Professional Standards for Teaching Mathematics

The National Council of
Teachers of Mathematics
Reston, Va.
The National Council of
Teachers of Mathematics, 1991

Teachers can use this companion volume to Curriculum and Evaluation Standards for School Mathematics (1989) to improve their mathematics teaching. Both books stress that in order to develop the mathematical power of all students, major shifts in curriculum and classroom environment are required.

Recognizing that teachers are the ones who change mathematics instruction, this volume focuses on the evaluation and professional development aspects of teaching. A brief section comments on the responsibilities of other "players"— policymakers in government, business and industry, schools, colleges and universities, and professional organizations.

Each standard is illustrated by vignettes of classroom discourse with commentary in the margins. For example, in one vignette a first-year teacher, Tom, confers with his mentor teacher, Jan, to improve his teaching. In a post-observation conference, Tom notes that his students did not participate in discussions. Jan points out that most of his questions required short answers. Tom then recognizes that he should improve his skill in asking questions, particularly questions to facilitate thinking and discussion. So, for a lesson on area and perimeter, Tom and Jan design questions like "What are the largest and smallest perimeters possible for a rectangle with an area of 20 units?" instead of "What is the area of a rectangle with length 4 and width 5?" The students discuss the problems in pairs with the aid of manipulative materials.

The general sense of the examples is that while what is needed is fundamentally different from current common practice, the new standards are definitely within reach.

Available from National Council of Teachers of Mathematics, 1906 Association Dr., Reston, VA 22091, for $25 (lower price for NCTM members and quantity discounts).


Learning Denied

Denny Taylor
Portsmouth, New Hampshire:
Heinemann Educational Books, Inc., 1990

Learning Denied tells the story of Patrick and his parents' unsuccessful struggle with the special education bureaucracy to provide him with an appropriate education. Denny Taylor presents detailed evidence from Patrick's school files and from her notes and tapes to show how the school prevented Patrick from learning.

When Patrick worked with Taylor outside school, he was able to read and write increasingly complex material. He even researched the solar system and wrote his own book. "Unfortunately," Taylor says, "these demonstrations of learner expertise have not helped him, for the literacy skills are not the same as the skills valued by the school."

School officials ignored what Patrick could do and continued to subject him to more tests. Patrick's parents invested a great deal of time and money challenging the system, but in the end they could not change it. After 2nd grade they chose to educate him at home to prevent further damage.

Whether or not readers agree with Taylor's perspective on the failures of the institution, the chronology of events and the contradictions apparent in the examples raise questions about the process of identifying children with special needs and the services provided. Many may not accept Taylor's views that "the myth of a learning disability was socially constructed" by lawmakers and educators or that the system is set up to stop children from learning. However, no one who reads this moving and disturbing account of an educational promise unfulfilled will deny that the system has problems that must be addressed.

Available from Heinemann Educational Books, Inc., 361 Hanover St., Portsmouth, NH 03801-3559, for $12.50.

—Reviewed by Anne Wescott Dodd, Brunswick, Maine.

Empowerment Through Multicultural Education

Edited by Christine E. Sleeter
Albany, New York:
State University of New York Press, 1991

Paulo Freire once wrote that the teaching of reading is a political act. He suggested that teachers act unknowingly in political ways, that political indoctrination was hidden in the reading curriculum. The authors of this text believe that multicultural education is political, and they advocate making it more explicitly political, based on a vision of a just and humane society.

Multicultural education is more than foreign food fairs and the sampling of exotic cultures. It has its roots in Dewey's philosophy of social reconstructionism and is nurtured by the social activism and civil rights movements of the 1960s. It strives to produce learners who not only appreciate their own culture and respect cultural diversity in society but who can also analyze society with an eye toward improving it. The powerless and oppressed learn to organize and coalesce to seize power from their oppressors. Ethnic minorities, women, Appalachian poor, non-English speaking, homosexuals, and the handicapped each have a stake in multicultural education.
Strategic Planning in Education: Rethinking, Restructuring, Revitalizing
Roger Kaufman and Jerry Herman
Lancaster, Pennsylvania:

Strategic Planning is not a "read-about" book. Instead, it is a teaching tool that repeats basic principles, uses realistic examples, and provides guidelines for activities.

The authors conceptualize and illustrate “outside-in” and “inside-out” planning to clarify interrelationships among essential components at all levels. They explain and diagram needs assessment as nine steps that are translated into operational actions.

Scoping, data collection, planning, implementation, and evaluation are links in the planning chain. The book teaches important lessons about SWOTs (strengths, weaknesses, opportunities, threats), consensus techniques, and roles CEOs play.

Chapter glossaries define key concepts and provide applications in this highly utilitarian text. An instructive case study of school district strategic planning is detailed in the appendix.

The book opens with Thomas Jefferson’s words: “History, by apprising them of the past, will enable them to judge of the future.” This quote aptly captures the spirit of the book.

