic that ignites their passion. I ask them, "What article in these publications produces a strong reaction in you? What topic makes you angry, joyous, or glad to be a girl, or an athlete, or a Korean, or a musician? What was the last issue that made you feel eager, angry, anxious, concerned, or helpless? When was the last time you heard something in the news that troubled you? What's worth living for or dying for among these issues?" This is the first step to their identifying a question to use as a presentation topic: they need to find something they find worthy of putting their minds to. (A further advantage of these questions is that just by asking them, students are able to see me as a person who is as human as they are; I too have uncertainties and passions.)

If they can't answer these questions immediately, I have them search for inspiration within the printed materials. At this point there are papers all over the classroom. Some students are examining the print materials, some are filling out the form, some are talking to each other. Groups are forming in the chemistry of the classroom.

I help put groups together, which requires a high level of diplomacy. When groups come forward I ask them why they wish to work together. A common answer is that group members have free time in which they can work together such as a study hall, or they might already be intellectual friends. I may suggest that another student join them because he could help them with a certain argument, or provide a different point of view. Or I may suggest a topic to someone. More rarely, I separate two people when I know that they have certain habits, by telling them that I'd like them to work in a different way: I coax them into forming different groups. For example, I've had two boys wanting to treat pornography as an art form, and asked them if they could find a girl to join them. They could not, and had to change topic.

Most students have a topic by the end of the hour. Some pick up on the following day, or decide that they need another person, or that their topic is too large. With eighteen students in my class I can use this method. If the class is larger, I can identify emergent themes and organize students into groups. In crowded classrooms people are more open to suggestions, and whine less--as if they know that Mom only has a limited amount of patience.

LR: (Laughing) Yes, in Oxford you identified our emergent themes and put thirty of us in groups in about 15 minutes! So, what's the next step?

MS: The next step is an idea I stole from Bill Roberts, reading his article in Forum ["Tick of TOK: Approaches to presentations", 45, November 2001], which my colleague Bill Brown field-tested with me. In the next class I have students bring a poster of the "Hyperlinks" for their proposed presentation, and run me through it. Upon seeing it I have a very good idea of how the presentation will flow: I can see the gaps, I can see that they don't have an approach, or a common platform, or counter-arguments, or too wide a question. I'll tell that to the group, and propose that we meet again after they fix the problems.

LR: Please give me some examples of how this method works.

MS: One of the most enjoyable and content-rich presentations I've ever witnessed (and that had us all laughing our heads off) focused on how language forms and creates culture as a central problem of knowledge. The students' formal question (to which they responded in the presentation) was, "How does language determine power relations based on status and gender within a culture? Four case studies."

Two quadrilingual Korean students divided the room into four groups, consisting of students who spoke English, Korean, Indonesian, or Japanese. Then they enacted a small dialogue in all four languages: the husband comes home from work, and the wife asks him if he wants dinner. The nature of the husband's reply differed in each language, from the English, "Honey are you hungry, would you like something to eat?" to the Korean, "I've been waiting for thy self to come in, so that I may offer you food." The students' thesis was that the relationship between husband and wife was mirrored in that dialogue. That was the presenters' beginning device. Then they illustrated three other brief dialogues, two of which were between a father and his child and between a boss and his employee. They demonstrated that the workplace relationship is much friendlier in English than in the other languages, and that in Indonesian people behave...
more intimately within the family and more distantly at work or school.

Then the presenters involved the audience by teaching unknown languages to students who didn't know them: they made American students bow as if they were Japanese, and Korean and Japanese students act as if they were Americans. An excellent analysis followed--much of which continued to be interactive, "How did you feel when you had to bow?"--and that included claims and counter-claims. Counter-claims included the assertion that the husband and wife know they can be intimate despite the formal words they use, and that "people all over may have a greater or smaller number of refrigerators in their homes, but the women all wait just like my mother does."

Another good presentation involved comparing news from Al Jazeera, the BBC, and an Indonesian station on the opening day of the Iraq war. Presenters gave everyone a handout to fill out, which they brought from their Global Studies class. (In Global Studies, in every unit, students have to evaluate news items from different perspectives.) In TOK, the central PoK treated was "Which reality is being presented, and how do you know?"

LR: How do you assess the mini-presentations and the presentation?

MS: I assess the presentation and mini-presentations using the four criteria set in the TOK Subject Guide. There is no reason to invent new criteria. I mark them strictly according to the four criteria, not overly penalizing the presentation that lacks language fluency, nor overly rewarding the vivacious performance.

Despite the fact that the four criteria are weighted equally, I'm inclined to favour a good performance in criteria A (Knowledge Issues) and B (Quality of Analysis). I think that criterion B is overwhelming: most students cannot accomplish all that is demanded. Thus, I offer a 5 for an excellent performance even if implications are noted but not "meticulously and thoughtfully accounted for" (which sounds like a presentation on its own). I'm quite strict on criterion C (Knowledge at Work), since it distinguishes the Presentation from the Essay. Finally, I am more flexible on criterion D (Clarity), and continually attempt not to impose my favourite performance style on the students.

As each student presents, I take notes on a pad. I may note, for example, that the student has spoken very little (though I usually prevent problems with the "who's doing what" while examining the group's poster prior to the presentation). At the end of the day I read my notes, consider them, and recall the presentation, but don't allocate marks until the next day when I receive the students' self-evaluation forms. The mini-presentations are counted as a homework grade.

LR: What was the range of marks you gave last year, and what was the lowest mark you ever gave?

MS: Last year my groups earned 14, 15, 15, 16, and 20 marks. I've given marks as low as a 12 to a couple of groups that, despite my guidance, made presentations that had nothing to do with TOK. One of them was about animal abuse; the students' passion for the subject transformed the presentation into a journalistic piece. The presentation was very strong in criteria C and D, but thin on A and B.

LR: Do you ever give a group another go, if something goes seriously wrong and you know that they're capable of much better?

MS: I have once given a group another go. My colleagues also agree that second chances should be given when possible. Unfortunately for us, time constraints don't allow us to do this often. I imagine that schools that hold all presentations at the very end of the term have even less opportunities to allow students a second chance.

LR: How do you evaluate this method of conducting the presentation?

MS: First the advantages! By having to speak in public in mini-presentations, the student is continually aware of where he is in the course--does he grasp it or not? For the final presentation, I like the fact that students consciously select an area and approach that they are favoring or moving towards in their lives. Otherwise they could just be swimming through the course without having made any selections.
The disadvantages are that some presentations are too lecture-based, but this could happen with any method. No matter what you do, some students will rely on an established body of information. Also, the presentation demands a lot of time, for only a few diploma points. For that reason at JIS we consider the presentation 20% of the semester grade.
Nine tips on good TOK presentations

by Nick Alchin
Sevenoaks School, Sevenoaks, Kent, UK

An excellent list of suggestions for students!

There is no general method or formula which is "correct." You can probably ignore some of this advice and still do a good presentation… but following these suggestions may help.

1. Familiarize yourself with the assessment criteria. Notice, for example that whatever your topic, the focus must be on knowledge issues and that you should choose a contemporary issue (or at least one that is contemporary to you: a historical event that you're studying in History class qualifies).

2. Choose a concrete topic that interests you and find the TOK in it. TOK can be found almost anywhere, so use the opportunity to do something that you will enjoy doing. Do not just choose, say, the death penalty just because you have a book on it. Your presentation will come across much better if you choose something which means something to you personally: your own school, recent events in the news, cartoons, books and films are often fertile ground for presentation topics. Some of the most effective presentations start with an everyday story and go on to draw out the TOK aspects.

3. You should be exploring an issue; this means that you should present different points of view, even if they contradict each other and even if you disagree with them. You can try to reconcile different points of view or explain precisely why they are incompatible. You do not have to choose one point of view as "correct," but you should avoid the rather vacuous "so there are different points of view all of which are equally valid" approach. Do not be afraid to give your own opinion; you can point out that there are problems with your opinion, but be honest and say what you really think!

4. Try to cover the facts quickly and get on to the abstract TOK principles. If you have chosen a topic where there are important facts that the audience needs to know, then you should get through these quickly--there are no marks for dissemination of information! The focus of the presentation must be analysis, not description. If you can't summarize the facts in a couple of minutes then you should distribute to the audience a summary to be read beforehand.

5. Once you have drawn out the abstract TOK principles you should try to see what the implications of these principles are, and perhaps use these implications to reflect on the validity of the principles. For example, if you are considering the argument for the death penalty that states that murderers lose the right to life, the underlying principle seems to be "an eye for an eye." But what if you were to ask, "What do we do with a thief? Or a rapist? Or a kidnapper?" a different underlying principle might have to be used, possibly leading to a reformulation of the original principle.

6. Consider carefully how you communicate the structure of your presentation. The structure may be clear in your mind, but the audience may not find it so easy to follow. Having one or two overheads with the main points in bullet form (using a large font for clarity) can keep both you and your audience on track.
7. **Try to state explicitly the problems of knowledge that you are looking at.** This will help you retain clarity and make it easier for an examiner to give you high marks in criterion A (Knowledge Issues). If you use an overhead, list the problems there.

8. **If appropriate use a film clip, slides, photos, newspaper cutting or any other prop.** Your presentation will probably be far more interesting if you can use something other than your voice! But make sure that the props serve a specific purpose, and that they don't replace the analysis that will earn you high marks in criterion B (Quality of Analysis).

9. **In your conclusion try to summarize (briefly--only a few sentences) what you have said, and try to end with a forward-looking view.** This might be a summary of the main principles you have identified or some issues which have arisen and which have not been answered. Do not just reiterate your arguments. The end should "feel" like a conclusion and not like "well, that's it."

back to top
A case against equating ethics and morality

by Jerry Chris
Mission Viejo High School, California, USA

"Moral" and "ethical" are often used synonymously, but the term "ethical" derives from the ethical theories that comprise the field of Ethics. In this piece Jerry Chris argues that mentioning certain ethical theories in TOK might enrich the student experience.

