



Robert Swartz talking to teachers at the Col.legi Montserrat, Barcelona, Spain.

WHAT DO WE WANT TO SEE OUR STUDENTS DO IN THEIR LIVES AS A RESULT OF OUR TEACHING THINKING IN OUR CLASSROOMS?

Bad Thinking Habits and Good Thinking Habits

When I think about this question I try to imagine examples of thinking challenges and responses to them by our students that will make me think that our efforts have been successful. The automobile is a piece of technology that has, for many years, been an essential and abiding part of modern life. Think of how much time most of us spend in automobiles, and how much of a fixture automobiles, gas stations, and parking areas are in almost every major populated area on this planet. Most of us buy automobiles one or more times in our lives. Our students will also. And that usually requires some thinking.

So take a look at this:



The sleek exterior of the 2006 Steria attracts more than its share of admiring looks, and its powerful 1.6 Turbo engine prompts "wow's from testdriver's and owner's alike. Yet it's the price which makes people stop and think. **Beauty has never been this affordable**

For many people who need to buy a car, an ad like this won't yet convince them to make this purchase, but it will draw them in. So they may go to a local dealership that sells the Steria and maybe look one over, drive it, read the specs usually posted on the window, ask the dealer some questions and get some answers, and then, maybe, warm up to signing the purchase agreement. That's a common purchase-pattern, and it extends to many other purchases as well. The trouble is that most of the time – though, of

course, not always – disappointment creeps into this story. "I didn't realize how hard it was to get this car repaired." "The back seat is very uncomfortable – no one wants to ride with me." "It keeps breaking down."

I don't want to exaggerate these disappointments, but they do happen all too frequently, and most of them can be avoided. That's one of the things I'd like to see as a significant outcome of our efforts to teach our students to be better thinkers. Here's a different scenario. Yes, this ad is appealing, but our buyer is alert. He says to himself:

"Marcus, hold on. This is an important decision and you should think about it carefully. Yes, this car looks appealing, but remember, you have a tendency to be drawn in by ads like this and make pretty impulsive choices. Maybe this car is for you, but maybe not. So slow down and take things step by step. Instead of just thinking about this one, consider some of the others that seem to meet your needs. And remember to get information about what you think you need to find out: make a list of things like how easy it is to get the car repaired, the cost of parts, how comfortable it is, etc. And don't just rely on what the dealer says to you – remember, he's got a vested interest in selling you the car. Maybe you can try to get more reliable information by listening carefully to people who have owned these cars, or maybe you can see if Consumer's Reports have any reports on these cars. And decide what the most important factors are before you compare these different cars. That's a plan and you should stick with it – remember your goal, making a well-researched and well thought-out decision. Also, it will probably be a good idea to consult your family – they will be using the car too. Maybe you should even gather the information, share it with them, and then think together as a family about this, and not just by yourself."

Other decisions like what shoes to put on in the morning may not warrant such care, but decisions like this one often do. Wouldn't it make us all feel more confident if the people whose decisions we rely on, like our government leaders, made decisions this way.

Types of Bad Thinking Habits

Let's take a minute to contrast these two situations. David Perkins and I have identified a four-dimensional matrix of defaults that people often display in their thinking – thinking habits that often have unacceptable consequences. These are hasty thinking (e.g. too quick without taking into account important factors), narrow thinking (e.g. one-sided), scattered thinking (e.g. not organized, failing to make connections), and fuzzy thinking (e.g. vague, ambiguous, losing sight of objectives). Of course these are relative to circumstances and tend to overlap, but they are easily identifiable in most circumstances, and this identification can be the basis for an effort to counter them. The thinking represented in the first scenario is, of course, hasty (e.g., needs more time to get



THE SKILFUL THINKER

relevant information) and narrow (only considering what the ad and salesman has to say). Is it scattered? Well, it's hard to tell, but it looks like the information considered – what the salesman says, what is in the ad, what it feels like driving it, is haphazard and certainly not complete. And fuzzy, well, does this person really know – have a clear conception – of what he really needs in a car if he is not clear that comfort or repair are important factors? Clearly, these defaults are costly ones for our decision maker.

Good Thinking

By contrast, Marcus takes appropriate time following a strategy (needs, options, consequences, priorities, and choice), thinks broadly by considering cons as well as pros based on a neutral search for information and by avoiding obviously biased information-providers, defines his search for relevant information in an organized way, and is clear about his objectives.

