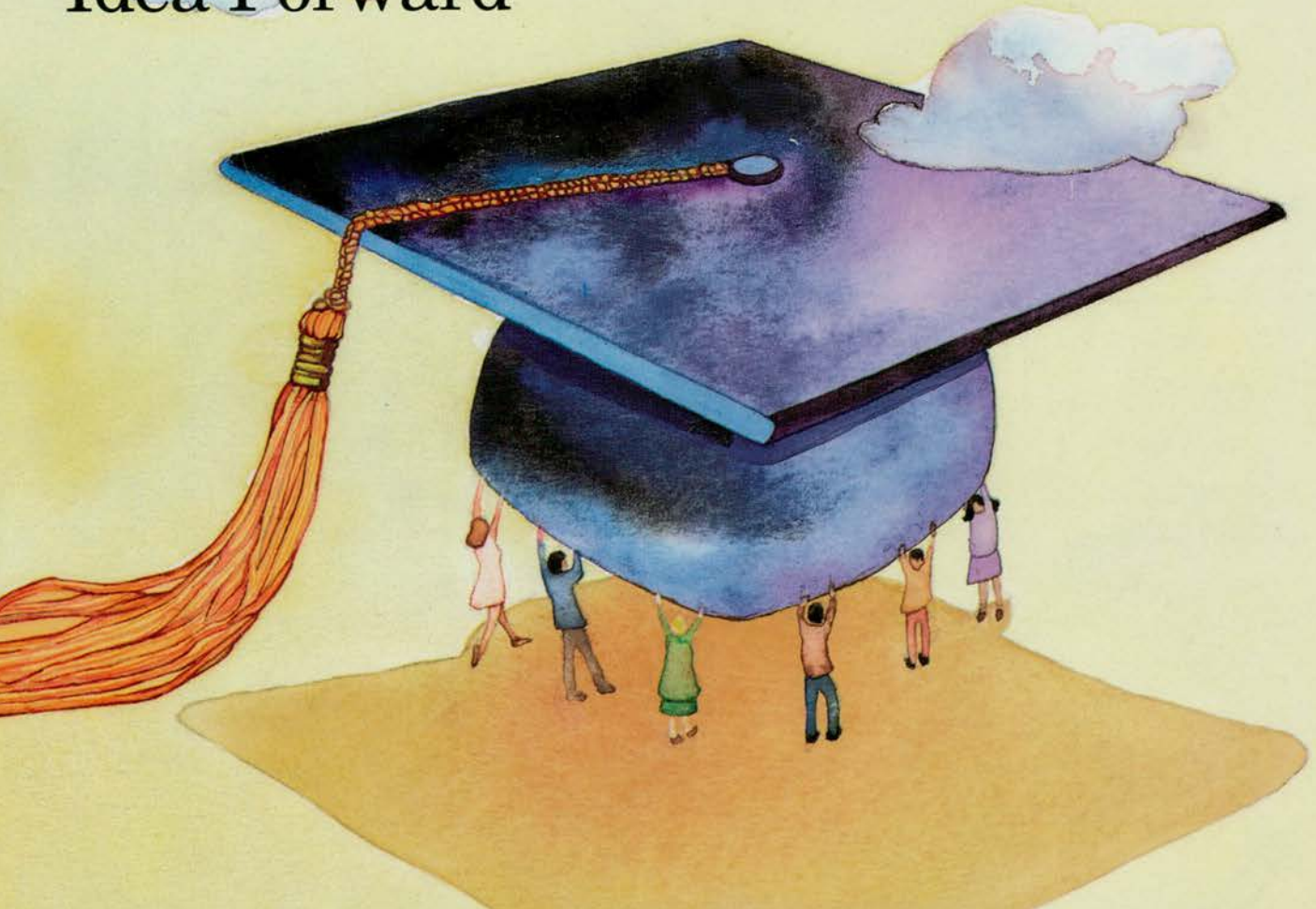


AMERICAN FEDERATION OF TEACHERS
SUMMER 1990

AMERICAN **Educator**

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How the National
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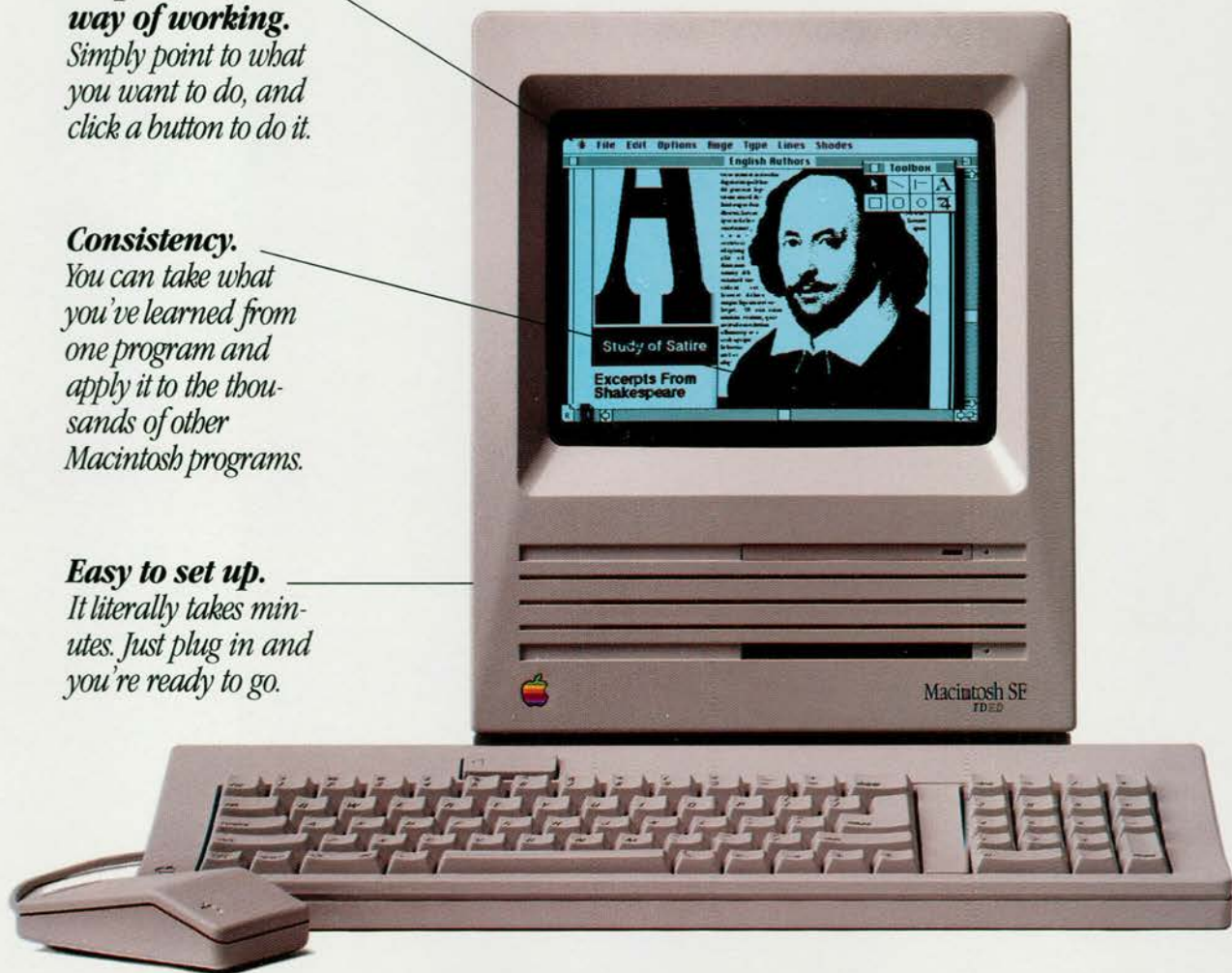
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LETTERS

MULTICULTURAL EDUCATION

In "Diversity and Democracy: Multicultural Education in America" (*American Educator*, Spring 1990), Dr. Ravitch neatly defined the difference between pluralism and particularism. The diversity that exists within our common culture is and should be a source of pride. It would be a distortion to focus on one's own ethnic group to the exclusion of all others. It is of grave concern to many New York City educators that a kind of separatism will be fostered in the name of multicultural education.

As Americans—native, reluctant, immigrant or naturalized—our students share with us a common heritage. To participate fully in that heritage, young people need to study its roots and development; its contributions and ideals, and its flaws and foibles. Most of us learn about our "second" cultures through family, religion, and tradition. However, that schools also should recognize the rich contributions of diverse cultures to America (and, especially to New York City) is an objective few would question. And over the past twenty years, texts and curricula have come to reflect this concern for inclusiveness. Gender bias has been largely eliminated. American literature texts include units on native American works and the Harlem Renaissance as well as including works by women, African-Americans, Hispanics and other ethnic minorities.

