

As Dr. Richard Paul, one of the preeminent American leaders in the field of critical thinking, has suggested, there is much to recommend this approach:

“In a world of pseudo-critical thinking, this approach stands out as remarkable, refreshing and exciting. It is a well thought through, substantive approach. Anyone seriously using it will be encouraging critical thinking in deep and important ways.”

Paul, R. (1997) “Using Minds to Command the Logic of Things: A Response to Case and Wright”. *Canadian Social Studies*, 32(1), 20.

Teacher-librarians, with their emphasis on selection, evaluation, assessment and use of information, can play a major role in supporting critical thinking. In this role, the TC² model provides a powerful framework for teacher-librarians and teachers to collaboratively integrate critical thinking, subject matter and resource-based learning.

This article focuses on the conception and framework of critical thinking; the design of critical challenges infused into curriculum; assessing the use of the intellectual tools; integration/use of critical thinking in the Four-Stage Research and Inquiry process and examples of critical thinking and information literacy.

UNDERSTANDING CRITICAL THINKING

According to the TC² model, systematic implementation requires attention to four areas or dimensions of teaching and learning. These four dimensions are:

- building a community of thinkers
- providing and infusing critical challenges
- developing the required intellectual tools
- assessing students’ competent use of the intellectual tools

BUILDING A COMMUNITY OF THINKERS

Developing supportive school and classroom communities where reflective inquiry is valued may be the most important factor in nurturing critical thinking. Many of the intel-

lectual resources or tools of critical thinking will not be mastered by students unless their use is reinforced on an ongoing basis. As well, the image of the thinker as a solitary figure is misleading. No one person can perfectly embody all the desired attributes—we must learn to rely on others to complement our own thoughts. There are many routines and norms that teachers can adopt to create a community of thinkers:

- regularly pose questions and assignments requiring students to think through, and not merely recall, what is being learned. (See *Designing Critical Challenges*.)
- create ongoing opportunities to engage in critical and cooperative dialogue—confer, inquire, debate and critique—this is key to creating a community of thinkers. (Refer to the *Intellectual Tools-Critical Vocabulary, Critical Judgment, Thinking Strategies*.)
- employ self and peer evaluation as ways of involving students in thinking critically about their own work. (See *Assessing for the Tools*.)
- model good critical thinking practices. Students are more likely to learn to act in desired ways if they see teachers making every effort to be open-minded, to seek clarification where needed, to avoid reaching conclusions based on inadequate evidence, and so on. (Refer to *Habits of Mind*.)

PROVIDING AND INFUSING CRITICAL CHALLENGES

If students are to improve their ability to think critically, they must have numerous opportunities to engage in and think through problematic situations—referred to as *Critical Challenges*.

- *Does the question or task require judgment?* A question or task is a critical challenge only if it invites students to assess the reasonableness of plausible options or alternative conclusions. In short, it must require more than retrieval of information, rote application of a strat-

Roland Case, co-founder of TC², did two sessions at the 2003 Super Conference on this material. He returns to Ontario during the Links to Learning Conference in Toronto, Feb. 27-28, 2004. He will present a plenary and a workshop. Rose Dotten will present a workshop on Critical Thinking and Information Technology.

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