What accounts for this contrast? (1) First, Marcus knows what to consider in thinking through a decision carefully – needs, options, consequences, priorities, and then a considered choice. He plans to follow a strategy or procedure that will focus him on the important considerations in making a decision. (2) Second, he knows how to do this to maximize his effectiveness – for example, he should listen to others seriously who have other perspectives, he should consider, in fact, making this decision collaboratively, he should withhold judgment until he has done a thorough and patient search for relevant information. (3) Finally, it is he himself that reminds himself not to be impulsive, and he himself guides him in following the plan outlined in the first and second points. In short, he uses a procedure that defines making a decision with skill, he employs various mental habits to enhance the effective use of this procedure, and he monitors and directs his thinking as he engages in skilful decision making. The first of these is what has traditionally been considered a thinking skill, the second employing various habits of mind, and the third, metacognitive guidance of his own thinking. Art Costa, Barry Beyer, Bena Kallick, Rebecca Reagan, and I call this blend Skilful Thinking in our book, *Thinking-Based Learning*. That's what I've been calling "good thinking".

Should We Teach Thinking Skills or Should We Teach Habits of Mind?

What kind of teaching will result in this integrated trio of ingredients that make for the kind of thinking we are looking to help our students do as a matter of routine? In this field there has been woefully little research, either quantitative or qualitative, that can give us an answer to this question. But we do know that some types of teaching do impact on such thinking routines. One is the direct and explicit teaching of thinking skills (procedures like the one above for decision making, and also for various other kinds of thinking like comparing and contrasting, predicting, generating ideas, etc.), combined with teaching directly and explicitly the kinds of intellectual behaviors that define the so-called "habits of mind", and combined, finally, with teaching students directly how to engage in metacognitive monitoring and self-guidance of their own thinking. Programs that infuse instruction in these three components into standard content instruction, we also know, have the greatest content learning yields as well.

We also know that teaching any one of these ingredients without the others is not enough to yield the kind of thinking that Marcus' situation exemplifies. Teaching students thinking procedures

alone gives them not much more than an algorithm to follow and while that may be enough in certain circumstances, without the ability to guide themselves in its practice, and the richness afforded by important mental habits like listening to others with seriousness, persisting in well-defined thinking tasks, and working collaboratively, we can't expect the richness of thinking exemplified in Marcus' situation. The same is true of teaching the so-called "habits of mind". Teaching such mental habits as those just mentioned, for example, without also teaching thinking procedures (skills) leaves students with the motivation to be persistent, for example, without knowing what to be persistent in. And while motivating students to listen to others and take what they say seriously, habits of careful listening without knowing what we are listening for, like relevant consequences, don't help much in careful decision making.

Habits of mind are important to teach, and thinking skills are important to teach, but teaching habits of mind is not enough to expect the kind of yield we see in Marcus' thinking, and similarly just teaching thinking skills is also not enough. But combine them, and add instruction in the kind of metacognition that leads to our guiding our own thinking, and you have a powerful combination of ingredients that has a good chance of giving our students the kinds of habits of careful thought we all wish more people on this planet practiced today!

Robert Swartz, The National Center for Teaching Thinking, USA

THE SUMMER INSTITUTE ON BEST PRACTICES IN BOSTON

What would motivate anyone to travel to the United States of America to attend a Summer Institute on Best Practices in Critical and Creative thinking – not once, but twice?



Del and Carol McGuinness having a break from study and enjoying Maine Lobster at the Seafood Shack. Carol is Professor of Psychology at Queen's College, University of Belfast.

While attending a two day workshop, run by Robert Swartz and Rebecca Reagan, in Auckland early in 2007, I discovered a technique for teaching thinking skills that I felt would greatly enhance my student's progress. I quickly became convinced that teaching these skills to my students would empower them to become independent thinkers. My enthusiasm and determination to make critical and creative thinking happen, both in my classroom and my school, began motivating me to

search for a way to increase my understandings of the work done at this initial workshop.

I had attended many workshops by other facilitators in the past and walked away either confused or un-convinced of the methods they were using to get students to that deeper level of thinking. Thinking



The three professors, Perkins, Swartz and Costa.

Based Learning was significantly different though. It was as though the students in my class had suddenly discovered excitement in the content and certainly the deeper understanding they were gaining became evident in their discussions and written work.

So I took the plunge and enrolled for the Summer Institute in Boston – to learn more about how to infuse Critical and Creative Thinking into my teaching practice.

The first Module involved learning in depth about what Thinking-Based Learning is. We covered many skills including Part-Whole thinking, Comparing and Contrasting, Decision Making, Problem Solving, and checking for Reliable Sources. Working in collaborative groups with teachers, brainstorming our ideas and working them into where they fitted in our own curriculum frameworks, became a regular fixture of the workshop. Lessons were demonstrated, then participants given the opportunity to see where the thinking processes would fit our own system.

Module 2 – consisted of a Saturday workshop covering Staff Development training for Teaching Thinking. The course participants were able to observe an infusion lesson being taught and Bob coaching that teacher prior to the lesson and offering feedback at the conclusion of the lesson. Ways to structure staff development programmes that would introduce these skills in our own school environments were also covered in this module.

By this time, methods and processes for introducing these skills into my own teaching were becoming clear. I firmly believe that often we have to revisit new learning many times before we are really proficient and confident to teach the skills to others.