However, I am fearful that new classes and curricula will become as one sided in presentation as the "traditional" courses of study that were deplored in the past. Will there be students who can quote Medgar Evers but who have never heard of Thomas Jefferson? Will there be students studying World War II who focus only on the segregation of the military and ignore the Holocaust? And will there be English programs that eliminate the study of British and classical American writers in favor of only ethnic writers?

It is imperative that all young people study the foundations of their

common American heritage in order to fully participate in our society. Equally, we must learn to appreciate our individual cultural differences in order to maintain the vibrancy and vitality of American society.

—WINIFRED M. RADIGAN

ASSISTANT PRINCIPAL

BROOKLYN COLLEGE ACADEMY, BROOKLYN, NY

Diane Ravitch's argument can be summed up in her statement, "... educators must directly refute the widespread filiovietic belief that children will succeed in school only if they have learned a glorified history of their own race or ethnic group."

This reflects a nationalistic sentiment that has been an inescapable part of life in the modern era, both in the U.S. and abroad. For instance, it was only two or three generations ago that non-English-speaking European-Americans were shamed into losing proficiency in their native languages. I was surprised at Ravitch's reference to the contributions of great Americans. "In our society, the democratic tradition was shaped by the enlightenment, Thomas Jefferson, Horace Mann, Abraham Lincoln . . . Martin Luther King, Jr. . . and millions of other people from different backgrounds."

