

C ontents

INTRODUCTION: TEACHING FOR INTELLIGENCE v

SECTION 1: THE NEED FOR INTELLIGENCE

IN SCHOOLING 1

- On the Habit of Informed Skepticism
by Theodore R.Sizer 5
- Narratives of the Educative Surround
by John I. Goodlad 13
- Truth, Beauty, and Goodness: Education for All Human Beings
John Brockman interviews Howard Gardner 27
- Art, Imagination, and School Renewal
by Maxine Greene 39
- Schools Should Nurture Wisdom
by Robert J. Sternberg 55

SECTION 2: THE INTELLIGENT LEARNER 83

- Teacher Learning That Supports Student Learning
by Linda Darling-Hammond 87
- Did You Ask a Good Question Today?
by John Barell 97
- The Misunderstood Role of the Arts in Human Development
by Elliot W. Eisner 107
- What Really Matters in Teaching Children to Read
by Richard L. Allington 119
- A National Reading Test for Fourth Graders
by Clifford Hill 129
- The Professional Growth Portfolio
by Kay Burke 153
- Conditions That Support Transfer for Change
by Valerie Hastings Moyer 171

SECTION 3: INSTRUCTION FOR INTELLIGENCE	179
• Teaching for Intelligence: The Intellectual Life of Schools <i>by Robert R. Spillane</i>	183
• The Intelligence-Friendly Classroom: It Just Makes Sense <i>by Robin Fogarty</i>	187
• Teaching for Intelligence: In Search of Best Practices <i>by James Bellanca</i>	195
• Advances in Research on Instruction <i>by Barak Rosenshine</i>	201
• Mediative Environments: Creating Conditions for Intellectual Growth <i>by Arthur L. Costa</i>	229
• Differentiating Instruction in the Classroom: Tapping into the Intelligence of <i>Every</i> Learner <i>by Dorothy S. Strickland</i>	245
• Teaching for Intelligence: Parameters for Change <i>by Eric J. Cooper and Daniel U. Levine</i>	261
• Considerations in Introducing Instructional Interventions <i>by Daniel U. Levine and Rayna F. Levine</i>	269
 SECTION 4: SPECIAL CONCERNS OF TEACHING FOR INTELLIGENCE	 281
• Working with Kids Like Mario <i>by Jonathan Kozol</i>	285
• Challenging Preschool Education: Meeting the Intellectual Needs of All Children <i>by Herbert P. Ginsburg</i>	287
• Mediation of Cognitive Competencies for Students in Need <i>by Meir Ben-Hur</i>	305
• Infusing Higher Order Thinking into Science and Language Arts <i>by Joyce VanTassel-Baska</i>	319
• A Practical Approach for Developing the Gifts and Talents of All Students <i>by Joseph S. Renzulli</i>	333
• Creating the Climate and Conditions for Children to Learn <i>by James P. Comer</i>	371
 AUTHORS	 391
ACKNOWLEDGMENTS	399
INDEX	403

Introduction

Teaching for Intelligence

The 1998 Teaching for Intelligence Conference represents an important milestone in American education and international dialogue for at least two reasons. First, it focuses on key speakers whose works constitute major ideas about pedagogy and achievement that have been developed throughout the twentieth century. Many of the writers in the first section of this volume and various contributors in the following three sections are researchers and theorists who have grappled with the central tenets of teaching for intelligence and now report on their most significant findings.

Secondly, the presenters at this international conference have collectively examined the output of fifteen years of school reform in the United States and now ask, from one advocated approach, whether significant answers have been generated that can guide future education and practice and make a difference in students' lives wherever they live. On both counts, this collection of perspectives documents positive responses and provides extensive details that suggest viable next steps for the advancement of both American and global schooling.

The first section of this volume underlines what teaching for intelligence actually means: emphasizing the *intent* that students and

teachers need to value inquiry, critical thinking, problem posing, and problem solving. From Sizer's praise of the skeptical mind to Greene's faith in rich conversation and dialogue, the objective of students actively engaged in thought and knowledge generation is the foremost goal of teaching and learning. Cognitive scientists such as Sternberg and Gardner emphasize *process* as well as *content*, and open the door to questions about methodology and the pursuit of *depth of meaning* in instruction. They raise the issues of who is the learner and under what conditions can teachers actually instruct for intelligence development. In the second and third sections of this volume, writers such as Rosenshine, Darling-Hammond, Barell, and Fogarty provide responses to these queries and report on empirical research findings that show that teaching for intelligence indeed does work.

