Thinking in Education

Second Edition

MATTHEW LIPMAN
Montclair State University

PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE
The Pitt Building, Trumpington Street, Cambridge, United Kingdom

CAMBRIDGE UNIVERSITY PRESS
The Edinburgh Building, Cambridge CB2 2RU, UK
40 West 20th Street, New York, NY 10011-4211, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
Ruiz de Alarcón 13, 28014 Madrid, Spain
Dock House, The Waterfront, Cape Town 8001, South Africa

http://www.cambridge.org

© Matthew Lipman 2003

Cover: Pre-Columbian, Mexico, Guerrero, Xochipala, Ceramic
Figures *Seated Shaman* and *Seated Youth*. Early Formative,
red-brown micaceous clay; H. 13.5 cm. and H. 11.0 cm.
Courtesy: Princeton University Art Museum

This book is in copyright. Subject to statutory exception
and to the provisions of relevant collective licensing agreements,
no reproduction of any part may take place without
the written permission of Cambridge University Press.

First published 2003

Printed in the United Kingdom at the University Press, Cambridge

Typeface Palatino 10/13.5 pt. *System* LaTeX 2ε [TB]

A catalog record for this book is available from the British Library.

Library of Congress Cataloging in Publication Data

Lipman, Matthew.
Thinking in education / Matthew S. Lipman. – 2nd ed.
p. cm.
Includes bibliographical references and index.
ISBN 0-521-81282-8 (HB) – ISBN 0-521-01225-2 (PB)
1. Thought and thinking – Study and teaching. 2. Critical thinking – Study and teaching. 3. Creative thinking – Study and teaching. 4. Judgment in education. I. Title.
LB1590.3 .L57 2003 2002023089
371.3 – dc21

ISBN 0 521 81282 8 hardback
ISBN 0 521 01225 2 paperback

Contents

Preface — *page* xi

Introduction to the Second Edition — 1

PART ONE: EDUCATION FOR THINKING — 7

1 The Reflective Model of Educational Practice — 9
- Rationality as an organizing principle — 11
- Schooling without thinking — 12
- Normal versus critical academic practice — 14
- Restructuring educational practice — 18
  - *Education as inquiry* — 20
  - *Community of inquiry* — 20
  - *Sensitivity to what is problematic* — 21
  - *Reasonableness* — 21
  - *Relationship and judgment* — 22
  - *Thinking in the disciplines* — 22
  - *Conversational apprenticeship* — 24
  - *Autonomy* — 25
  - *Reflective thinking* — 26

2 Approaches in Teaching for Thinking — 28
- Enter the critical thinking movement — 28
  - *How we got to where we are* — 30
  - *Some more recent origins of critical thinking* — 32
  - *Dewey and the Deweyans* — 34

Analytic skills and cognitive objectives 38
The emergence of informal logic 40
Other conversations, other voices 42
The educational assimilation of critical thinking 44
Critical thinking and the inculcation of belief 46
Alternative approaches to teaching practical reasoning 49
The guidance of practice by reasons 50
Criterion-based performance 51
The guidance of practice by hypotheses and consequences 51
Teaching for bridging, transfer, and translation 54
Some characterizations of critical thinking 56
3 Obstacles and Misconceptions in Teaching for Thinking 64
Conceptual obstacles to the strengthening of thinking 64
Disagreements over the nature of thinking 64
Disagreements over the proper psychological approach 66
Disagreements over the role of philosophy 68
Disagreements over the preferred educational approaches 69
Some misconceptions regarding teaching for critical thinking 72
Misconception 1: Teaching for thinking is equivalent to teaching for critical thinking 72
Misconception 2: Reflective teaching will necessarily result in reflective learning 73
Misconception 3: Teaching about critical thinking is equivalent to teaching for critical thinking 75
Misconception 4: Teaching for critical thinking requires drill in thinking skills 76
Misconception 5: Teaching for logical thinking is equivalent to teaching for critical thinking 78
Misconception 6: Teaching for learning is just as effective as teaching for critical thinking 79

PART TWO: COMMUNITIES OF INQUIRY 81
4 Thinking in Community 83
What produces the community and what the community produces 83
Following the argument where it leads 84
The logic of conversational discourse 87
The art of conversation 89