She failed to mention one native American in that statement. She might be interested to know that the ancient Greeks and the European Enlightenment had less to do with American democracy than the League of the Iroquois, which inspired a young Indian agent by the name of Benjamin Franklin to later copy it in planning the Federation of States. The republican form of government that existed in ancient Greece was less important to American democracy than what Franklin discovered among the Iroquois. European-Americans of the time found representative government more acceptable if it came from Ancient Greeks instead of contemporary Indians.

Clearly, Ravitch's Eurocentricity is showing, and she needs to do something about it. . . .

President John F. Kennedy concluded in 1961:

"Before we can set out on the road to success, we have to know where we are going, and before we can know that we must determine where we have been in the past. It seems a basic requirement to study the history of our Indian people. America has much to learn about the heritage of our American Indians. . . ."

—MICHAEL KLIZNIK

MENDOTA HEIGHTS, MN

Diane Ravitch's article has served the purpose of stimulating discussion on how to design effective multicultural curricula for our nation's schools. While most educators agree with Professor Ravitch's view that the United States has a common culture that is multicultural and that multicultural education is a necessity in a nation such as ours (made up of many racial, ethnic, and national groups), there is disagreement regarding the purpose, method, and content of such a curriculum.

Professor Ravitch denounces the New York state report entitled "A Curriculum of Inclusion," which was accepted by the Board of Regents in February 1990. She calls the report Europhobic and anti-western and believes that it promotes particularistic multiculturalism by neglecting the bonds of mutuality and the common set of political and moral values of the nation. After carefully reviewing "A Curriculum of Inclusion," I find that I disagree that the report reflects a particularistic point of view. . . .

The New York state report indicates that "the various contributions of the African Americans, the Asian Americans, the Puerto Rican/Latinos, and the native Americans have been systematically distorted, marginalized, or omitted." This is, indeed, true.

Professor Ravitch states that the report "is remarkable in that it manages to denounce bias without being able to identify a single instance of it in the curriculum guides under review." The consultants of the report, however, cited numerous

(Continued on page 47)



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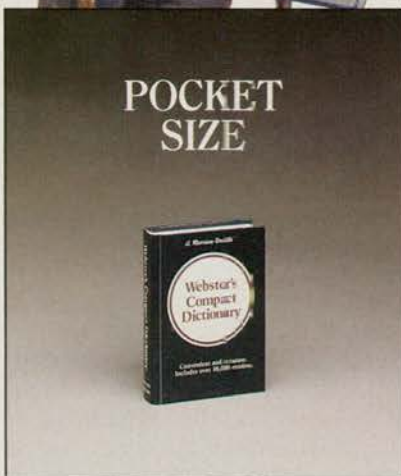
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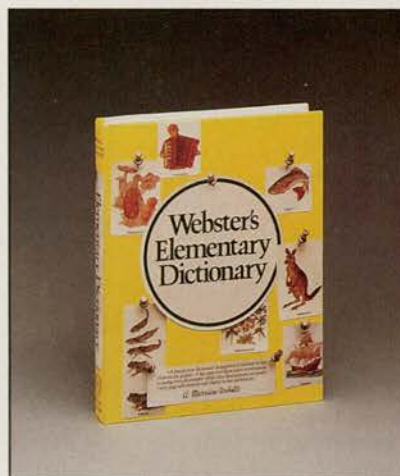
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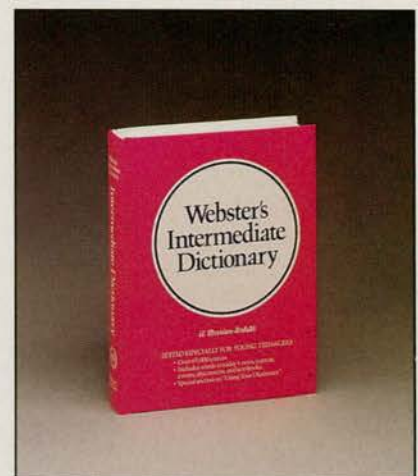
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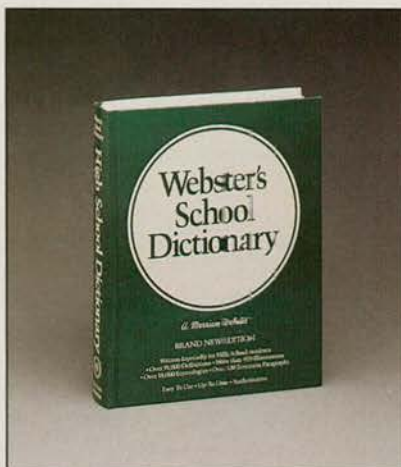
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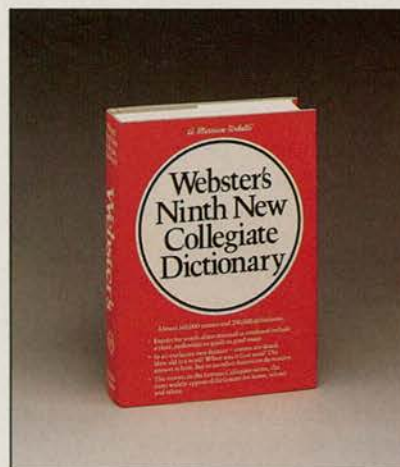
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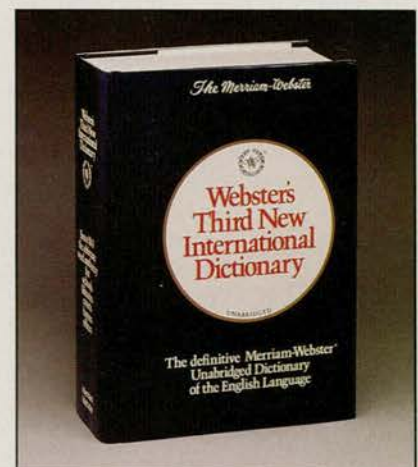
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“It’s Like...”