First scenario: A perfect Boy Scout decides suddenly that he wants to do something out of character… something totally wrong. He prepares a rotten egg and fires it across the street at Mrs M's house, with the sole intention of making a mess and chipping the paint on the innocent old lady's front door. Just as the egg is about to hit, a robber steps out and the egg cold cocks him between the eyes. Down goes the robber with all of Mrs M's fine silverware in his bag. The next day, the paper announces, "Eagle Scout Saves the Day!" The question: was the Scout's action ethical? When I present this scenario at TOK trainings or at other teacher workshops, 90% of the participants quickly respond, "Of course not. His intention was to do harm." Unfortunately, this quick response reflects a definite naiveté regarding the field of Ethics.

Second scenario: My buddy and I are playing golf. We stand on the tee of a four par and have the choice of going around a lake--as the hole is intended--or attempting to drive 240 yards over the lake for the chance at a possible eagle or sure birdie, but also with the possible consequence of losing two strokes to the water. The question: does the decision have anything to do with ethics? Yes! Sadly, many TOK teachers don't realize this and miss all the fun of teaching ethics. They remove the controversy!

One more question: can a "moral" action be "unethical"? Definitely! Let's explore these answers in more depth, and let the fun begin!

When the ancient philosophers first offered ethical theories, they did so in an attempt to answer two basic questions: what is the good life, and how does man find happiness? Philosophers from Confucius to Aristotle to John Stuart Mill to William David Ross have written extensive answers to these questions. They set out to establish, in theory, codes or principles of behavior they believed could best lead humankind to ultimate happiness. Being philosophers, they realized that ethics was not a simple matter of an action being right or wrong as is commonly misconceived today, because not all peoples or cultures could ever agree on one code guided by one set of values. In fact, they would most probably cringe if someone were to use the term ethical as a synonym for moral or good, or the term unethical to denote immoral or bad. (If these words were synonymous, we would go to a favorite restaurant to eat an ethical hamburger.) And I imagine, despite their own egos, they also knew that their ethical systems would forever be challenged by other proposed systems. For purposes of this essay, then, I will define "ethical studies" as an analytical attempt at applying classical theories on how humankind ought to behave to modern day situations, in order to live what each philosopher considered "the good life."

Perhaps we should make it clear from the beginning that the purpose of this writing is not to debate the original intent of the authors of the TOK Subject Guide or to suggest, because of the way Ethics is often taught today, that they might have been shortsighted. Rather, in the spirit of internationalism and the TOK attitude of studying issues from a variety of viewpoints, my purpose is to suggest that the study of Ethics, in its original, philosophical intent--whether we choose to use philosophers' names or not--be used as a vehicle
A case against equating ethics and morality for the broadening of our understanding of the Ways of Knowing and the Areas of Knowledge.

Let us return first to the scenario of the Boy Scout. Yes, his intention was to do something wrong. (Note that terms such as wrong will be used throughout this writing, but not as a synonym for ethics.) However, the consequence of his throwing the egg was good. Immanuel Kant and other rule-based philosophers would proclaim that ethics depends solely on the intention. On the other hand, J.S. Mill, and his fellow consequence-based thinkers, would suggest that since the measurement of intention is totally subjective, even by the doer, we can only measure an action by the consequences. (Does a parent read each night to his or her child so that the child will grow into a brilliant IB Diploma candidate, or because the parent wants to brag to the neighbors that the child is an A student?) Mill's purpose was to make ethics completely objective. If you are thinking that this is too logical, you are correct. How can the doer foresee all the consequences before making a decision? A strong TOK student should make this observation. So, should we judge an action according to intention or consequence? The TOK class, hopefully, will never reach agreement about this first question.

Okay, you say, that scenario has to do with right and wrong--morality, if you want. What could the golf story possibly have to do with ethics? Aristotle's theory was that the good life depends on moderation. In fact, he laid out a clear, empirical formula for determining the moderate position. The virtuous life, Aristotle claimed, could never be achieved by actions at either end of the spectrum. Instead, each individual finds the formula for happiness through a pseudo-scientific process of trial and error which ends somewhere in the middle ground. In opposition, one might place hedonistic thinking. At least in modern times, most equate Hedonism (although extremism was certainly not Epicurus's intent) with the extreme philosophy that pleasure is the highest good, a philosophy often pursued by our teenage students.

So how is the golf decision ethical or unethical? Simple. Attempting to drive the ball over the lake, a difficult task that will result in pain more often than not, represents an extreme lifestyle. On the other hand, settling for par by going around the lake represents the sensible, moderate way to live. Aristotle would suggest that no one except Tiger Woods should attempt the over-the-lake shot. Students will react to our second question, "should we act moderately in order to live the good life?", in a variety of ways. "Wouldn't life be boring if we all acted moderately all the time? Wouldn't this philosophy result in mediocrity for all?" Further discussion about the golf example might also lead to further queries: might the decision be different if others are involved (e.g. whoever wins the golf game takes the loser's family home, or the game involves other team members)? Someone might also suggest that maturity involves knowing when to take risks (during a friendly golf game) and when to be moderate (investing retirement funds).

Adding the dynamic of having others involved in a decision leads into a third ethical debate: common good vs. egoism. Recently on a field trip to an art museum and play in Hollywood, three members of my class snuck off to buy some food after a long bus ride. Throughout the year we had taught the class that individuals’ actions on these trips affect the whole class, because we represent our school in public. In spite of our instructions, the three did sneak off, and were unfortunately soon embroiled in a misunderstanding in the restaurant. Weeks later, after the dust settled, the administration disallowed the entire class from taking future field trips, which are usually a highlight of the senior year.

We would probably agree that the action of the three students was wrong because they disobeyed the rules. However, in the classical sense, Plato would suggest that the three acted immorally because they disregarded the common good in favor of their own egos. (In The Republic, he went so far as to suggest that teachers give up their own children in order to have complete dedication to the state.) The opposite viewpoint might best be represented by Spinoza, who saw primary virtue flowing directly from satisfaction of the ego: progress is made for society when an individual looks to his own needs. Where would the technological world be if Bill Gates were not interested in making money for himself? (One could certainly question how the world profited from the students having gone to the restaurant, but the point is that both the common good and the ego must be evaluated when determining the ethics of an action.)

In this regard, we make decisions every week that we might not realize involve ethical issues. Often, on Saturday nights, my wife and I must decide on what movie to spend US$8 each. To me, spending US$16 on an overly sappy love story is a complete waste: in a few weeks it will be available on video. So, should I satisfy my ego and drag her to a TOK worthy movie, or should I ensure the "happy family" by enduring Meg Ryan for two hours? Obviously, I'm going to follow Plato--for the common good--not Spinoza!
Many teachers at my school, when word of our field trip prohibition leaked out, suggested that it was inevitable. The class of 2003 was "full of rotten apples." This incident was just one more in a long chain of unfortunate happenings, in sum, we were fated for disaster. Ah, another issue in classical ethics that brings us to a fourth question: in order to find happiness and to live the good life, should we accept our fate or attempt to change fate? Classical Stoicism, founded by Zeno and furthered by Epictetus, states that virtue lies in accepting the cards dealt to us. Whether we win or lose the football game is predetermined; no amount of preparation will change the outcome. Therefore, displays of joy or pain are ill-founded (hence the current use of the word stoical). So, whether Mary accepts Fred's non-preferred invitation to the prom, or holds out for Bill, is an ethical decision. The true stoic would propose that it will all work out the way it was intended. Maybe she will say yes to Fred and make him happy; then he will get too sick to go, and she will be left with Bill, the object of her true affections. An interesting note here is that in my high school TOK class, most students charge that we must create our own fate; that is the only way to get ahead in life. However, in my college philosophy class, many more students have adopted a stoical attitude, perhaps having gone through several "true loves," experienced some hard times which somehow worked themselves out, or given themselves over to the religious belief that everything happens for a purpose.

Just as students' lives change, many would argue that times and cultures change, and that therefore absolutes are not possible. This brings us to a fifth debate on the subject of ethics: are ethics absolute or relative? Once upon a time, when I was in high school, teachers walked between us with rulers at dances to make sure we maintained the proper distance. If we were ever lucky enough to dance cheek to cheek when a teacher turned her back, we might not wash that side of the face for a week. When Elvis became popular, we were asked in church to take an oath that we would not watch his immoral gyrations. Fast forward to 2003. The most popular dance in Southern California high schools might be "the freak"—an all-out attempt to imitate intercourse on the dance floor (the real thing being prevented only by the clothes required at all public school dances, but nonetheless enhanced if the female reveals that she is not wearing undergarments). The students' justification is a simple one (and probably what we said when caught dancing cheek to cheek thirty-five years ago): "Everybody is doing it." It's the "normal" thing to do. Morals are relative.

The search for absolutes provides excellent discussion for a TOK class. How about the Ten Commandments? Number four says to "Keep holy the Sabbath" and implies a day of rest to honor God. Relevant today? One would be hard pressed to find one IB Diploma candidate at my school who does not do homework on his/her "Sabbath." How about the Golden Rule, "Do unto others as you would have them do unto you?" In the spirit of internationalism, we may want to reject this rule; what is good or right or preferable for us in the United States (democracy? wealth?), may not be preferable for someone from another culture. (Unfortunately, many current world leaders did not take TOK.)

Hence our TOK course might have come full circle. Just as it might have begun with a debate over the objective or relative nature of truth, now we find that Ethics deserves the same intensity of discussion.

Thus, clearly, Ethics is not a simple case of right and wrong. Every Area of Knowledge is subject to ethical questioning. Ought cloning for individual body parts be allowed in order to save lives, despite the possibility that some futuristic Hitler might want to clone a perfect race? Ought the mathematician misuse statistics to influence investors, and thereby help the economy? Ought the historian write history to preserve the ethnocentric righteousness of the nation? Classical philosophers could easily state that a yes answer to these three questions is the ethical answer.