The structure of dialogue 90
Dialogue and community 91
Learning from the experience of others 93
The role of the community of inquiry in education 94
Toward the formation of classroom communities of inquiry 100
The epistemological status of discussion in the community of inquiry 103
5 The Community of Inquiry Approach to Violence Reduction 105
Education, not indoctrination 105
To what criteria can we appeal? 108
We can cite our own experience 108
We can appeal to the child's own experience 109
We can attempt to persuade the child 110
We can make use of reason 110
All of the above 111
Violence and justification 111
The strengthening of judgment through cognitive work 116
Educating for values and meanings through the community of inquiry 119
Reducing violence in a school setting 121

PART THREE: ORCHESTRATING THE COMPONENTS 125
6 The Emotions in Thinking and in Education 127
Emotion and education 127
Is there a paradigmatic version of emotive thinking? 130
Can we educate with regard to emotions? 131
Emotions and language 132
Word clusters for building verbal fluency about emotions 135
7 Mental Acts 139
Consciousness and the performance of mental acts 139
Being aware of our mental acts 141
Mental acts as performances 143
Propositional attitudes 145

Epistemic movement: Mental acts and states can develop into thinking skills 148
The development of mental moves into philosophical dialogue 150
Through the magnifying glass: A closer look at how philosophy can improve thinking 156
8 Thinking Skills 162
On teaching thinking skills to children 162
Skills and meanings 172
Four major varieties of thinking skills 178
Inquiry skills 178
Reasoning skills 179
Information-organizing skills 180
Translation skills 185
Is teaching reasoning worthwhile? 186
Skills and their orchestration 186
From basic skills to elementary school subjects 189
The boundaries of skill 191

PART FOUR: EDUCATION FOR THE IMPROVEMENT OF THINKING 195
9 The Transactive Dimensions of Thinking 197
A multidimensional thinking approach 197
The right to thinking capability 203
10 Education for Critical Thinking 205
Critical thinking: What it can be 205
The outcomes of critical thinking are judgments 209
Critical thinking relies on criteria 212
Metacriteria and megacriteria 215
Criteria as bases of comparison 215
The indispensability of standards 217
Critical thinking is self-corrective 218
Critical thinking displays sensitivity to context 219
Practical reasoning behaviors that signify closure 223
Professional education and the cultivation of judgment 226
Critical thinking and informal fallacies 230
The fallacies as a rogues' gallery of reasoning defects 230
The significance of the value-principles 231
Using validities to establish standards of reasonableness 235

A table of validities 238
The role of value-principle exercises in teaching for critical thinking 241
11 Education for Creative Thinking 243
The primary aspect of the work of art as the standard of the work 243
Creative thinking in critical perspective 244
Freshness, problematicity, and intelligibility 247
Amplificative thinking 249
Defiant thinking 251
Maieutic thinking 252
Creative and caring thinking 253
Creative and critical thinking 254
Cognitive moves in the creative thought process 255
Creativity and dialogue in the community of inquiry 255
Creativity and thinking for ourselves 257
12 Education for Caring Thinking 261
The place of the passions in thinking 261
Caring thinking as concern for matters of importance 262
Some kinds of caring thinking 264
Appreciative thinking 264
Affective thinking 266
Active thinking 267
Normative thinking 268
Empathic thinking 269
13 Strengthening the Power of Judgment 272
Why not teach for better judgment? 272
Judgment as critical, creative, and caring 274
The juncture of the universal and the particular 276
Three orders of judgment 279
Generic judgments 281
Mediating or procedural judgments 283
Focal or culminating judgments 288
The balance wheel of judgment in educational settings 289
Judgments as expressive of persons 292
Bibliography 294
Index 299

Introduction to the Second Edition

If there is any institution that can legitimately claim to be worldwide, it is probably the school. However different the cultures may be, the schools resemble one another remarkably. The system of education they provide is founded on the presupposition that children go to school to learn. They learn basic skills, like reading, writing, and arithmetic proficiencies. And they learn content, like geography, history, and literature.