The Bridges Teachers Build



How do we help children understand new and often mystifying concepts? In his speech to the AFT QuEST conference, Lee Shulman of Stanford University told us: “The most important single principle of learning . . . is that you must find ways to connect new concepts, new ideas to the ideas that are already in the heads of the youngsters. Teaching is bridge building. That’s why when you walk into the classroom of a fine teacher, I contend that the word you will hear most often when a teacher is explaining something is the word “like.”

We asked readers to send us their favorite bridge builders—the metaphors, similes, analogies, examples, and stories that they had used most successfully to convey new understandings to their students.

STAR BRIGHT

In District 22 in New York City, our science resource teacher, Mr. Alan Winkler, uses various “bridges.” In one case, he uses the flame of a cigarette lighter to graphically show the effect of temperature on the color of a star. After showing the actual flame, a large flame is drawn on the board and the children label the colors; the innermost portion of the flame is blue, becoming yellow, then orange, and, at the flame’s edge, red.

When a diagram showing the temperatures of stars is presented, the children easily see that blue-white stars are the hottest, the red stars the coolest.

In answer to a question about why one side of Mercury is 500°C and the other side is -200°C , he says that it is like cooking a chicken on a rotisserie. When the chicken turns at a constant speed (as the Earth does in its regular twenty-four-hour rotation), it cooks evenly on all sides. But imagine what would happen, he says,

if as you began to cook the chicken, you slowed down the turning of the chicken and had the rotisserie move very, very slowly. What would happen?

Children: “It would burn on one side and the other side would be raw.”

The rotation of Mercury, responds Mr. Winkler, is equivalent to 57 Earth days. Mercury turns so slowly that the side facing the sun is exposed to that heat for a very long time.

—ADELAIDE HURST
P.S. 255, BROOKLYN, NY

ZERO

Breathes there the teacher, plowing ahead, who never to herself hath said, “Someone out there could be a real hero, if he’d explain to third graders that place holder, zero.”

With apologies to Sir Walter, I present one of the more difficult concepts for elementary students to grasp. Ask them to write four hundred six and many, if not most, will write 46. Zero as a place holder baffles more than a few.

I select a day when one child is absent. (Or I may send our class messenger to the office for another stack of lunch count forms.) Then I turn to my class and ask ever so innocently, “Where is Emily?”

“She’s absent today,” the students respond.

“How do you know she’s absent? Perhaps she has moved to Minnesota.”

“Oh no! She’s still around,” I am assured in a *cappella* chorus.

“But how do we *know* she’ll be back *here*?”

“Cause her stuff is still here in her desk.”

“Oh? Is her desk some sort of a clue that she’ll be back? Is her desk

holding a place for her? Hmmm. That reminds me . . . it’s like zero as a place holder in math. There’s nothing there right now. But we know we cannot ignore that special place because something *does* belong there. So, just as this desk holds a place for absent Emily, the zero holds a place for the absent digit.”

—MILLIE RICHMOND
HOLLYWOOD HILLS ELEMENTARY SCHOOL
HOLLYWOOD, FL

MAPS, GLOBES, AND FRACTIONS

In comparing the accuracy of the globe and the map as representations of the Earth itself, I have my fourth-graders think about paper dolls and real dolls, pictures of cars and model cars. They note that a picture of a person or an object can only provide a flat, one-dimensional picture of the real thing. A map has the same limitations; it cannot show all sides of the object at once or truly represent its actual shape. I then cut a tennis ball in half and try to flatten it to demonstrate the difficulty of representing a sphere in one dimension without distortion.

In our unit on equivalent fractions, I explain the idea of equivalence by comparing the fractions to money. Just as equivalent fractions have the same value but different names, so the same amount of money can be represented in different ways. Fifty cents, for example, can be expressed as two quarters, five dimes, ten nickels, 50 pennies, or any combination of coins, as long as the coins’ value remains fifty cents. Hence, as with equivalent fractions, the name of money changes but the value remains the same.

—JAN SETTINERI
PUBLIC SCHOOL 138
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SPECIAL
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CREATING A PROFESSION OF TEACHING

The Role of National Board Certification

One of the most significant and far-reaching education reforms, one with enormous potential to improve student learning, is beginning to take shape. It's the work of the National Board for Professional Teaching Standards, which was created in 1987 at the urging of the Carnegie Task Force on Teaching as a Profession, the National Governors Association, the AFT, and many other leaders in education and the broader community. The Board, whose membership includes a majority of teachers, is working to set standards for teaching practice and to develop a series of "Board Certification" assessments based on these standards that would allow teachers to gain a highly regarded, professional credential like that available to physicians, accountants, architects, and other professionals. The Board's work will be far reaching not just because it will have the effect of raising the status of teaching, but because it will spur so much other research and reform in education.