This leads to a final, perplexing question. Can an action be "moral" but unethical, or vice versa? Yes. Consider the Pope in the Vatican. No matter our religious beliefs, we could accept the premise that the Pope is a spiritual leader who is in the position to make moral decisions for humankind. However, his stand on the immorality of birth control other than the rhythm method influences the sexual practices of Catholics around the world. Now, if we also accept the premise that overpopulation is the root of many problems (e.g. smog, deforestation, pollution) in predominately Catholic countries such as Mexico, we can quickly conclude that with the criterion of common good, the Pope's decree is unethical! His moral stand leads directly to the problems of overpopulation.

Finally, it is also the case that "immoral" actions can be ethical. In the past decade, performance enhancing
drugs for sports have grown in popularity in the U.S. Many such drugs can be obtained without a medical prescription by anyone, from the professional athlete to the body-building high school student. However, many people would readily label the use of any such drugs as "immoral," because they provide unfair athletic advantage to those who take them, or because they are harmful to their health. Let us suppose that despite warnings, a famous athlete takes these stimulants and then dies on the field, in front of thousands of fans. Because of this terrible event, millions of high school athletes stop taking these drugs. The consequence-based philosophers would conclude, looking objectively, that since the good results outweigh the bad (many high school athletes quitting drugs vs. one tragedy), the professional's drug taking was "ethical." His action has resulted in the greatest good for the greatest number. (Obviously, when many ethical theories were advanced hundreds of years ago, the world was a much simpler place.)

Again, the purpose of this essay is not to discredit the modern equivalence of ethics and morality. This trend is both understandable and undefeatable—probably the product of the natural evolution of language with culture (a TOK linking question!). It is also not to suggest that there is a right and a wrong way to teach ethics. Indeed, a non-philosophical approach to TOK is sometimes preferred. However, I would submit that in the spirit of TOK with its integral demand for examining questions from multiple viewpoints, the "ethics equals morality" equation seems somewhat myopic. From my perspective, TOK should be provocative, dynamic, and open-minded. Discussing the issues of the modern world with classical ethics as a base offers a wonderful opportunity to reach these objectives, and it can easily be done without ever mentioning a philosopher's name if that is the teacher's bent. I fear that a danger exists: limiting ethics to "morality" can limit the TOK unit on Ethics to the particular teacher's or country's morality, with that relative value system seeming to represent the absolute. With a focus on international understanding, a TOK class deserves a much broader perspective.
Can law-breaking be justified? Civil disobedience and knowledge

by Steven Huxley
Helsingin Suomalainen Yhteiskoulu, Helsinki, Finland

A lesson in ethics and politics based on a case-study. Is it ever justified in a democratic society to break the law?

Introduction

My interest in the ethics, practice and history of nonviolent action arose not out of academic curiosity, but rather out of my experiences growing up in a troubled black neighborhood in Los Angeles. I found it extremely distressing when my teachers began to challenge us students to get involved, and seek ways out of the culture of violence. It seemed impossible. At the same time, however, I became inspired by the local Mexican-American leader Cesar Chavez and the United Farm Workers. In my eyes, Chavez was a Gandhi-like figure bravely carrying out successful nonviolent collective action against a powerful and violent system of injustice.

I gradually became convinced that the problem of violence and related action is at the very core of ethics. I would like to claim that all offensive violence and coercion are wrong. Furthermore, every effort must be made to reduce the need for defensive force of any kind, and to limit the definition of defense as narrowly as possible (offensive action in the name of Jihad, or the Christian God's will, for example, must be excluded from defense). Accordingly, active nonviolence and harmlessness are essential parts of a correct ethical standard.

I hope that the following focused lesson will help students and teachers approach the problem of political and social violence, and related matters, in a manner relevant to TOK.

Context

This lesson is highly suitable following a general introduction to the problems of knowledge involved in ethics and politics. It is an engaging and dynamic way to examine these problems in controversial, true-to-life circumstances.

Aims

A central concern of TOK is to explore how we arrive at standards, axioms, truths and systems in ethics and politics and how we justify decisions based upon them. For example, are basic human rights or democracy based on universally applicable, objective knowledge or are they reached through practical consensus? This lesson leads to fresh and practical insight into the fundamental questions of ethics and politics and offers a bridge to a TOK discussion of justice, law, political violence and related issues.

One of the functions of law is to define acts which, for the good of the community, are not to be committed.
More or less severe punishments are set for violations of the law, and it is held that strict obedience to the law is essential for peace and order. The aim of this lesson is to explore the claim—and the problems of knowledge it involves—that sometimes we have the right, and even the duty, to violate laws.

Focus Activity

One way to begin this lesson is by dividing the class into small groups to consider the following question: Is it ever justified, in a democratic society, to break the law? After the groups have warmed up to the topic, present to the whole class the case of the four women who broke into the British Aerospace plant and did expensive damage to a Hawk fighter aircraft (see focus source material below, item 1). Listen to class reactions and then go to the discussion questions.

An alternative approach is to write the preliminary question on the board and go directly to the case and the discussion questions.

Do not give the students any hints as to the aftermath of the "crime" until students have had a chance to guess what the verdict was and discuss the case. [Ed.: This is detailed on the OCC.]

Preliminary question

Is it ever justified in a democratic society to break the law?

Discussion Questions

- What arguments could be put forth for and against the four women?
- What appeals to knowledge and truth might be involved?
- What is your verdict?
- Do you think the women were convicted or cleared?
- Consider a definition of civil disobedience (see focus source material below, item 2) and then reevaluate your standpoint.
- Why did the women leave a video explaining who they were and what their motives were at the scene of the crime?
- Why did they ring a news agency?

Teacher Notes

See OCC, note Huxley 1 for the content of this paragraph.

There are usually students who have strong opinions for and against civil disobedience, and this makes for lively discussion. There is a good deal of disagreement among legal experts on the subject, and those who commit it can be severely punished. The appropriateness of civil disobedience in certain strictly defined circumstances is, however, widely recognized.

The existence of conflict among human beings is inevitable, and because this is so, nonviolent means of resolving and waging conflicts are necessary. This implies something essential about human knowledge. Unlike ants and bees, each human being has the capacity to produce knowledge and act on the basis of new knowledge. This ensures that knowledge is ever changing, and that truth in practice remains uncertain. Civil disobedience and nonviolent action offer visions of how one can challenge entrenched ideologies, fixed truths, injustice, etc. in a radical way without resorting to morally reprehensible means.

- Can we objectively know the "higher cause" or sense of justice that advocates of civil disobedience appeal to? Can we know it in the same way we know things in science?
- Watch the section of the film Gandhi about the Salt March to see a dramatization of what radical civil disobedience is like. Note the role of the reporter from the New York Times.
- Has anyone in the class participated in civil disobedience or nonviolent action campaigns?
- Invite an activist from the local community to come in and discuss the knowledge and practical issues involved in civil disobedience and nonviolent resistance.
Can law-breaking be justified? Civil disobedience and knowledge

- Do a TOK presentation on a related theme.
- To what degree does nonviolent action offer a practical alternative to violent resistance? Examine violent resistance movements from around the world and consider whether they might achieve their goals more effectively through radical nonviolent action.
- What are the differences between civil disobedience, clandestine nonviolent resistance, sabotage, violent struggle and terrorism? How is each justified or rejected?

**Links to Other Areas of TOK**

The examination of civil disobedience involves, in addition to ethics and politics, at least the following TOK concerns: sources of knowledge; justification of knowledge claims, theories of truth, the definition of terms and demarcation of categories of action. We can also ask to what extent are arguments for and against civil disobedience, and the actual practice of nonviolent action, culture bound.

**From Other Times and Places**

What has come to be called civil disobedience, civil resistance and nonviolent action has been used extensively all over the world in a wide variety of social, political and environmental movements both in democracies and against repressive colonial regimes and single party states. Throughout the 19th and 20th centuries it was often accompanied by extensive discussions of the type of knowledge and justification it involves, and by debates concerning both the moral and practical problems raised by violent struggle. For more on these matters see the works in the references section.

**Focus source material**

1. The "crime"

In 1996 four women peace campaigners attacked with hammers a British Hawk fighter aircraft at Warton, a British Aerospace plant, doing extremely expensive damage:

- "...the women cut through Warton's seven-mile perimeter fence, entered a secure hangar and damaged the jet in twenty-five places...."
- "They left a 15-minute video in the cockpit, which was shown to the jury, explaining their motives, and rang a news agency immediately afterwards to say what they had done."
- The women argued that, "the jet's export would flout repeated United Nations condemnations of Indonesian repression of the population of East Timor."
- They claimed that they "had lawful excuse to disarm Hawk ZH955 because they were using reasonable force to prevent a crime."
- They cited international and British legislation against genocide.

2. What is civil disobedience?

(See Huxley 1990, pp. 37-47; Rawls, pp. 363-371; Sharp, pp. 315.)

Civil disobedience is a specific type of refusal to obey unacceptable or illegitimate demands or legal requirements imposed by governments and other authorities. Civil disobedience connotes the deliberate exclusion of violence. Often such refusal is justified through appeal to shared extra-legal values or a common sense of justice. Civil disobedience is part of a family of forms of conscientious disobedience and resistance. According to the philosopher John Rawls, civil disobedience is an intentional nonviolent violation of law. It is communicative action done openly in public, with fair notice given, and is addressed to the sense of justice of the majority of the community. Those who commit civil disobedience are aware of, and willing to accept, the legal consequences of their action. M.K. Gandhi distinguished between reformatory, defensive and revolutionary types of civil disobedience.

3. The verdict
Can law-breaking be justified? Civil disobedience and knowledge

See OCC, note Huxley 2 for the content of this paragraph.

