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Introduction

The Design of the Book

This Handbook has a two-fold goal, and everything it contains can be seen as aiming at one or both of these objectives: 1) to clarify the concept of critical thinking and the principles that underlie it, and 2) to help teachers learn how to teach it. The second goal has two forms: *a)* presenting general strategies which can be used at any time to foster critical thinking, and *b)* demonstrating how lesson remodelling can help bring critical thinking into the heart of everyday classroom activities. Most sections of the book combine goals 1 and 2.

This introduction, besides explaining the structure of the Handbook as a whole, introduces the reader to the concepts of critical thinking and education for critical thinking and makes recommendations for using this handbook. In the second chapter, "Remodelling: a Foundation for Staff Development," we explain and justify the lesson plan remodelling approach and describe its use in staff development. This method of infusing instruction for critical thinking is the main concern of this book. Chapter 3, "Global Critical Thinking Strategies," combines the objectives of clarifying critical thinking and suggesting general teaching strategies. It does not directly address remodelling. The first section explains the necessity for *strong sense* critical thinking across the curriculum. The second section introduces the technique of Socratic discussion, first in general terms, then by illustration in a transcript of a Socratic discussion. The next section briefly introduces another general technique: role playing and reconstructing opposing views. The last two sections address the importance of having students analyze their experiences, and emphasize the role of reasoned judgment.

Chapter four, "Thinking Critically About Teaching: From Didactic to Critical Teaching" contrasts standard approaches to education with a critical theory of education and describes some of the most common problems we found in 6th-9th grade texts. Chapter five, "Strategies," clarifies the idea of critical thinking further and suggests how it can be taught by introducing and explaining the thirty-five specific teaching strategies at the heart of our remodelling process. The next sections contain examples of our use of the remodelling process on standard lessons, lesson fragments, and units. We introduce each subject area with a general discussion of a critical approach to the subject and brief criticisms of texts.

Following the sample remodels in language arts, social studies, and science is a sampling of remodels that we are beginning to collect and which, for the most part, represent teachers' early efforts in remodelling their lessons. These sample remodels are not divided into subject areas.

Since lesson remodelling is most effective when it is integrated into a long-term, multi-faceted, critical thinking staff development plan, we include next a copy of one such project, "The Greensboro Plan." Perusal of it will suggest a variety of problems one should recognize as intrinsic to district-wide efforts at moving from didactic to critical modes of teaching. Following the Greensboro Plan is a compilation of teacher statements of "What Critical Thinking Means to Me." These statements demonstrate the room there is in critical thinking for a variety of individual articulations, all consistent with developing the "critical spirit" in instruction and learning. Next is a list of basic critical thinking vocabulary which should help teachers to synthesize some of the various dimensions of critical thinking into a more coherent picture. Not all of the concepts briefly explained there will be immediately intelligible. The recognition of the usefulness of these distinctions will emerge progressively over time as teachers become more and more familiar with critical thinking and critical teaching.

The final major section of the handbook describes some additional resources for critical thinking staff development. Once again, we need to remember that a long-term evolution is necessary to bring critical thinking successfully into the mainstream of school life. As time goes by, teachers will need a variety of resources to facilitate this evolutionary process.

Our Concept of Critical Thinking

The term 'critical,' as we use it, does not mean thinking which is negative or finds fault, but rather thinking which evaluates reasons and brings thought and action in line with our evaluations, our best sense of what is true. The ideal of the critical thinker could be roughly expressed in the phrase 'reasonable person.' Our use of the term 'critical' is intended to highlight the intellectual autonomy of the critical thinker. That is, as a critical thinker, I do not simply accept conclusions (uncritically). I evaluate or critique reasons. My critique enables me to distinguish poor from strong reasoning. To do so to the greatest extent possible, I make use of a number of identifiable and learnable skills. I analyze and evaluate reasons and evidence; make assumptions explicit and evaluate them; reject unwarranted inferences or "leaps of logic"; use the best and most complete evidence available to me; make relevant distinctions; clarify; avoid inconsistency and contradiction; reconcile apparent contradictions; and distinguish what I know from what I merely suspect to be true.

The uncritical thinker, on the other hand, doesn't reflect on or evaluate reasons for a particular set of beliefs. By simply agreeing or disagreeing, the uncritical thinker accepts or rejects conclusions, often without understanding them, and often on the basis of egocentric attachment or unassessed desire. Lacking skills to analyze and evaluate, this person allows irrelevant reasons to influence conclusions; doesn't notice assumptions, and therefore fails to evaluate them; accepts any inference that "sounds good"; is unconcerned with the strength and completeness of evidence; can't sort out ideas, confuses different concepts, is an unclear thinker; is oblivious to contradictions; feels certain, even when not in a position to know. The classic uncritical thinker says, "I've made up my mind! Don't confuse me with facts." Yet, critical thinking is more than evaluation of simple lines of thought.