National Board Certification will not in any way replace the current entry-level teaching license that has traditionally been issued by states. Rather, the National Board will offer an advanced credential for experienced teachers who choose to apply for it.

But simply recognizing excellent teaching, as the Board will do, is not enough. The key to improved schooling will be how schools actually deploy these teachers—how will their experienced teaching be brought to bear on a given school's most intractable challenges? This will be determined locally by school boards and unions.

The National Board's potential is tremendous for upgrading the status of teachers, for expanding and codifying the knowledge base of teaching, for providing a fair way to recognize excellent teachers, and for triggering such needed school reforms as increased collaboration among teachers, reduced bureaucratic control over the forms of their work, and more productive use of their talents.

So that AFT members may be familiar with the kinds of reforms the National Board is expected to stimulate and the kind of teaching practice it expects to promote and certify, we reprint here generous portions from its recent report, *Towards High and Rigorous Standards for the Teaching Profession: Initial Policies and Perspectives* of the National Board for Professional Teaching Stan-

dards. In addition, we preview the kinds of assessments that may be used by the Board to elicit and certify the rich and complex teaching practice that current examinations don't begin to reveal.

To order a copy of *Towards High and Rigorous Standards*, send \$7 to: NBPTS, 333 West Fort Street, #2070, Detroit, MI 48226. Make checks payable to NBPTS.

—Editor

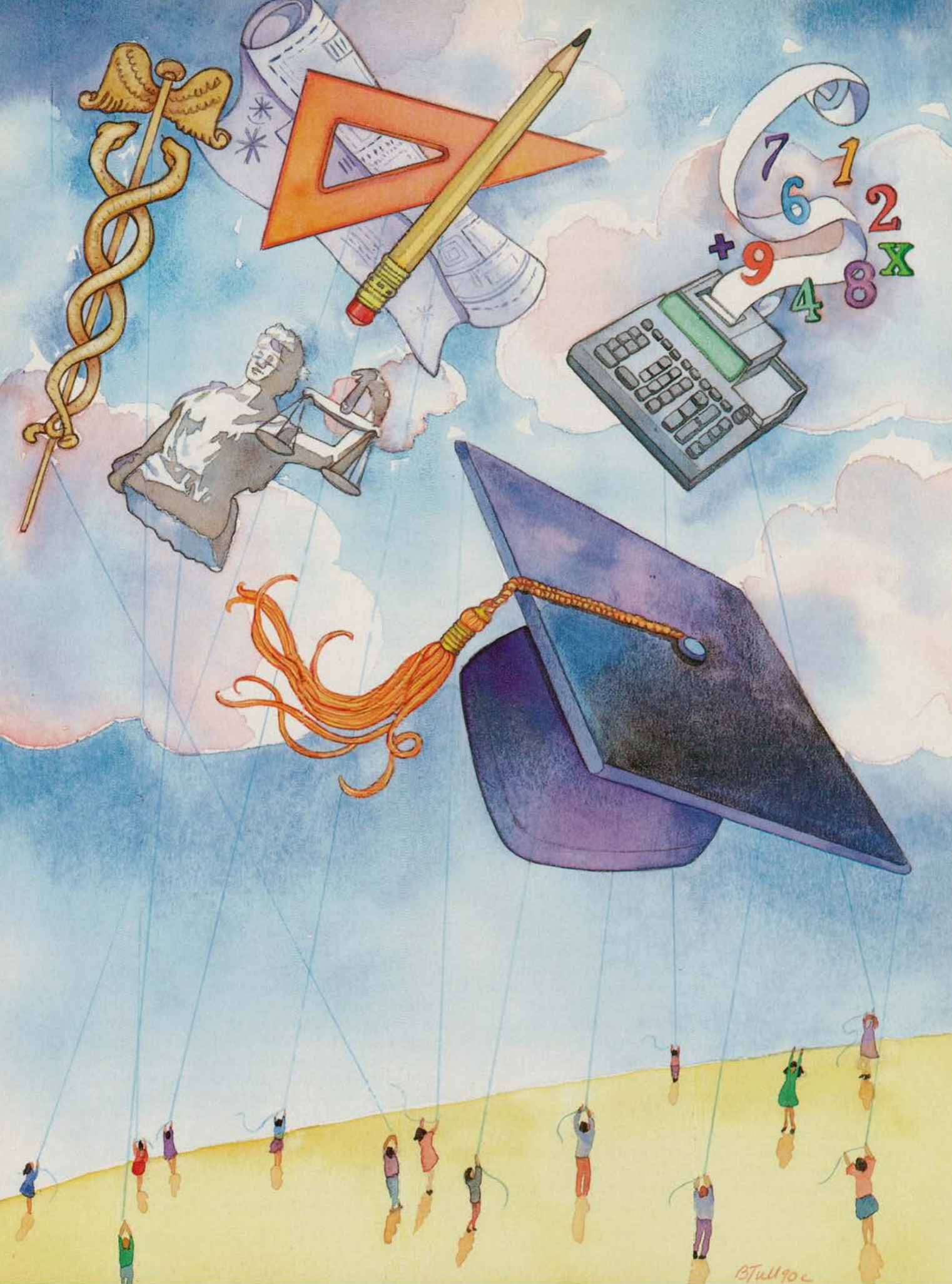
ALARMS HAVE sounded in state capitals, in local communities and in many corporate board rooms. The country is beginning to understand that if America is to have a future with promise, it must have world-class schools, and that if America is to have world-class schools, it must have a world-class teaching force. The corollary of this is also true: To have world-class teachers, America must have world-class schools. The two go hand in hand.