References

Attenborough, Richard. 1982. Gandhi. Columbia Pictures. [For another film version of the Salt March, and other cases of nonviolent resistance, see http://www.pbs.org/weta/forcemorepowerful/]


back to top

Forum is jointly published online at www.adastranet.net/forum/ by the International Baccalaureate Organization and Lena Rotenberg Educational Consultant, © 2000-2003. Forum is a peer-reviewed publication aiming to offer original, thoughtful articles promoting Theory of Knowledge (TOK) teaching, in a fashion that is immediately useful to teachers. It is published twice per year in English (November and May) and twice per year in Spanish (February and August). Page last modified 19 November, 2003.
Ricardo Navia argues that in order to attain equity across the IB Diploma Programme world, the IBO needs to (1) define a core curriculum for TOK, (2) make a diverse set of readings available to schools, (3) define a TOK terminology common to the entire TOK community, and (4) reconsider the time allotment for the course.

In March of 2003 Ricardo Navia wrote this letter to the curriculum review committee, stating his impressions of the Curriculum Review Report about their first meeting (21-23 October 2002), published in February 2003. [The report is available at the OCC.]

What do you think of his proposals?

Although it's been less than two years since I started teaching TOK, for many years I have been employing pedagogical criteria similar to those of the IB. Thus, I feel compelled to send you further comments about the TOK curriculum.

I think that the themes, the teaching styles, and the assessment criteria of TOK have successfully harmonized important pedagogical aims that are usually difficult to combine. For instance, critical thought and creativity on one hand, and the demand for a certain level of conceptual and expressive rigour on the other; or between considering personal experience and the need to universalize; or between recognizing cultural differences and attempting a cosmopolitan view. Reconciling so many opposing polarities is a major achievement, and I think that this is the first thing a new teacher realizes. The comments that follow belong within the framework of this primary appreciation. I will focus on some of the bulleted items listed in section 4 of the Report, "Perceptions of the current TOK course," which portray the initial perceptions of those who attended the Curriculum Review meeting.

"The initial observations of the participants on the TOK course were as follows:

The fact that TOK does not require an examination at the end of the course is positive because it allows the teacher more time to teach."

Yes, it does. Even more importantly, the absence of a final exam promotes a much more creative, analytical, argumentative, and expressive activity through the development of the Essay. Moreover, the fact that teachers help students to improve on their essays--without, of course, doing the work for them--weakens the traditional scheme of the teacher-examiner in contraposition to the student-examinee. This places teachers and students in a joint process of construction, which is quite impressive. The Essay is also more similar to what students will encounter at the university.
"The TOK assessment criteria are not clear and coherent, and therefore equity across the IB Diploma Programme world is difficult to achieve."

In my opinion this is not completely true. To the contrary, I think TOK's assessment criteria are one of its most successful elements, for they contribute to the attainment of the difficult harmonization of pedagogical aims that I mentioned. I generally agree with the requirements addressed by the different criteria, as well as with the levels of accomplishment set in each. Maybe I'm not experienced enough to form a judgment, but it seems to me that, if there is indeed a problem of inequity, it may be due to other difficulties that I will discuss later: the lack of a common core content (essential topics to be taught), bibliography, and vocabulary.

"Some ways of knowing and areas of knowledge may be missing from the Guide."

I believe that there are no important absences, but I have two suggestions. First, that we use the term "Rationality" instead of "Reason": it fits better with the concept of knowledge as a construction, allows for extra-theoretical factors to affect knowledge, and is compatible with the notion of a historic construction of areas of knowledge. Second, the expression "Ways of Knowing" is confusing in Spanish ("formas del conocimiento"): it is too easily associated with what the TOK diagram considers to be "Areas of Knowledge." Perhaps we could use "vías del conocimiento" or the classic "sources of knowledge" (though the latter has inconvenient connotations that I shall not analyze here).

"TOK students are not being excited by the course. They are producing dull essays and are working in a mechanical mode."

I dare not analyze student excitement; research should be conducted. As for dull essays written in a mechanical fashion, I believe that this can be countered. Without wishing to limit teachers' freedom of expression and creativity, teachers and their students would benefit by being offered relevant, updated, and high-quality teaching resources, covering all parts of the TOK curriculum.

"The flexibility of the Guide places great responsibility on the teacher."

I agree. I think that this is connected with the discussion described in Section 6 of the Report: "It could be argued that there is a particular need for clarity in what is required in the course, especially for teachers new to the subject." According to the Report the committee then wondered if there might be essential topics that could comprise a "core curriculum" for TOK, and then counter-argued that maybe "the strength of the course lay precisely in its flexibility."

Four main needs for TOK

I agree with the need to define a core curriculum, based on four main needs: (1) to identify basic TOK content, (2) to compile a collection of high quality, relevant, and updated texts, (3) to have a minimum set of agreements about concepts and terminology, and (4) to reconsider the time necessary to complete the course. I will develop each of these in turn.

1. The need to identify basic TOK content

I think that there are a number of circumstances that underline the need to identify "basic TOK content". First, when assessment is external (with prescribed titles, assessment criteria and standards for their application) some explicit basic agreements are necessary in order to attain equity. Otherwise, those teachers and students who feel more "empathetic"--either with the imagination of those who write the prescribed titles, or with the expectations of those who correct the essays--would be favored.

Identifying basic content would be a mere clarification of agreements which, it can be argued, already exist. Such agreements are implicit in the questions included in the Subject Guide, as well as in the assessment criteria. (This implicit agreement is what makes the prescribed titles mostly understandable, instead of inscrutable to the TOK community worldwide.)
It is not so hard to demonstrate that the questions included in the Guide rely on certain unavoidable themes: for example, that knowledge is neither a copy nor a reflection but a construction; that the knower (or knowers) is not passive but active; that knowledge is not necessarily an individual process but involves a social matrix; that language has very important cognitive functions; etc. We could make a long--but not infinite--list of items on which consensus is not impossible.

2. The need to compile a collection of high quality, relevant and updated texts

I share the IBO's idea not to favour the use of manuals or set texts. This does not mean, however, that the IBO should not provide an ever-increasing number of TOK teachers with pertinent and high quality materials. The way to combat the danger of an impoverishing orthodoxy (everyone using the same book) is to offer plentiful, diverse and alternative choices, not to deny that the problem exists.

For example, the Guide correctly maintains that there is a connection between language, society, and knowledge. Wouldn't it be great if teachers could have easy access to anthologies containing not only texts by Herder and Humboldt, but also by Wittgenstein and Searle? Another example: the Guide emphasizes the relationship between truth and rationality, and links it to certain non-cognitive values. Selected passages from Putnam, Habermas, or from the correspondence between Russell and Einstein would be useful to explore these issues. I am using sophisticated examples to show how equity could be attained; however, materials such as newspaper or magazine articles should also be included.

An obvious problem is that such texts are difficult for teachers to access, unless the IBO makes it available to teachers. This does not mean that the use of this material would be prescribed.

I believe that the availability of such materials, combined with the identification of basic TOK content, would contribute to the balance between schools, students, and teachers, and thus to equitable assessment. Perhaps access to these texts would even help improve the quality of essays, which sometimes tend to be insubstantial.

3. The need to have a minimal set of agreements about concepts and terminology

In the Guide as well as in some of the prescribed titles I notice some terminological and conceptual ambiguity, or alternatively the assumption of certain terminological or conceptual agreements that are not so obvious. For example, when we consider the triad knowledge, the arts, and truth, we can talk about at least three relationships: (a) knowledge that can be conveyed through the works of art; (b) knowledge involved in the judgment of aesthetic appreciation; and (c) knowledge involved in the creation, execution or identification of a piece of art. These approaches are closely linked together, but it may be convenient to come to certain agreements about what we're talking about, or at least to acknowledge the possibility of multiple interpretations and thus student responses.

The Guide has made some progress in this regard, but it seems that this should be a permanent effort. On the one hand it is desirable to prevent confusion among new teachers and students, but on the other we should aim to avoid authoritarian or impoverishing unification. This is not an easy task because TOK is a new discipline arising from the combination of many traditions including philosophy, anthropology, art criticism, and others. The IBO, however, has a good track record in bringing opposites together, and perhaps could pursue these clarifications as well.

4. The need to reconsider the time needed to complete this course

I think that there is a disproportion between what we want to accomplish in TOK regarding teaching content, skills, and conducting assessment, and the hundred hours' duration of the course. Teachers often face an unsolvable dilemma: either they take the necessary time to conduct class discussions and to train analytical skills, or they focus on content, which students also need as a basis for their analysis. There is often no time to do both.
If we really want a course that deals with at least some of the important issues included in the *Guide* and we desire to do it using a constructivist--and not an expository--methodology (which means using a critical, participatory, and interdisciplinary approach), then the hours allotted to TOK must be extended.

Regarding time constraints, there's something else I would like to mention. We talk about introducing contemporary or global issues in TOK. Obviously, we are interested in these matters and realize it is important that young people be concerned with them. Nevertheless, given the time deficits already mentioned, we cannot include these without extending the time allocation for the course. A compromise solution could be not to incorporate them as a prescribed part of the syllabus, but to include them as a required part of the Presentation.

The author thanks the Uruguayan college student Micaela da Silveira for the first English version of this article.

**Please let your opinions be known by replying to this article.**
Nicholas Alchin's Theory of Knowledge: Teacher's Book

by George Spanos
Washington-Lee High School, Arlington, Virginia, USA

If you're unfamiliar with Nick Alchin's textbooks George Spanos provides a panoramic view of the entire text, and an in-depth description of Chapter 9.