A cynical commentator once observed that human beings invented speech in order to conceal their thoughts. The same observer might have added that they send their children to school to learn in order to keep them from thinking. If so, it is a tactic that has had only limited success. Children are not easily prevented from thinking. Indeed, it is often the case that our most cherished recollections of our school years are of those moments when we thought for ourselves – not, of course, because of the educational system, but in spite of it.

Yet there has always been a strand of educational thought that held that the strengthening of the child's thinking should be the chief business of the schools and not just an incidental outcome – if it happened at all. Some have argued in this way because they thought that the schooling of future citizens in democracy entailed getting them to be reasonable and that this could be done by fostering children's reasoning and judgment. Others have argued in this way because they saw their social systems – particularly the economic, bureaucratic, and

legal systems – congealing into rationality, and it was by fostering children's rationality that the schools could best prepare children for the world they would face when they grew up. And still others have contended that helping children to think well and think for themselves is required not just for reasons of social utility but because children have the right to receive nothing less.

Since the mid-1970s, the proponents of thinking in the schools (and colleges) have become distinctly more numerous and more vocal. The banner they have unfurled is emblazoned with the phrase "critical thinking," and although neither they nor those who oppose them are very clear about just what critical thinking entails, the hue and cry continues to mount. This awareness among educators that something has to be done to improve the quality of thinking in the classroom has prevailed until now.

What constitutes thinking? To this expert, good thinking is accurate, consistent, and coherent thinking; to that one, it is ampliative, imaginative, creative thinking. This scholar points to examples of good thinking in literature; that one points to instances of it in the history of science or conceives of it as the employment of scientific methodology. One philosopher hails it for its embodying logic and rationality; another, because it embodies deliberation and judgment. One educator acclaims it for helping us decide what to believe; another argues that belief decisions are out of place in a school context and that the teacher should aim at helping students discover only what they have sufficient evidence for asserting.

Amid the confusion, school administrators have to make decisions about how they are going to upgrade the educational offerings in their schools, about whether or not teachers should be retrained and, if so, about what approach should be employed. To make such decisions, they will need to be guided by definitions that clearly indicate just what a significant improvement of thinking is and how it can be made operational. They need to determine by what criteria teachers and researchers can decide whether or not such operationalization has been successful.

Thinking in Education has been proposed as a step in this direction. It does not claim to be definitive, but it does try to raise a few of the questions that need to be raised and to supply some of the answers

that can be provided at this very early stage in the development of a thinking-oriented educational process.

Thinking in Education makes no claim to being a work of specialized scholarship. Nor does it claim to be impartial and nonjudgmental. It regards the capacity of philosophy, *when properly reconstructed and properly taught*, to bring about a significant improvement of thinking in education. The case for this claim has not yet been made; the present study can be regarded as a kind of prologue to the making of such a case.

There is a second important (though not final) claim to be made in *Thinking in Education*, which is that the pedagogy of the "community of inquiry" should be the methodology for the teaching of critical thinking, whether or not a philosophical version of it is being employed. A third claim is that it is no accident that critical thinking is affiliated with such cognate terms as "criticism" and "criteria." These terms have to do with reasoning, evaluation, and judgment, and these in turn have to do with the improvement of thinking in which students are being encouraged to engage. Insofar as judgment is an art, the community of inquiry provides an environment in which it can be practiced and acquired. Spinoza was being unduly grim when he remarked that everything excellent is as difficult as it is rare. We have to create a society in which excellence flourishes in diversity and abundance. Upgrading the reflective element in education is a reasonable place to begin.

Throughout the past decade, efforts were made to introduce "thinking skills" into schools in which the acquisition of education had hitherto been equated with the acquisition of information. According to the earlier rhetoric prevailing in state departments of education and local boards of education, these efforts were making progress, and students could be said to be acquiring "knowledge," or, to use an even headier term, "understanding." But these were traditional conceptions of the aims of education, and what we were now told was happening was that the schools everywhere were engaged in equipping their students with "critical thinking." The arrival of the millennium seemed to be right on schedule. "Critical thinking" was the watchword for what the better teachers supposedly taught in the better schools. So ran one account. According to another, "critical

thinking" was characteristic of the sharper students, whether or not as a result of their having been taught to think that way. Some students are just naturally clear thinkers, it was said. What was to be done with the others was not quite evident.