Many excellent teachers already work in the schools. But their work regularly goes unrecognized and unrewarded. As a consequence, many first-rate practitioners leave the schools, and others who could be exceptional teachers never consider teaching. Worse still, the knowledge and skills of the fine teachers who remain often are underutilized, their positive influence allowed only the most modest scope.

In recognition of these challenges, the nation has begun to take several steps forward—one of them unprecedented. The leadership of the nation's education community has coalesced to create a National Board for Professional Teaching Standards.

Throughout this century, teachers have stood by as one profession after another has established its credibility and grown in stature by creating national certification systems that set high and rigorous standards. Although similar systems have periodically been proposed for the teaching profession, the proposals languished.

Then, in 1983, the report of the President's National Commission on Excellence in Education, *A Nation at Risk: The Imperative for Educational Reform*, sharply heightened public concern, provoking a new wave of reform initiatives that engulfed the education community. Three years later, the Carnegie Task Force on Teaching as a Profession in its pivotal report, *A Nation*



BJull90c

Prepared: Teachers for the 21st Century, called for the establishment of a National Board for Professional Teaching Standards. The following year this unique institution in the life of American education was born.

TEACHING IS at the heart of education, and the single most important action the nation can take to improve schools is to strengthen teaching. A national certification system that reliably identifies teachers who meet high and rigorous standards can galvanize the entire system. Understanding how this might occur begins with understanding the shortcomings of the current system.

Unlike physicians, architects, or accountants, teachers have not codified the knowledge, skills, and dispositions that account for accomplished practice. Consequently, there are widespread misconceptions about what constitutes good teaching. Some hold that it requires no more than knowing one's subject. Others think that caring about children is all that is essential. Still others believe that just knowing "how to teach" (as if such knowledge can be divorced from the two prior considerations) is sufficient. Actually, all of these attributes are necessary, but even taken together they are not sufficient. Accurately evaluating student needs and progress, translating complex material into language students understand, exercising sound and principled professional judgment in the face of uncertainty, and acting effectively on such judgments are also necessary conditions for teachers to excel.

Unfortunately, lack of attention to the act of teaching at the college and university level reinforces a cavalier attitude toward teaching in general. Too many Americans—school board members, administrators, and many teachers included—believe that any modestly educated person with some instinct for nurturing has the requisite qualifications to teach. The National Board intends to change this view by presenting a compelling case for, and a more accurate description of, accomplished teaching.

Many schools are now organized as if all teachers were peas in a pod, indistinguishable one from another. This strains the imagination. In a profession of 2.5 million people, variations in knowledge and effectiveness are to be expected. Unlike other professions, the schools have, for the most part, been unable to accommodate their practices to account for the diversity that exists within the teaching workforce. In no other profession are neophytes thrust into full service without a period of transition; in no other profession are demonstrated competence and success unrecognized and unrewarded; and in no other profession are human resources deployed inflexibly without reference to the needs of the client. Treating teachers as if they were all the same is inefficient and dispiriting. The Board's ability to identify accomplished professionals in a fair and trustworthy manner can free the schools from a large part of this structural straitjacket.

The absence of a credible and accepted method to recognize outstanding teaching sends a message that good teaching is not valued and that the profession does not take itself or its responsibilities seriously. Moreover, because the incentive structure in schools fails to promote the spread of the knowledge and expertise of the

most accomplished teachers among fellow faculty members, schools fail to capitalize on these precious resources.

This state of affairs has come about not by accident but by design. Schools and the teachers and administrators within them function in the manner that they do as the result of deliberate policy decisions. Many of these decisions have been grounded in the reality that neither labor nor management has trusted the other to make fair distinctions among teachers. Until now, most attempts to recognize accomplished teachers have not only been characterized by limited teacher involvement in their origination but also have not been based on high standards of professional practice; as a result, teachers are understandably skeptical about such programs.

A SYSTEM OF National Board Certification that commands the respect of the profession and the public would make a critical difference in how communities view their teachers. Superintendents would encourage their teachers to acquire National Board Certification and would want to hire Board-certified teachers. No longer would the overriding objective be to fill each vacancy with the lowest-cost teacher; instead, districts that cared about the quality of education being provided to their students would have a strong incentive to see that a solid percentage of their teaching force was Board certified.

Perhaps, most importantly, new assignment procedures could be devised to capitalize on the wisdom and ability of the most accomplished teachers. Such behavior is second nature in professional practice firms in architecture, accounting, and law, where the most distinguished professionals accept the most demanding cases. Unfortunately, in many schools, the least experienced teachers are regularly assigned to the most disadvantaged students. Such a practice serves neither teachers nor students. In schools redesigned for improved performance, Board-certified teachers would not only enjoy greater status, they would likely command higher salaries.