Introductory remarks

In his Theory Of Knowledge: Teacher's Book, Nicholas Alchin advises prospective users that "[his] intention has not been to provide 'content'...[but] to offer a loose structure within which to slot all the ideas and approaches that make up all the good practice around the world." As his central theme, Alchin sets out to place emphasis upon the "human nature of knowledge and experience." And, as his central aim, Alchin hopes that his book will enable students to achieve a position that provides an alternative to the extreme positions of "Prejudice and Certainty" and "Relativism and Skepticism." (p.3)

After reading both the Pupil's Book (hereafter referred to as PB) and the Teacher's Book (hereafter referred to as TB), I am confident that Alchin has been true to his word with respect to his central theme and aim, even if it falls to each TOK teacher to reinforce his message. He has, however, been overly modest in terms of his intention; he has, in fact, provided a wealth of 'content' within a well-organized structure that can serve as the primary text of a TOK course. In this review, I will describe the contents of the TB, making reference, where necessary, to the PB and to the TOK curriculum. It should be noted from the outset, however, that I have not yet used either the PB or the TB, so my remarks should be taken as tentative.

Description of the Teacher's Book

The 115-page TB is the first book of its kind to accompany a text intended for use in TOK classes. It is a flexible, soft cover text, approximately legal size (21 cm x 29.5 cm). As in the PB, ample room is provided in the left margin of the TB for notations.

The TB includes an introduction, advice on using the books, a listing of audio, video, online, and other resources, and 15 chapters that follow the order of the 15 chapters of the PB. These are:

Ch. 1: What are we trying to do?
Ch. 2: The natural sciences
Ch. 3: The arts
Ch. 4: Mathematics
Ch. 5: Rationalism: the use of reason
Ch. 6: The social sciences
Ch. 7: History
Ch. 8: Empiricism: the use of the senses
Ch. 9: Paradigms and culture
Ch. 10: Language
The reader familiar with the current TOK curriculum will quickly recognize that Chapters 2, 3, 4, 6, 7 and 11 address the six Areas of Knowledge (Natural Sciences, The Arts, Mathematics, Human Sciences, History, and Ethics) while Chapters 5, 8, 10 and 14 address the four Ways of Knowing (Reason, Perception, Language, and Emotion). As a rationale for this ordering of the chapters, Alchin explains that students need to be told "a compelling story about what we are trying to do by providing a lucid linking narrative with which to move students from one set of ideas to the next" (p. 4). Hence, after a treatment in Ch. 1 of general epistemology and the issues surrounding collective and individual knowledge, Alchin presents the Natural Sciences (Ch. 2), the Arts (Ch. 3), and Mathematics (Ch. 4). These three areas can be contrasted on the basis of the relative degree of certainty, objectivity, and progress that can be claimed in each. This discussion leads naturally to the chapter on Rationalism (Ch. 5) since we require deductive and inductive tools to assess our arguments, proofs, and experiments, and because we speculate about the status of reason in the Arts, where certainty, objectivity, and progress are arguably irrelevant.

This provides a springboard to the Social Sciences (Ch. 6) and History (Ch. 7), which in turn motivates the chapter on Empiricism (Ch. 8), since these areas of knowledge rely heavily on empirical observation and are more subjective than the natural sciences and mathematics. Chapter 9 (Paradigms and culture) thus becomes a crucial linking chapter because it promotes a Kantian-like synthesis of rationalism and empiricism as a combined Way of Knowing, and because it introduces the culturally sensitive issues surrounding language, ethics, politics and religion in Chapters 10-13. This leads to a consideration of feelings, emotions and intuition (Ch. 14) which, while relevant to all areas of knowledge, is better placed at the end of the text because such considerations become particularly prominent once students have learned something about linguistics, morality, politics, and religion in Chapters 10-13.

In Chapter 15 (Where do we go from here?), Alchin urges teachers to point students in a positive direction that avoids the twin dangers of epistemological dogmatism and skepticism, one or the other of which is often the extreme position that students take away from their TOK course. He views this chapter as more of a beginning than an end, and in this sense seems to parallel the message of the final two hexagrams of the great Chinese classic, the I Ching. These are:

Hexagram 63 Chi Chi: After Completion
Hexagram 64 Wei Chi: Before Completion

While Hexagram 63 symbolizes a time when there has been a transition from confusion to order, Hexagram 64 symbolizes a time when this transition has not yet been completed. In my experience, and apparently in Alchin’s, TOK students often feel deflated by all of the unanswered questions that remain at the conclusion of the TOK course. After all, in their other classes they feel a sense of closure once they have completed their exams and achieved a measurable stage of content mastery. But, in TOK, it is incumbent upon the instructor to encourage students to face uncertainty and inconclusiveness in a constructive manner, i.e., to accept the situation, recognize its challenges, and yet continue to ask the kinds of questions that Socrates had in mind when he taught his students that the unexamined life was not worth living.

Chapter structure and a preview of Chapter 9

At the beginning of each TB chapter, Alchin restates the aims of the corresponding chapter of the PB and gives suggestions for teaching individual sections. Except for Ch. 3 (The Arts) and Ch. 6 (Social Sciences), each chapter begins with a section entitled "Teaching Activities," which provides ideas for activities that might be used to introduce each chapter. It is unclear why Ch. 3 and Ch. 6 lack this section, but it doesn't seem to matter since teaching activities are scattered throughout other sections of each chapter. In these sections, Alchin specifies corresponding page numbers from the PB and provides background information, answers to exercises in the PB, additional teaching activities, and advice on how to use the activities. Some chapters (4, 5, 8, 9, 10) also include reproducible pages that can be used for teaching activities suggested in
As mentioned in the preceding section, Chapter 9 (Paradigms and culture) is a crucial linking chapter; hence I will cite some TB examples from that chapter to both underline its importance and to give the reader the flavor of the TB.

Like each chapter of the PB, Ch. 9 begins with a set of quotations that relate to the main chapter topic. On page 8 of the TB, Alchin urges teachers to familiarize themselves with these quotations and to use them to summarize positions that the students themselves might espouse in classroom discussions.

On TB pages 81-85, Alchin provides a "simulation game" that can be used as an introductory activity for extending the notion of paradigms to the cultural realm. [Editor's Note: The simulation that George mentions is a derivative of the classic BaFa-BaFa game, adapted for use in TOK.] Two reproducible pages are included that describe the rituals and customs of two contrasting cultures. The students are divided into groups, directed to practice the rituals of one or the other of the two cultures, and then given the opportunity to further develop their respective cultures through several role play sessions. Once this has been done, students of one culture visit the other culture to observe them in action and to collect data on a third reproducible page. This page provides space for four visits to the other culture with each visit focusing on the social structure, economy, customs, status indicators, gender roles, and values of that culture.

On p. 84 of the TB, Alchin urges instructors to emphasize the distinction between cultural descriptions and cultural explanations in conducting this simulation game. Since the data collection phase will focus primarily on description, the discussion stage should be used to ask the higher order question of why the particular culture engages in certain customs. The TB provides the teacher with ideas for starting such discussions, e.g., Is the individual or society the center of the simulated culture? Is it an equitable society in terms of material wealth? He then provides a lengthy list of questions that can be used by students to examine their own cultures, e.g., Do men and women greet each other differently? How do teachers and students talk to each other? Can a woman ask a man out on a date?

In addition to the simulation game, Alchin provides ideas for using the Ch. 9 PB Resource file concerning the classic story about the body rituals of the Nacirema (PB pp. 193-195) and two of the videos listed in the TB Resources section: The Power of the Situation and Constructing Social Reality and Kidnapped by UFOs? (TB p. 6). The story about the Nacirema [Ed.: see the OCC for further information] is intended to show students how an outsider might objectively describe a culture. As a follow up, Alchin urges that teachers have students write a similar story. The first video is included because it concerns our dependence upon culture in constructing social reality, while the latter is included because it models the contrasting scientific and "I want to believe" paradigms. For the latter video, Alchin includes a set of questions that can be used as a follow up to watching the video.

Thus, Alchin has provided supplemental activities in the TB that not only support and extend the content of the PB, but also lead into the types of questions that arise in subsequent chapters dealing with language, ethics, politics, religion, and emotions. For teachers such as myself who have had difficulty in encouraging some students to see beyond their cultural "filters" and adopt a more global point of view, these activities are welcome, indeed.

Some suggested improvements

While I am very enthusiastic about the prospects of using the TB and PB, there are several areas where instructors will probably feel the need to inject their own resources.

First, since Alchin does not explicitly refer to the TOK Curriculum Guide in the TB or the PB, the instructor may wish to point out the relationship between the PB content and the Knowers and Knowing, Ways of Knowing, and Areas of Knowing section of the Curriculum Guide. This could be easily achieved through the use of the TOK Diagram. Since the TOK Curriculum is subject to change in future reviews, Alchin's omission of explicit reference was probably a wise editorial decision, but instructors will probably want students to be aware of the "official" categories as they prepare them for the required prescribed essay and internal assessment oral presentation.
Second, with respect to assessment, it might have been useful for Alchin to include specific ideas in the TB that would help teachers prepare students for essays and oral presentations that require attention to problems of knowledge as they relate to the areas and ways of knowing. I have found that my students often find it difficult to understand exactly what a problem of knowledge is, and I have to spend a good deal of time and effort in making sure that they at least pay lip service to this crucial aspect of the curriculum in their essays and oral presentations. Perhaps a future edition of the TB could include "How to prepare students to write a TOK essay" and "How to prepare students to make a TOK presentation" sections that provide tips on how to use content from the text to fashion effective essays and oral presentations. Since these are areas of the curriculum that are likely to remain relatively intact, their inclusion would make the TB even more useful than it appears to be at present.

Finally, Alchin makes no reference in either the PB or the TB of the three theories of truth that are often included in instructors' discussions of knowledge, nor explicit reference to the Linking Questions (p. 30 of the TOK Subject Guide). Details on the correspondence, coherence and pragmatic theories would be particularly useful for instructors who are new to the TOK curriculum, particularly those with little or no background in epistemology.