The second week focussed on Advanced Lesson Design and Assessment Techniques for developing Critical Thinking skills of Reasoning and Argument. Tapping into the NZ Herald website from Boston enabled me to come up with some excellent arguments from the “letters to the Editor” section, which I could use in my future lessons back in New Zealand.

The workshops were at times challenging and yet hugely rewarding. The learning was immense and the skills that I came away with have

changed the way I teach. I stayed at the Tufts University Campus in Boston and although the days were full to the brim with Thinking Based Learning, I still had the warm summer evenings to explore the sights and sounds of beautiful Boston.

Last year I met other professionals from Australia, England, Ireland and Saudi Arabia as well as the United States. We were all united with a common vision – one of activating student’s potential by teaching Thinking Based Learning in our own class and school environments. This year’s Summer Institute saw educators coming from as far afield as Barcelona, Spain, Greece, Australia and New Zealand to attend the workshops. The initial workshop was based around the concept “Doing the Right Thing.” World wide networking of ideas has been a bonus to the skills learnt on the course.

To learn from many of the great leaders in the field of Thinking, Robert Swartz, Art Costa, David Perkins, Carol Mc Guinness, Rebecca Reagan and Alec Fisher, during these summer institutes, has been an amazing journey of discovery both personally and professionally. The Annual International Summer Institute on Best Practices run by the National Centre for Teaching Thinking (U.S.A.) is definitely an internationally acclaimed forum that is well worth attending.

Del Mc Farlane-Scott
Kaurilands School

A number of collaborative members have attended the Summer Institute in Boston.

If you would like more information please contact Del at delm@kaurilands.school.nz



Tufts University, Somerville, Boston, Massachusetts.



Swartz Workshops Critical and Creative Thinking

Have you signed up for these important workshops?

22 & 23 October

WORKSHOP 1 - INTRODUCTION - WEDNESDAY 22 OCTOBER
FEE \$250 COLLABORATIVE MEMBERS \$200

This workshop is intended as an introduction to the techniques of lesson design and classroom instruction for lessons that infuse instruction in critical and creative thinking.

WORKSHOP 2 - ADVANCED - THURSDAY 23 OCTOBER
FEE \$250 COLLABORATIVE MEMBERS \$200

This one-day workshop is intended as a follow-up to the workshop offered by Robert Swartz and Rebecca Reagan on May 1 & 2 of 2008. In it we will explore additional thinking skills that build on those that you were introduced to in May. We will look at some of the other analytical skills that enhance deeper content learning as well as another key critical thinking skill, that of judging skilfully the reliability of sources of information and the accuracy of information reports that we are exposed to, especially on the internet.

Contact - Richard rcoote@bis.school.nz

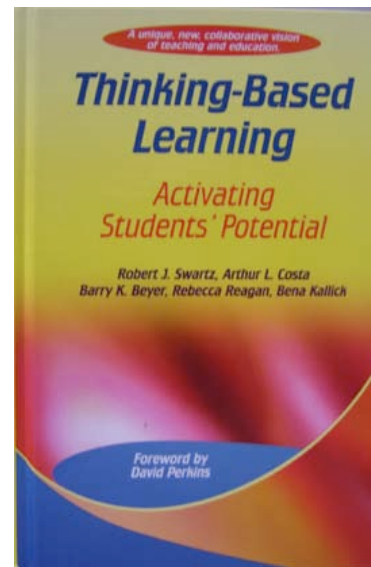
TITANIC UNIT AND CD AVAILABLE



This unit on the 'Titanic' can be ordered by collaborative members from Birkdale Intermediate School for \$60. Its thinking focus is skilful causal explanation. It is suitable for Years 6 - 10. There is a teachers guide and CD of resources.

The school purchased copies of many of the original documents from The National Archives, Kew, United Kingdom. These, along with other material, are presented in an exploratory environment of a White Star shipping office of 1912. Click on the filing cabinet and read the original documents, click on the newspaper and read articles on the sinking. There is a lot to explore. Using skilful causal explanation, why did the Titanic hit the iceberg?

NEW THINKING-BASED LEARNING BOOK PUBLISHED



This book needs to be in the library of every school and teacher who is serious about improving their students' thinking.

Thinking-Based Learning: Activating Students' Potential.
Robert J. Swartz, Arthur L. Costa, Barry K. Beyer, Rebecca Reagan, and Bena Kallick - Foreword by David Perkins

Available from the National Centre for Teaching Thinking at:

<http://www.nctt.net/> \$39.95US

Mention you are a member of the collaborative and receive a 10% discount.

A BOOK WORTH READING



Infusing the Teaching of Critical and Creative Thinking into Content Instruction: A Lesson Design Handbook for the Elementary Grades by Robert J. Swartz and Sandra Parks \$49.99US
<http://www.nctt.net/>