The papers in this collection challenge educators to go back to the beginning of the current reform period and ask how teaching for intelligence has made a difference to the issues raised by *A Nation at Risk* (1983) or *Academic Preparation for College: What Students Need to Know and Be Able to Do* (1983). In the first case, writers in this volume suggest American schools have failed to serve their constituencies well because the goal to have all students learn to be intelligent has not really been pursued. Every student can learn and, given appropriate conditions for learning, can succeed academically in terms of his or her potential. But merely covering curriculum is not sufficient as the question of academic preparation is faced. The curriculum must be *accessible* to the learner. Whether it is in reading or mathematics or the wisdom of sound moral choices, according to Strickland, Gardner, Ginsburg, and Sternberg, teaching for intelligence can enable learners to master the skills and cognitive operations that underlie all the "frames of mind" necessary for every thinker's lifelong learning. The critical dimensions taught by experience in studying the arts, as Eisner suggests, or sound mechanisms of learning that increase one's knowledge base, as Rosenshine proposes, can transfer to other forms of decision making and help the young learner face new and varied issues that arise in a complex, fast-changing world.

One important educational development is particularly highlighted in this unique volume. We actually have learned a great deal about classroom instruction for intelligence in these valuable fifteen years. From understanding the requisites of a thinking classroom, to appreciating the importance of teacher support and setting up uni-

versity partnerships, to learning from research about gifted and talented students, the years of American educational reform have not been an idle period. Writers such as Cooper, Levine, Renzulli, and Ben-Hur cite many successes in practical, instructional implementations of getting students to think. Their point is that we should be continually following up these studies and seeing that their results are promoted to others. The significance of past research and the need to continue its momentum are important outcomes in the collection of studies included in the 1998 conference. Although the documents speak for themselves, we need to see that their message is shared.

Last, but hardly least, the needs of special students were carefully addressed by several key contributors to the conference. The fourth section of this volume underlines how crucial teaching for intelligence is for children from poor, depressed, and immigrant backgrounds. These are children who are school-dependent for learning higher-order thinking skills. Whether it is Kozol or Comer describing the desperate conditions of children with such needs, it is also important to know that here, too, there are successes to report. The requisites of a *community* of learning are well known in a post-Vygotsky world. Child-centered environments, places that nurture thoughtfulness and focus on appropriate development and experience, can make all the difference in a child's ultimate ability and skill. The challenge is to provide such caring environments for all youngsters in need.

What does the 1998 Teaching for Intelligence Conference ultimately tell American education? It maintains that such teaching holds great promise for *all* America's learners. It advises us to study more carefully where we have been educationally over these past fifteen years. Beyond current schooling's narrow focus on IQs, standardized test scores, and minimal curriculum requirements, there is a vast world of thought, inquiry, wisdom, and beauty ready to help educate children. Open this volume and see what a treasure we have—pedagogical knowledge about *teaching for intelligence*.

Section 1

The Need for Intelligence in Schooling

For centuries, there have been numerous philosophers and educational theorists who have called for “intelligence” in schooling. In America, such advocacy has sometimes clashed with demands for practical knowledge and empirical application. During periods of reform, however, researchers and educational leaders become more energized about intelligent teaching because they see policies and practices in place that actually run counter to this long-held approach. They also see the potential and promise of bringing intelligence development to the center of American schools.

This initial section reveals many of the essential arguments embedded in the need for intelligence in schooling. They have emerged over the last half century of educational research and represent philosophical, psychological, and sociological underpinnings of theory about pedagogy and achievement. Whether it is Sizer’s informed skepticism or Goodlad’s intended learning, these writers call for the development of an inquiring mind and the cultivation of critical skill. Above all, these experienced educators say, habits of thoughtfulness need to be accessible to all students so that as learners they become part of a stimulating, sensory environment—the surround of Goodlad’s study. Such belongingness in a learning community, like citizenship in the Republic, is key to upholding the basic ideals of democracy and capitalism.