Historical Literacy:
The Case for History in American Education
Paul Gagnon and the Bradley Commission
on History in Schools
New York:

This collection of essays is a treasure. Prolific and learned historians and teachers discuss the teaching of history from the perspective of their classroom experiences. They set the record straight concerning the need to evaluate the state of history certification in American schools and to reestablish it as a discipline instead of paying it lip service under the social studies umbrella.

One issue addressed is the important role of history in a democratic society and the way in which it can reflect the “public culture” of the United States so that the histories of minorities will not become, as Gary D. Nash writes, “victims’ histories.” Rather, Thomas Bender writes, history must “consciously and explicitly ... relate minorities to the historical process of human interaction in the formation of public culture.”

The authors’ visions of history teaching are vivid and inspiring. For instance, Diane Ravitch makes an eloquent case for detaching the teaching of history from “vulgar utilitarianism,” and for providing students with “cultural resources on which they may draw for the rest of their lives.”

Successful Schooling for Everybody
Burton W. Gorman and William H. Johnson
Bloomington, Indiana:
National Education Service, 1991

In the United States we often speak of our desire to educate all, yet our models are often sadly lacking. The authors of Successful Schooling challenge us to honor individual idiosyncrasies and to educate for success as they review grouping practices and testing procedures that set up roadblocks to those goals.

Educators and school districts will find Successful Schooling a long essay of support for outcome-based education. The authors’ perspective is that responsibility for everybody’s education belongs to all. They extend their challenge to the community, government, and business, while pointing out school reform’s false starts (such as the near obsession with testing).

The book reflects on the history of education, describes how we got where we are today, and encourages education to strive toward a future in which effective, well-researched practices will contribute significantly to student success.

Reviewed by Muriel Stevenson, Bloomington Public Schools, Bloomington, Minnesota.
The Predictable Failure of Educational Reform
Seymour B. Sarason
San Francisco: Jossey-Bass Inc., 1990

Professor Sarason has written a personal statement about schooling and educational reform intended for educators, legislators, and policymakers. If his assumptions were accepted by the education community, current and future educational reform efforts would be very different from the initiatives of the past 10 years.

Sarason contends that "any effort to deal with or prevent a significant problem in a school system that is not based on a reallocation of power—a discernible change in power relationships—is doomed." Schools have been intractable to reformers' efforts, he believes, because educators have failed to alter the power relationships within the system and within the classroom. However, he also points out that simply changing power relationships will not necessarily result in the achievement of important reform goals.

In the chapter, "Power Relationships in the Classroom," Sarason argues that the traditional mode of classroom and school organization adversely affects the productivity of teachers and students. Teachers often regard their students the way they are regarded by their administrators, and so traditional classrooms are based on conformity rather than on the students' ability to take responsibility for their own learning.

This enjoyable book contains several important "nuggets of wisdom" about educational reform. However, because Sarason does not offer a specific plan to give direction to future reform efforts, it may not be useful to those who already understand the problems and want to identify workable solutions.

—Reviewed by Brenda Benson-Burrell, Glassboro State College, Glassboro, New Jersey.

Schools of Thought
Rexford G. Brown

In a search for what the "entire society" will need in the 21st century, Rexford Brown discusses the Education Commission of the States' investigation into the literacy issue. There he discovers a literacy of thoughtfulness.

In a narrative, conversational style, Brown transforms interviews and classroom observations into careful documentaries relating "what people believe about students' capacities to think critically, solve problems, and become active, engaged learners." Brown and his team visited schools in the Deep South, rural and urban America, an Indian reservation, and Ontario to provide the "sneak peaks."

Brown's team looked for nine indicators of an environment conducive to a literacy of thoughtfulness: physical classroom environment; interaction between and among students and teachers; questioning strategies; amount of facilitation and probing; discussion elements; nonverbal indicators of engagement, courtesy, and sensitivity; amount of reflection or self-regulation; and risk-taking environment. The discussion of these factors alone makes reading the book a worthwhile exercise.

Something compelling rests within these pages: a sense of being there. As one reads about each cultural setting, the need to construct meaning for all students and to help them develop a literacy of thoughtfulness that will last a lifetime becomes very clear.

—Reviewed by Jerry Bellon, University of Tennessee, Knoxville, Tennessee.

Going to School: The African-American Experience
Kofi Lomotey

Just how devastating is education for blacks in urban America? What roles do the massive conglomerations of teacher regulations and diminishing parental support play in this drama? What distinguishes schools where African-American students are succeeding from those that are ineffective? And, of particular interest to administrators in predominantly African-American schools, what are the leadership qualities that establish a climate in which students thrive academically?

An examination of urban education for African-American students from preschool programs through college, this collection of articles includes a section entitled "Programs That Work." Case studies outline organizational factors that contributed to high achievement and high growth in reading and mathematics in several elementary schools where effective principals held an unyielding belief that African-American children could achieve. These principals conducted rigorous supervision of faculty performance and carefully monitored student achievement and placement. Also, the infusion of African-American culture into their curriculums enriched these schools' programs and increased their credibility and relevance as perceived by the students.

Administrators in urban schools with African-American student populations and other interested parties will find this a highly useful book.

—Reviewed by Fred Johnson, Shelby County Schools, Memphis, Tennessee.
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