Concluding remarks

As stated in the introduction, I am planning to use the PB and TB extensively in my TOK classes in the 2003-2004 school year, so I should have a good deal to say about their effectiveness by the end of June 2004. Since my classes meet every day for the entire 180-day school year, I am hoping that the books will enable me to provide students with a positive direction and sufficient content to last the entire year. I have been particularly concerned about the 3-4 months that follow the completion of the assessments, since students often perceive the course as being over once they have submitted their prescribed essay and made their presentation. Thus, anything that will help fill that daunting gap is welcome. It seems to me that the ordering of the chapters will be very helpful in this regard since the contemporary issues raised in the areas of ethics, politics, and religion come last and will be fresh in the minds of students when they complete the assessment phase.

In tentative conclusion, then, I think Alchin should be commended for providing a teacher's edition that both explains and supplements his student edition and that motivates instructors to use the activities in the two texts and encourages them to create their own activities and lesson plans. Although TOK teachers tend to be an independent lot, unwilling to give too much ground to central command, I suspect that there are enough veterans, and surely enough current and future rookies, who will welcome the important information (dare I say "content"?) and activities that Alchin provides in this well-written, well-edited, and intellectually stimulating text.

[Editor's note: Nick Alchin's books can be purchased directly from the publisher (if the link does not work, go to John Murray and search for ALCHIN). Also, from www.amazon.co.uk (it is NOT available at www.amazon.com). Inspection copies are available by e-mailing intschool.orders@hodder.co.uk. ]
A tale of three texts: how one teacher is getting to know TOK

by Tim Waples
Charlotte Country Day School, Charlotte, North Carolina, USA

Tim Waples describes his experiences with TOK textbooks by Tomkinson, Woolman, and now Alchin.

I was more fortunate than many new TOK teachers: I had four months to prepare before taking over the class from a beloved veteran teacher who was leaving the school. Learning of my upcoming assignment in August, I had the opportunity to observe the IB seniors in class throughout the fall semester--the second half of our two-semester, five-day-a-week TOK sequence--before starting fresh on my own in January with a new batch of IB juniors. Doc, my predecessor and TOK mentor, was a classicist who taught Latin and tirelessly worked towards drawing students into a love of language and its history: there is a picture of him in the dictionary next to the word "avuncular."

Through Doc, I met my first TOK textbook, *The Enterprise of Knowledge*, written by John L. Tomkinson and published by Leader Books in Athens, Greece [reviewed in *Forum* 43, August 2000]. *Enterprise* consists of a hefty 451 pages, organized into twenty chapters, plus an appendix addressing religion. The first two chapters, "The Enterprise" and "Knowledge," serve as an introduction, with the remaining chapters organized into three categories: "The Sources of Knowledge" (Sense Experience, Testimony, and Reason), "The Vehicles of Knowledge" (Language, Meaning, Logic, Mathematics, and The Arts), and "The Varieties of Knowledge" (Everyday Knowledge, Empirical and A Priori Knowledge, The [Natural] Sciences, The Human Sciences, History, Explanation, Values, Ethics, Politics, and Philosophy). Doc taught the course using the IB diagram and employing the language most familiar to it (no discussion of "sources," "vehicles," and "varieties"), but he expected students to consume Tomkinson's chapters; I can't recall now if he skipped chapters or altered their order in the progression of his class.

Tomkinson's book is set up for the no-nonsense reader. Each chapter offers a glossary of terms, and many have exercises for which correct answers are printed in the back of the book. Text boxes offer study questions, lists of examples, or "talking points" (digressions of a paragraph or more to explore a particular issue in greater depth, such as the relation of propaganda to education, or the issue of gender equity in language). Perhaps *Enterprise*’s best feature is its "case studies," which are elaborate examples plentifully included in each chapter, ideal for arousing and focusing discussion.

Despite these nuances, Tomkinson's book strikes me as a daunting, weighty mass of words. It is possible that Doc considered this one of the attractions of the text. He required students to produce a list of questions for every chapter, with accompanying answers. He encouraged a certain competitive and quantitative spirit for this task, with students vying to compile the longest list of questions, the most thorough "coverage" of the material. I knew this approach wouldn't work for me: I was in search of a method that put students more immediately and directly into dialogue with each other and with me. I knew I was looking for fewer words on the page, hoping that would lead to more words in the classroom. I wanted students to think that class began with what they already knew, not with what awaited them in the textbook.
I took my nascent impulses about TOK with me to a teacher training workshop I had the privilege of attending that fall. The workshop leaders, Lena Rotenberg and Eileen Dombrowski, inspired and awed me with their attitude of thoughtful playfulness, and with their daunting advice to avoid using a textbook in TOK, or to phase it out as soon as the teacher is comfortable with the course, thereby foregrounding the central task: to encourage student inquiry, not mastery of a given body of information. While I appreciated this theoretical point, I felt that I needed the structure of a text to help me link and reinforce lessons, to give students a clearer sense of progression and interrelation between units. In short, I was insecure about my authority in a TOK classroom, and I wanted some support.

Moreover, I was sensitive to the range in ability and affinity, even within the advanced IB program, of the students at my suburban independent day school. The majority are habituated to carrying a text in their bulging backpacks as a talisman embodying truth and academic reward, the straightforwardly material benefits of the "education" being purchased for them. While I loved the student-centred theory through which TOK was presented to me, I feared that my students were inclined to see "inquiry" as a less rigorous or less rewarding mode of academic activity than traditional feats of review and recall. When I considered all these impressions, jumbled together in my anxious brain, I knew that I needed a TOK text, but one offering students a different feel and message from Tomkinson's compendious volume.

My search led me to Michael Woolman's *Ways of Knowing*, published by IBID Press in Victoria, Australia. Woolman demonstrates the spirit of his approach in "An Introduction," where a line drawing introduces us to "Theory of Knowledge," a duck-billed platypus! The 306-page text includes cartoons, line drawings, and thumbnail-sized black and white photos to illustrate and break up the text, in addition to a generous offering of charts, diagrams, lists, and text boxes to enhance the visual appeal. I liked the informality of Woolman's approach, the frequent attempts at humor (although only moderately successful at best), and the study questions offered before and after each chapter. *Ways of Knowing* seemed somehow more manageable and less inhibiting than *The Enterprise of Knowledge*.

I also found the structure of *Ways of Knowing* a more comfortable fit with my desire to teach the course according to the IB diagram, starting in the center with Knower(s) and Knowing, moving out to Ways of Knowing, and finally out to Areas of Knowledge. Woolman's text is divided into five sections and fifteen chapters, although these divisions do not coincide with the IB diagram. The first section, titled "Ways-of-Knowing," actually begins by dealing with definitions and theories of truth—which I regard a province of the IB's Knower(s), not of the four Ways-of-Knowing—before moving into perception and skepticism. Thus rationalism and empiricism, by the nature of this organization, become principal organizing concepts for this section. Section Two addresses "The Prison of Logic" and "The Prairie of Language." The third section, appropriately titled "Areas of Knowledge," includes "Natural Science," "Mathematics," "The Human Sciences," and "History." Unfortunately, Section Four, which presents two chapters, "Literature, Music & Art" and a nicely interdisciplinary exploration of "Creativity," returns to the "Ways-of-Knowing" nomenclature to ask if these humanities areas might be more aptly labeled "Ways-of-Experiencing." Finally, the fifth section, "Other Areas of Knowledge," introduces three chapters: "Ethics," "International Knowledge," and "Classifying Areas of Knowledge," a reflection upon how knowledge is classified by libraries and universities.

In other words, Woolman doesn't closely follow the IB terminology, but he does use it somewhat idiosyncratically. I suspect that, for Woolman, "Areas of Knowledge" are a subset, by-product, or offshoot of "Ways of Knowing," but I have not found any clear or direct indication of how he views this relationship. Despite the potential for confusion, however, I found that the structure of the individual chapters fits comfortably with my attempts to introduce concerns and concepts to my students. I used Woolman's plentiful and often clever study questions regularly as prompts to begin class, or as homework assignments for students to ponder or respond to in writing. Our best discussions often came from the separate sections of supplementary material at the end of most chapters, which contain some of the most valuable information in the book: brief bibliographies of related texts for further inquiry; snippets of philosophy from the likes of Plato (p. 38), Descartes (p. 48), and Orwell (p. 96); poems by Coleridge (p. 231) and D.H. Lawrence (p. 213); lists of syllogisms (p. 67) and logical fallacies (p. 70); descriptions of Bacon's idols (p. 49) and Gardner's intelligences (p. 296); and several challenges to an unthinking acceptance of scholastic practice, namely, "Is School Science Real Science?" (p. 124), "Is Economics a Science?" (p. 166), and "Why School History Is Not Real History" (p. 188).
Over the year and a half that I've used *Ways of Knowing*, I haven't always found the engaged and self-confident reaction from students that I see in my mind's (heart's?) eye and seek in the classroom. Certainly the phenomenon of the twenty-first-century teenager has something to do with my experience; possibly aspects of Woolman's text also contribute to my sense that something is wanting. But the logical and instinctive place to seek improvement is to look at my own pedagogical practice: throughout my time in TOK, I have frequently asked myself what I can do to approach more closely my idealistic goals for the course and the classroom. I have gradually come to see that, perhaps because my disciplinary training is in English and history, the class activity I have planned most often is discussion in response to readings assigned as homework. I am increasingly alert to the shortcomings of adopting a single or even a usual approach to conducting class: I've found that my habits were neglecting differences among students' learning styles and interests.

One way I've tried to address this imbalance has been to trim and focus the readings from *Ways of Knowing*: by making students responsible for fewer pages, I hoped to focus their attention more narrowly on the ideas to be discussed in class. However, I experienced their response as diffidence towards the issues I had hoped they would raise, towards the text generally, and, in a few cases, even towards the proposition that class discussion could be meaningful, productive, or fun. In other words, both the routine of assigned reading and the reduction of that reading seemed to lead students to a reduced involvement, a step closer to disengagement or apathy. Ultimately, even though I saw the somewhat casual approach in Woolman's text as more desirable than Tomkinson's, that difference didn't seem to effect an appreciable alteration in the way students experienced the course. Although I recognized that the most direct way to address my dissatisfaction was through my own pedagogy, I also found myself, after two years with Woolman, in search of another TOK text.