In some respects the situation was a puzzling one. The last decade of the twentieth century was expected to be one of a gathering of momentum by the critical thinking movement. There would be more textbooks devoted to the topic, to be used by college undergraduates as well as by teachers-in-preparation. There would be more national and international conferences devoted to critical thinking, argumentation, informal logic, and "cooperative learning." There would be more degree programs in critical thinking, more minicourses in the subject for teachers looking for in-service credits, more philosophers and educational psychologists devoting themselves to expanding the scholarly side of critical thinking by strengthening its claims to be a discipline. The fact is that some of these things have been happening but others have not. The great conferences on thinking and its educational possibilities are no longer prevalent. The journals that once flourished by exploring the many facets of this latest of educational paradigms were now struggling, in what had been the most prosperous of decades, to keep from going under. The university-based academics, whose fledgling interest in matters of educational significance had been expected to grow stronger year by year, were instead, in increasing numbers, turning their backs on opportunities to contribute to the strengthening of the theoretical framework of the critical thinking movement. Not even the historical scholars were now devoting time to examining the undoubtedly genuine credentials of the important history of that movement, and without such an examination, critical thinking's claims to be a discipline can hardly be persuasive.

Still, this bleak account fails to give the whole picture. Publishers *are* putting out more and more textbooks in critical thinking. Teachers *are* being required to devote a portion of their time to in-service enrichment courses, and among these, critical thinking courses appear to be very popular. The trendy educational newspapers and periodicals, like *Educational Leadership*, which devoted much space to teaching for thinking in the 1970s and 1980s, but then pulled back in the 1990s, are now beginning to show signs of renewed interest in the

topic and perhaps even of a renewed sense of responsibility for the outcome. Everywhere there seem to be signs – no doubt feeble in many cases – of a certain degree of *institutionalization* of critical thinking in the schools. Perhaps this is all we could have hoped for, given the circumstances. This is what happens to educational fads that are considered successful: They come to be taken for granted, although at a fairly low level of efficiency.

For the vast majority of elementary school students, critical thinking has not fulfilled its promise. To be sure, more promises were made for it than it could possibly keep. But there were a number of deficiencies that doomed it from the start:

1. The critical thinking approach was, by itself, narrow and skimpy. It needed to be based much more solidly on informal logic, formal logic, educational psychology, developmental psychology, and philosophy, but this was seldom done.
2. Even where some instruction in these areas was provided, teacher preparation was insufficient.
3. Little effort was made to devise, as part of the approach, a creative thinking component that would engage students in imaginative thinking, and in thinking about the imagination.
4. Likewise, no serious effort was mounted to construct a valuational component, in which students would be able to talk together freely about the different sorts of values, and how they were to be appreciated.
5. Not only was there little teaching for judgment, there was seldom a clear identification of what was meant by "teaching for judgment," possibly because educators did not recognize judgment as an important educational goal or because they thought it incapable of being taught.
6. It was not recognized that most pedagogies of the "thinking in education" movement were inappropriate. The only fully appropriate pedagogy was the one called "the community of inquiry approach," and relatively few teachers had been effectively prepared to use that approach.
7. No effort was made to connect the various dimensions of thinking (critical, creative, and caring) into a whole, both conceptually and developmentally. Critical thinking by itself came to be

> seen as a disconnected, discontinuous fragment, shouldered with responsibility for upgrading the whole of education.

Some parts of the second edition of *Thinking in Education* are retained from the first edition; Parts Three and Four are almost completely new. What these new parts offer is a view of education at a more comprehensive level of effectiveness than critical thinking by itself could ever hope to achieve. Some components new to the elementary school level of education have been introduced: emotions, caring thinking, mental acts, and informal fallacies. I have tried to merge both new and old elements into an integrated developmental sequence that will offer at least a glimpse of the direction in which we are to go. It is my hope that we can thus achieve an education that enriches, enlightens, and liberates, that fosters understanding, strengthens judgment, improves reasoning, and imparts a clear sense of the relevance of inquiry to the enlargement of humanity. Fortunately, there are already in existence approaches to education that demonstrate unequivocally that these goals are feasible.