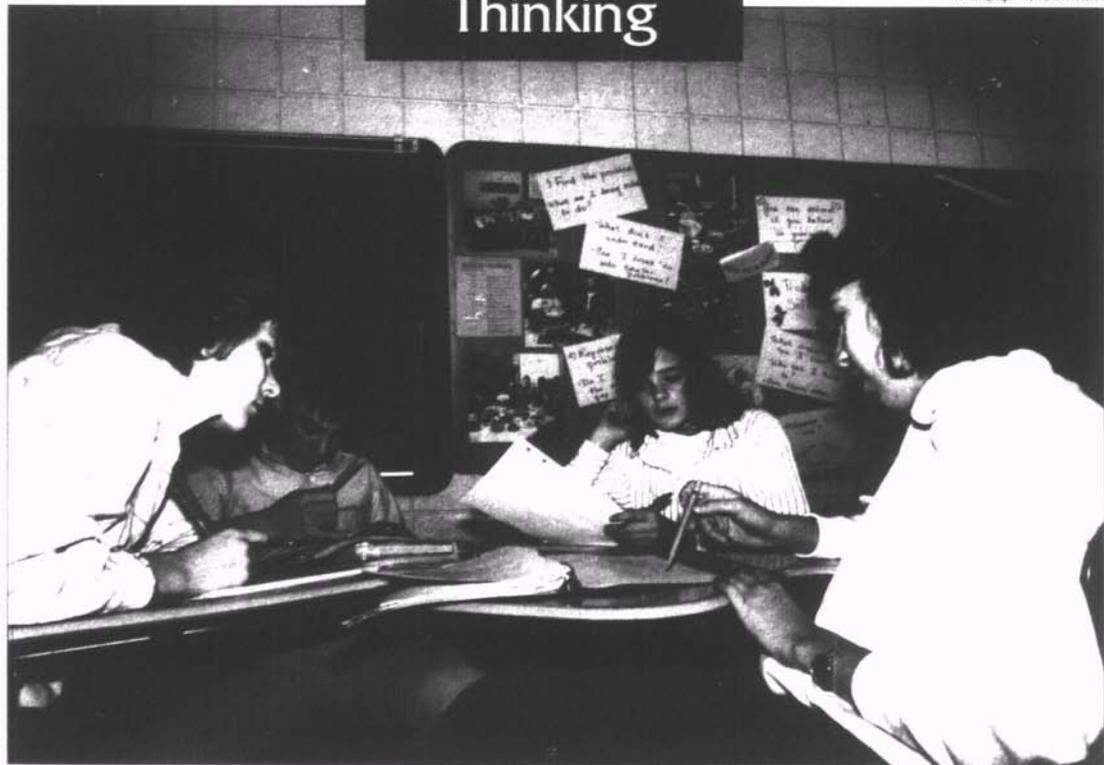


# How Schools Teach Thinking

Photograph by Albert Ellis



## Using CoRT Thinking in Schools

For five years, educators as well as students in Valley Stream, New York, have been using de Bono's versatile tools both in and out of the classroom.

**I**n 1982, we introduced Edward de Bono's CoRT program to English classes at Memorial Junior High School, Valley Stream, New York. Our students learned general thinking tools from CoRT I, such as how to generate ideas, reflect on their perceptions, organize both, prioritize

their thoughts, and see issues from another person's point of view. Specifically, they used these tools to analyze literary characters and plot development and as pre-writing thinking strategies to generate and organize ideas for writing assignments.

### Early Success

Our initial effort was very successful. English teachers and students alike could see the value of the CoRT I tools. Teachers felt that students' use of the tools enhanced their motivation, made them more aware of their thinking, and provided a framework for orga-

nizing classroom activity. Following these initial successes, the English teachers introduced CoRT I tools to teachers in other departments, who used them with similar results.

No teacher at Memorial Junior High School was ever instructed to use the CoRT program. All teachers were taught the program, and many have used it; but Memorial teachers make their own decisions regarding if, when, and how they will apply CoRT. While not all our teachers feel that CoRT tools are applicable in their classrooms, those teachers who value CoRT use the tools often, not on a structured basis, but rather at appropriate times in a given lesson or unit.