This January, I'm starting my third cycle as a TOK teacher with Nick Alchin's *Theory of Knowledge*, published in late 2002 by John Murray, in London. Unlike Tomkinson and Woolman, Alchin offers a 115pp. legal-sized "teacher's book" (hereafter referred to as TB) to accompany his 328pp. trade-sized student's book (or SB), both of which are divided into fifteen chapters. In the TB, Alchin explains the "lucid linking narrative" he offers in his sequence of chapters, which intersperses Areas of Knowledge and Ways of Knowing. After a brief, thoughtful introduction, Alchin discusses three Areas of Knowledge ("The natural sciences," "The arts," and "Mathematics"), then pulls back to explore Reason; discusses two more Areas of Knowledge ("The social sciences" and "History"), then treats Perception and Language, with a useful chapter on "Paradigms and culture" between them. Alchin continues his mix of Areas and Ways with chapters on "Ethics," "Politics," "Religion," and Emotion, wrapping up with a brief conclusion that emphasizes each person's individuality in the search for knowledge and understanding.

While I am impressed with Alchin's scheme, I remain reluctant to change my dependence upon the TOK diagram, which I have found immeasurably useful as an organizing principle for my course. However, I believe that Alchin's chapters can be addressed out of numerical sequence without confusion or disruption. If I wish to begin with Ways of Knowing, I can start with Chapters 1 (Intro), 5 ("Rationalism: the use of reason"), 8 ("Empiricism: the use of the senses"), 9 ("Paradigms and culture"), 10 ("Language"), and 14 ("Feelings, emotions and intuition") before returning to earlier chapters to explore Areas of Knowledge, without losing my students along the way.

What draws me most powerfully to Alchin's text is how his philosophy about "doing TOK" (for lack of a better verb) fits my evolving thoughts. The author expresses it quite clearly in the introduction to his teacher's book:

"The intended audience is students who have, for most of their lives, been bombarded with 'facts,' and for whom learning may sometimes seem to be accumulation of 'truths'…. For many, the transition from the sponge model of education to a more dynamic but initially less confident model is exciting; but for many it is confusing; ideally, it should be both. (TB 1)"

Alchin's purpose infuses the methodology of his text. Rather than presenting information about each of the Ways and Areas, information that students (or teachers) may all too easily take for an "accumulation of truths," Alchin presents problems, showing how "they seem to accumulate, interlink, and present a rich, dense and profoundly thick barrier to knowledge" (TB 1). Hence, the excitement and the confusion that Alchin hopes will ultimately compel students to think, question, and judge for themselves, with curiosity
and reverence for the past, present, and future efforts of others. I join Alchin in that hope.

One way Alchin makes his methodology apparent is by opening each chapter with a "file folder" of quotations, many of which contrast with each other or stake out positions that will inspire reaction and position-taking from students. Tomkinson and (to a greater degree) Woolman also include quotations, but in a way that is static, not dialogic. For example, in Alchin's "Mathematics" chapter, Hermann Weyl's comment, "You can not apply mathematics as long as words becloud reality," jostles against Robert Jensen's "On each decision, the mathematical analysis only got me to the point where my intuition had to take over" (SB 52). Considering these two sound bites together foregrounds a handful of contentious questions: What is "reality?" How does language ("words") or intuition (emotion?) relate to it, and to math? Does math lead or follow other forms of knowing as we make decisions or pursue understanding? Suddenly, studying math entirely separately from the other Areas of Knowledge and Ways of Knowing seems a bit more impossible--which is just what I'm hoping students will gather, as much on their own as from me. Alchin reinforces this impression by concluding each chapter with a paragraph or so on "Where do we go from here?" This feature, which propels Alchin's "lucid linking narrative," once again demonstrates that the connectedness of the Areas and Ways must be considered as we focus on each in turn. Also, although Woolman offers brief bibliographies after each chapter, Alchin annotates his, giving teachers and students alike a better understanding of how to pursue their curiosities.

Chapter by chapter, Alchin underlines the focus on problems to be questioned rather than material to be covered. One small but meaningful way in which he does this is to eschew the numerical subdividing that both Tomkinson and Woolman adopt (Woolman even goes into a second level of subordination; i.e.: "10.1.5 Each Generation's Reconstruction [of History]"). Many of Alchin's subheadings are questions, not categories: "Mathematics: invention or discovery?" (SB 54); "How much can the social sciences tell us?" (SB 116); "Which is the right version of history?" (SB 135). Alchin conveys more clearly than other authors that the most a TOK textbook can do is offer a sampling of issues, questions, and examples, and that it is up to the reader to "go from here." (So often, my students try to ease their way out of a tight spot by saying, "It's all up to the individual," to which my favorite response is, "Okay. You're an individual. Tell us how it is for you," placing them right back on the hook.) Another important technique Alchin uses is to present "Aims" at the beginning of each chapter. These can focus student attention without limiting their field of vision: "[B]e able to give at least an initial definition of 'knowledge' and distinguish between 'knowledge' and 'belief'" (SB 3).

Finally, Alchin knows what TOK teachers want most: lots and lots of materials from which to fashion classroom exercises. The student's book contains copious study questions and short supplementary readings (Alchin calls them "resource files"); the teacher's book is comprised primarily of activities that support the issues addressed in each chapter, with brief discussions and still more bibliographic references. Included are: a fun non-verbal communication exercise; a diverse cultures simulation; historiographic skits; useful and entertaining sketches from Monty Python and Abbott & Costello; lateral thinking puzzles; and more than a dozen diagrams and charts that can be turned into overhead transparencies. In short, Alchin, with the combination of teacher and student texts, is practicing what he preaches in the teacher's book:

"The text does not pretend to begin to make real the profound problems of knowledge--as always this responsibility and privilege remains with the teacher....[A] central theme of the books is to stress the human nature of knowledge and experience. Nowhere is this better exemplified than in an exciting Theory of Knowledge class; in this, a book can play only a supporting role. (TB 3)"

So my exploration of TOK texts once again takes me back to my own practice. I've learned over the last three semesters that teachers as well as students have to work hard and self-consciously to break out of the habits and patterns of the traditional classroom. For me, that means less dependence upon language and greater emphasis on activity. It means more student-centredness, accompanied by quiet, deft ways of pushing students to build on their activity as they grow in self-awareness, to gain in respect for differences of all kinds, and to strive to synthesize the problems and achievements that arise over a year of TOK inquiry. I expect Alchin's texts to be a stalwart ally, although the real--whatever that means!!--text will be the one my students and I construct together.
A tale of three texts: how one teacher is getting to know TOK

For more about TOK textbooks, visit a special thread on the OCC.

back to top

Forum is jointly published online at www.adastranet.net/forum/ by the International Baccalaureate Organization and Lena Rotenberg Educational Consultant, © 2000-2003. Forum is a peer-reviewed publication aiming to offer original, thoughtful articles promoting Theory of Knowledge (TOK) teaching, in a fashion that is immediately useful to teachers. It is published twice per year in English (November and May) and twice per year in Spanish (February and August). Page last modified 13 November, 2003.
A Review of Hugh Robertson's Student Projects

by Marilynne Sinclair
Ashbury College, Ottawa, Canada

Hugh Robertson's "Student Projects" may be very useful for TOK students embarking on essays and oral presentations.

Hugh Robertson, teacher, long-standing IB Examiner and the author of The Research Essay, The English Essay and Research and Communication Skills has now published a revised and expanded edition of Student Projects: An Introduction to Research and Communication Skills, his invaluable guide to student assignments. It is a lively, user-friendly manual that covers a wide variety of written and oral assignments, providing clear, up-to-date explanations, tips, and strategies to help students get the work done.

Robertson's genius is to demonstrate how each assignment is really just a series of clearly identifiable steps that, when followed, leads to the successful completion of the assignment. There are numerous illustrations and exemplars. Lively, humorous cartoons help illustrate his points which are explained in clear, direct language.

TOK students will find the following sections of the book particularly useful when embarking on their TOK essays and oral presentations:

- Selecting the topic
- Narrowing the focus
- Preparatory reading
- Developing outlines
- The roles of the introduction and the conclusion
- Drafting the assignment
- Tips on style and language
- Revising and editing
- The three major documentation styles and how to both cite and list sources correctly
- Using quotations
- Speaking tips for oral presentations
- Multi-media ideas for oral presentations

Students can use this book independently, but in many ways the manual is also a useful teaching resource. For example:

- The various diagrams and checklists are useful teaching tools.
- Documentation styles are clearly explained and illustrated.
- The way to document online sources is right up-to-date.
- There is a glossary which clearly explains assignment prompts such as "explain," "compare," or "evaluate."
- Plagiarism and the importance of citing sources are clearly explained.
Student Projects can be used effectively in conjunction with Eileen Dombrowski's "Six Steps to Writing a Good TOK Essay: A Student Guide" (Forum 44, November 2000). Both identify and explain a step-by-step method. Where Dombrowski’s guide is concerned specifically with the unique challenges of the TOK essay topic list and the overall purpose of TOK, Robertson's tips help in a general way by explaining preparatory reading, the organization of information and ideas, and methods of outlining, drafting and editing an essay.

Student Projects can be purchased from www.piperhill.ca and costs US$9.00.
Worth Clicking!

The Political Compass
http://www.politicalcompass.org/
"The old one-dimensional categories of 'right' and 'left,' established for the seating arrangement of the French National Assembly of 1789, are overly simplistic for today's complex political landscape." This test measures where in a two-dimensional scale of "rightism" and "leftism" you lie, and compares your results with that of famous leaders'. Its thought-provoking questions encompass judgments in politics and ethics. (Thanks to Marney Bruce.)