As National Board Certification signals that the teaching force is populated by many practitioners entitled to full professional standing, state and local authorities should find it easier to back away from instructional edicts that limit flexibility and stifle creativity at the school site. Providing more discretion so that those closest to the point of service delivery may use their distinctive knowledge of the client's needs should produce better results for students and yield a more stimulating and professionally rewarding work environment for teachers. Thus, Board certification can help to shape new roles for teachers in both instructional policy and staff development. Working in concert with principals, teachers would have the flexibility to assemble and reassemble school resources in response to their students' shifting educational needs. Such changes would enhance the likelihood that all school resources—time, people, money—are marshaled more effectively on behalf of student learning.

National Board Certification should lead to greater mobility and career opportunities for teachers. The arbitrary barriers that make it difficult to move from one state to another should be reduced for Board-certified

A system of National Board Certification that commands the respect of the profession and the public would make a critical difference in how communities view their teachers.



teachers, and within-district transfers to deploy teaching talent more equitably should be facilitated. This last consideration is especially important where there is a maldistribution of teaching talent hidden from view in the absence of a mechanism for identifying accomplished teachers. Once such inequities can be unambiguously observed, schools that have been slighted in the past will be on firmer ground to advance a claim for a fair share of the most able professionals.

By creating a new and more attractive career path for all teachers, National Board Certification should improve the schools' ability to retain able professionals, make the profession more appealing to bright and enter-

prising college students who enjoy many other promising options, and attract older Americans seeking new and rewarding careers. Such changes also hold promise for a reversal in the long-term trend of declining minority interest in teaching.

As the labor market has expanded for minority college graduates, many of these able, young people have been attracted to other careers that offer more promising avenues for advancement, greater prestige, and more attractive work environments. The result is that the schools no longer have a captive pool of talented minorities from which to draw. The pool itself has also been constricted by low college completion rates for minority youth. Broadscale reforms at all levels of American education are required to stem the loss of minority students all along the education pipeline. But even as progress is made on this front, being able to offer a more rewarding career, with decent pay and the prospect of professional standing, respect, and responsibility is necessary if sufficient numbers of minorities are to find their way back to the teaching force.

National Board Certification will present colleges and universities with a new challenge and a new market. Coming on line at a moment when teacher preparation programs are reshaping their curricula, Board Certification should have a constructive effect on efforts to redesign teacher education. Board standards that stress the interaction of subject matter knowledge and pedagogy will pose a special opportunity to many higher education institutions where different faculties claim responsibility for each of these bodies of knowledge. The myth that there is nothing to know about teaching except what one learns from experience should lose credibility. With many initial candidates for Board Certification coming from the current teaching force, there should emerge a new and burgeoning market for preparing teachers for the Board's assessments. Institutions of higher education will be in a prime position to help practitioners evaluate their readiness for the Board's assessments and broaden and deepen their knowledge of the subjects they teach and the research on teaching.

When viewed narrowly, professional certification is a means to enhance the status and pay of teachers. These are worthy objectives in their own right. But when the connections between professional certification and the organization of instruction are examined, the potential to improve student learning can be seen quite directly. Through its potential to transform schooling, to leverage current investment in teaching, and to build a system where increasing public investment makes more sense, the full value of National Board Certification is revealed.

Strengthening Teaching and Instruction

At present, almost all of the incentives for continuing professional development are wrapped up in salary schedules that reward the accumulation of graduate credits. It does not matter what is studied or whether it is related to a teacher's assignments. It does not matter if a teacher receives a high grade or a low grade, or, for that matter, if anything at all is learned that might strengthen the teacher's practice. All that counts is that one's card

gets punched.

Recognition of Board certificates will fundamentally change this equation. Suddenly, the selection of courses, the quality of instruction, and the quality of a teacher's effort in the pursuit of knowledge and expertise will matter. Graduate courses and other staff development activities, including school-sponsored inservice training programs that contribute to the continuing professional development of teachers will, indeed, become important. Once there is a way to reward and recognize teachers who can do more than just master the basic licensing requirements, the orientation of both teachers and administrators toward professional growth opportunities should change markedly. Peers will seek out accomplished teachers noted for their expertise. Novice teachers will request constructive criticism to improve their practice. Administrators responsible for encouraging and supporting teachers' efforts to attain

National Board Certification will have a fresh perspective for judging the quality of the professional growth opportunities their schools provide and a new, healthy concern for the manner and pace at which novice teachers mature into accomplished professionals.

Concurrently, interest will grow in the knowledge base for teaching. Intellectually curious teachers have long sought to understand and to apply the modest research that has emerged about teaching. But most school systems do little to encourage such exploration. By codifying the knowledge base and drawing attention to the broad sweep of factors that constitute accomplished teaching, the Board should change the perceptions of those who hire teachers. As the country moves from rather simplistic notions of the ingredients of effective practice to more sophisticated models, greater appreciation of the demands and complexities of teaching should emerge.