### Versatility in the Classroom

Figure 1 lists seven of the CoRT tools and their acronyms. To illustrate how CoRT works in the classroom, a 9th grade English teacher might have the students use the tools for a literary analysis of *The Old Man and the Sea*. The teacher, pulling ideas from the students, has them examine the factors that Santiago probably considered in his decision to venture alone without the young boy, Manolin, to catch the big fish (CAF or Consider All Factors). In studying *Romeo and Juliet*, students might analyze the couple's decision to marry (CAF) and then prioritize the factors leading to the decision (FIP or First Important Priorities). After prioritizing the factors, the students could analyze each factor in terms of its advantages and disadvantages (PMI or Plus, Minus, Interesting points), and then examine the long-range implications of Romeo and Juliet's decision (C+S or Consequence and Sequel).

In 8th grade social studies, a teacher could ask students to analyze the objectives of a democratic government (AGO or Aims, Goals, and Objectives). Once the class has generated a list, the teacher could distribute copies of the Preamble to the Constitution to compare the students' thinking with the thinking of the Founding Fathers. An interesting follow-up exercise would be to prioritize governmental objectives (FIP) with respect to today's world. The teacher might also have

CAF	Consider All Factors
FIP	First Important Priorities
PMI	Plus, Minus, Interesting points
C+S	Consequence and Sequel
AGO	Aims, Goals, and Objectives
APC	Alternatives, Possibilities, Choices
OPV	Other Points of View

Fig. 1. CoRT I Tools

From: CoRT Program, Pergamon Press. Distributed by Dormac, Inc., P.O. Box 270459, San Diego, CA 92128-0983.

students examine cultural factors influencing types of governments (CAF), followed by an examination of each government's objectives (AGO).

In science, CoRT tools could be used during an energy unit in which students analyze the consumption of fossil fuels. The teacher could begin with an analysis of the objectives (AGO) and then have students examine the advantages, disadvantages, and interesting points involved (PMI). These exercises could be followed by a discussion of the long-range implications of fossil fuel consumption (C+S). Once problems emerge, the students could consider alternatives (APC or Alternatives, Possibilities, Choices), and the lesson could end with a PMI for each energy source.

These examples show the CoRT program's versatility. Having once taught the tools, teachers can use them again and again to reinforce their applicability and to promote transfer. During initial instruction, it is crucial that teachers keep students focused on the content being discussed. Later on, students should emerge from a lesson knowing not only what information was discussed but, more important, what thinking tools were used and how their thinking developed through using them. With repeated use, students become conversant with the acronyms in their classrooms, in their writing, and in dealing with their own problems and decisions.

### Outside the Classroom

CoRT can also be used by educators as

a framework to organize thinking and focus discussion. At a meeting of the principal's cabinet, for example, department heads were asked to project their departmental goals (AGO) over the next three years (C+S) and to apply the other five tools as a means of reflecting on their proposals. Similarly, district supervisors met to review a supervisory program introduced to all district personnel. Among the 40 participants, CoRT I tools helped to organize the discussion. After considering the points of view of everyone involved in the supervisory process (OPV or Other Points of View), the group then concentrated on the AGO of the program and related them to the points of view (OPV) of all personnel. The session concluded with a PMI on the supervisory program.

### The Future Looks Good

In 1986, we began gathering data to measure our students' growth in thinking. Working with John Edwards of James Cook University in Australia, the foremost researcher on the CoRT program, we began a five-year research project. While we believe that we already are experiencing cognitive gains, we will not have meaningful data to report for a few years. We firmly believe, however, that our students are less impulsive in their thinking and more deliberate and more reflective, achieving major goals of the CoRT program. In addition, our students seem more aware of and more confident about their own thinking.

We will continue to expand our applications of CoRT by encouraging teachers to use the additional five CoRT sections and their tools. As we reflect on our five years with CoRT, we are encouraged by our experience, but we await the research findings. In this context, our school motto, which comes from Edward de Bono, is appropriate: "Think before you leap." □

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