The Yuk Factor (Taboo)
http://www.philosophersmag.com/games/taboo.htm
I was first introduced to the "yuck factor" by Tim Henly, who argued that many of our moral and aesthetic values are based on repugnance: when actions or things make us say "yuck," (or, I suppose, "yuk" in the UK) we equate them with "wrongness," "evil," or "immorality." This online quiz at The Philosopher's Magazine website, appropriately called "Taboo," provides several situations that attempt to measure to what extent we have good reasons for the moral judgments we make. The analysis of results raises questions about the influence of emotion on moral judgments. On the same vein check out Ophelia Benson's article, "The Yuk-Factor," at http://www.philosophersmag.com/games/yuk_factor.htm.

The Argument Clinic
http://www.univnorthco.edu/philosophy/clinic.html
Unsure of whether an argument is sound or not? Type in the argument, and [not immediately] receive a response about its validity from the folks the the University of Northern Colorado. The "previous submissions" link can be found below the Submit button, and is worth checking. At the bottom of the page, other resources about arguments and informal fallacies. (Thanks to Carolyn P. Henly for submitting this site, found by her school's library media specialist.)

What if Einstein was wrong?
http://www.discover.com/issues/apr-03/cover/
João Magueijo, a 35-year old physicist, is questioning Einstein’s postulate that the speed of light is constant throughout the universe. This article, written by Tim Folger and published in Discover magazine (April 2003), provides a good example of science in the making. For a concrete glimpse into paradigm wars you can also conduct a search at amazon.com for Magueijo's book, Faster Than the Speed of Light: The Story of a Scientific Speculation, and read what people are saying.

"Reaching for the stars": an interview with George Walker
http://education.guardian.co.uk/schools/story/0,5500,1010832,00.html
On August 2, 2003 The Guardian published an interview with the IBO director general. Worth reading, especially the phrase that describes what many seasoned TOK teachers know: "Students might be sceptical about theories of knowledge, but years later they come back and say it's the one thing they remember in the IB. They are really grateful for it." (Thanks to Mike Clarke)
From the editor: First issue of Forum online
Based on the last print issue, 48A

Welcome to Forum online, which replaces the print publication that has existed since October of 1984. Despite the fact that I too will miss the feel of the nicely laid-out print issue in my hands, it is time to move away from print, for many reasons.

From now on, you'll be able to:

- Copy and paste parts of articles to your word processor, and adapt the content to your own needs.

- Search the Forum website and quickly locate articles that contain your search term. (Our search engine is elementary at this point, but will be improved.)

- Receive an e-mail that lists the articles that have become available online. Click on the provided links, and immediately access the articles that interest you.

To receive an e-mail notification whenever each issue becomes available, send an e-mail to TokForumEnglishNotify-subscribe@yahoogroups.com. This is a one-way (from the editor to all subscribers) distribution list, not an "everybody posts" listserv. The volume of e-mails will be low. To protect you against spammers, your e-mail address will be hidden from other subscribers. After subscribing, you will have to reply to an e-mail from yahoogroups, confirming that you're a live person with a real address instead of a spammer-bot.

If you have trouble using yahoogroups, e-mail me and I will resolve your problem on an individual basis.

I will also post notification of new issues on the Online Curriculum Centre (OCC), which is now available to all authorized IB schools free of additional charge.

- Access websites mentioned on the "Worth Clicking" page without having to type the URLs. You'll be able to click and go!

- [Under consideration] Click on a link on the notification e-mail (or visit the Forum website) and download the entire new issue as one PDF file, rather than downloading each article separately. (What do you think about this?)

- [Under construction] Access past issues of Forum. I'm delighted to say that the Forum Archives Project is well underway! The work of scanning and performing optical character recognition of issues prior to No. 43 (August 2000), begun by John Day of Springbrook High School, has received a major boost. Rick Bisset kindly suggested that Matthew Woolman, his ITGS student at the International School of Kuala Lumpur, work on the Forum Archives project. Matthew has been converting print into files at warp speed.

This cannot be a solo effort. In the spirit of our entire *Forum* endeavor, a team effort is essential for its success. **I need you to help with the next stages.** These are:

1. Deciding which articles are worth re-publishing;
2. Locating authors and securing permission to publish their articles on the Web;
3. Re-editing these articles (whenever necessary, for example to adapt terminology to the current Subject Guide);
4. Laying out the articles in HTML for publication on the *Forum* website.

If you are able to help with any of these, please e-mail me, stating which of the four jobs most interests you. **Please write "Forum archives" on the subject line.**

Issues 43 to 47 will be republished online fairly quickly. My priority right now is to set up the *Forum* website in Spanish.

**Beyond personal advantages:**

- Presently, **newly authorized schools** have very limited access to issues of *Forum* published prior to their authorization. They will now be able to access these issues online.

- **Future TOK teachers in schools going through the authorization process** need to develop a course, but didn't receive the current print issue of *Forum*, nor were allowed into the OCC. They will now be able to access *Forum* online.

- The excellent peer-reviewed articles published in *Forum* will now be **available to the public at large**. I personally believe that in the past 30+ years we've developed a unique course, which our graduates appreciate even more years after they graduate from university. It's time for the world at large to become more closely acquainted with what we do, which is why *Forum* is being published on a public site.

**Some disadvantages of Forum online:**

- Even if we offer, and you print out, the entire issue as one PDF file, it will not look as nice as the print issue.

- Since *Forum* will be publicly available, we will have to be more mindful of what we publish. Some lesson plans would be rendered moot if students read the articles introducing them. Such "sensitive" information will be placed on the Online Curriculum Centre (OCC), which is accessible only to IB teachers. Thus, you will occasionally encounter, while reading an article, a link such as "[Ed.: This is detailed on the OCC]."

  **Important note:**
  
  If you are an IB teacher and do not yet have access to the Online Curriculum Centre (OCC), please contact your IBC.

**Next project: TOK Memory Lane**

In the future the earliest issues of *Forum*, as well as the early subject guides and teachers' guides, will be included on this website, thanks to Trevor Trumper, Sue Bastian, and John Mackenzie who are furnishing source materials. **If you wish to participate in this effort to collate the history of TOK**, please contact me (write "TOK memory lane" on the subject line).
I hope you enjoy this site and this issue of *Forum*. **As always, your comments and input are welcome.**

May your holidays be everything you wish for. And may you find the time to finally write up that great idea you've been using in class, and send it to us!

**Lena Rotenberg**  
*Forum editor*

---

*Forum* is jointly published online at www.adastranet.net/forum by the International Baccalaureate Organization and Lena Rotenberg Educational Consultant, © 2000-2003. *Forum* is a peer-reviewed publication aiming to offer original, thoughtful articles promoting Theory of Knowledge (TOK) teaching, in a fashion that is immediately useful to teachers. It is published twice per year in English (November and May) and twice per year in Spanish (February and August). Page last modified 13 November, 2003.
Birlaint Obsrevatoin...

When I studied Shannon's Information Theory I learned about the built-in redundancy in most natural languages: many letters or entire words can be deleted without preventing the recipient of the message from understanding its content. A classic example is the phrase “mre mssgs r snt than ncesry to cnvey infrmtn ntendd by sndr.” This apocryphal text that has been circulating on the Internet suggests that our brains are quite proficient in deciphering messages of this kind in English. A friend confirmed that Portuguese also works. Please let us know if it works in other languages! (Thanks to Harvey Levy for the submission.)

Aoccdrnig to extnesvie rseeacrh conudcdetd at Oxofrd Uinervtisy in Enlgnad, it deosn't raelly mttaer in waht oredr the ltteers in a wrod are, the olny iprmoetnt tihng is taht the frist and lsat ltteer is at the rghit pclae.

The rset can be in a toatl mses and you usulaly can stll raed it wouthit much porbelm. Tihs is bcuseae we do not raed ervey ltete by it slef but the wrod as a wlohe.

Jus tbnik a momnet abuot all the tmie you and I watesed laernnig how to splel wrods croscopey!

Responses: Counterclaim by Nick Alchin

Round the world with the TOK Wheel (Thanks to Carolyn P. Henly)

I have a large poster-sized TOK wheel that displays the sections of the TOK diagram as layers that can be turned, so that we can line up the various elements to demonstrate what complex of relationships is under discussion at any given moment. We might, for instance, decide that in discussing a chapter from Rocks of Ages by Stephen Jay Gould, we are talking about the KNOWER-REASON-SCIENCE interaction, and/or the KNOWER-EMOTION-SCIENCE interaction, and/or the KNOWER-PERCEPTION-HISTORY interaction, and so on.

I have found this to be a useful way of helping students understand that the various elements on that diagram interact with each other, rather than existing as separate categories. I have also had students make their own individual TOK wheels; they rely on these fairly frequently to help them clarify an idea. An interesting sidelight is that from time to time students come into my class from another class, and head directly to the wheel. They use it to demonstrate what they were talking about in a previous class. TOK travels!

Inadvertent humor from essays submitted in the May 03 session

“...members of the clergy are skilled speakers who are trained in the art of heretics.”

“R. Abel once wrote: ‘All seeing is seeing-as, there is no innocent eye,’ Nietzsche called this
‘the fallacy of Immaculate Conception.’”

“Repetition can determine what we believe to be true because it is repetitive.”

**Finally, these are for the anals (sic) of TOK:**

- “...Meaning: when a person is enculturated into their particular area, family, group, society, excreta, they were taught beliefs that they now hold as truths.”

- “Despite this new insight, Carroll’s statement is still quite constipated.”

- “Other sources of knowledge, such as books, websites, authorities, and the media offer only an institutional, impersonal and sometimes biased experience and are essentially only suppositories of information.”