THE ASSESSMENT: A PREVIEW

HOW DOES one create a teacher assessment that captures the richness of teaching as described by the National Board? Certainly not through a traditional paper-and-pencil test. Such tests reduce teaching to a set of simplistic right and wrong answers. They do not allow for the variety of forms that sound practice takes, and they do not elicit the sophisticated judgments that mark excellent teaching.

The Board is searching for new methods of assessment that are both feasible and faithful to the complexities of teaching. The final assessment that is developed will likely employ a mix of techniques: Candidates may be interviewed, their portfolios reviewed, their teaching observed over some period of time; or they may be asked to demonstrate their teaching skills and knowledge by completing specially designed exercises.

Stanford University's Teacher Assessment Project (TAP) has developed a series of prototypical assessment exercises that allow teachers to demonstrate the depth and breadth of their knowledge and ability. Among the prototypes are a number designed to assess elementary teachers' ability to teach fractions, a task regarded as quite challenging, and a number designed to assess secondary social studies teachers' ability to teach about the American Revolution.

While TAP is an independent research project not under the

Board's auspices—and while the Board has just begun its own \$50 million research and development program to determine just what its final assessment will look like—the following descriptions of the exercises piloted by TAP suggest the depth and richness of the assessments that we may expect from the National Board. Technical reports detailing the strengths and weaknesses of each of these exercises are available from TAP. (To order, write Teacher Assessment Project, CERAS, 507 Stanford University, Stanford, CA 94305-3084.)

—Editor

MATH PROTOTYPES

Math Lesson Planning (90 minutes). The examiner provides the candidate a lesson on simplifying fractions from a widely used fifth-grade arithmetic text. Following an instruction sheet, the candidate takes thirty minutes to review the section of the textbook and to plan a lesson on simplifying fractions. The lesson need not follow the textbook. In the following hour, the candidate explains the lesson to the examiner and answers some questions about it, e.g., what an appropriate homework assignment would be. Finally, the candidate responds to some brief vignettes that involve possible student misunderstandings related to the subject matter, e.g., "You have the students simplifying $8/18$ at their seats. . . . You discover that

one student has tried to divide numerator and denominator by 4. What would you say and do?"

Math Video Critique (90 minutes). The candidate pretends that she has been released from teaching to visit another school and learn how other teachers practice. The candidate views a twenty-minute videotape of a small group lesson using geoboards then answers general questions about what she saw, e.g., "What mathematical understanding do students need in order to participate successfully in this lesson?" The candidate then views the tape a second time; the examiner stops the tape at pre-determined spots to ask questions, such as "Discuss the quality and accuracy of the teacher's explanation. What would you have said or done?"

Math Teaching Tools (45 minutes). The candidate is asked to suppose that he is teaching fractional equivalence and inequalities to "an average fifth-grade class." The candidate is presented a set of Cuisenaire rods (segmented bars sometimes used to teach fractions) and a computer running an instructional game called "Fraction." The candidate has twenty minutes to become familiar with the rods and the game. The examiner then asks questions about each of the items, such as "For which classroom explanations, demonstrations, or activities might you use this mate-

Teacher interest in the knowledge base will also be piqued. For the first time in teachers' careers, it will be in their direct self-interest to have command of the knowledge base. Simultaneously, capturing the wisdom of the nation's exceptional teachers will be seen as a crucial endeavor. Expert practitioners will become a valued commodity and acquire the respect and admiration they deserve from colleagues and researchers alike.

When it is recognized that among the nation's largest group of professionals there are many with special expertise, schools are but one step away from being changed in other ways. A major managerial challenge for the schools then becomes how best to deploy their most valuable resource, teachers, in a manner that maximizes the opportunity to utilize the knowledge, skill, and expertise of the most proficient practitioners. This would include creating conditions that ensure that the positive influence of Board-certified teachers is felt not

only by those few students who are directly assigned to such teachers, but by all students in the school. This can only be accomplished by changing the predominant "egg crate" model of schooling that isolates teachers one from the other and by giving Board-certified teachers a role in instructional decisions.

More fluid and open models of schooling would emerge. They would be characterized by collaborative working relationships among teachers and administrators that encourage Board-certified teachers to share their knowledge and expertise with their colleagues. The toughest cases would be seen by the most accomplished professionals, and flexible instructional arrangements permitting different mixes of students and teachers would evolve as circumstances dictate.

There is no one magic recipe for how best to deploy a group of teachers. Each different mix of students presents a new set of challenges; each different mix of

rial?" And, "What mathematics would you use this material to help explain?"

Math Shortcuts (45 minutes).

The candidate is presented three problems: (a) $\frac{5}{6} = \frac{?}{18}$. (b) $\frac{5}{9} ? \frac{45}{81}$. (c) $\frac{6}{8} ? \frac{11}{12}$. Taking each problem in turn, the examiner demonstrates a different "shortcut" method for testing whether the fractions are equivalent. After each demonstration, the examiner asks the candidate a series of questions, such as "Is it a good idea for teachers to teach students to use this method to solve this type of problem?" "If so, why . . .?" "If not, why not . . .?" "Does this method work for all pairs of fractions?"

SOCIAL STUDIES PROTOTYPES

Documentary History (90 minutes).

The examiner gives the candidate a textbook summary, several documents, and three pictures concerning the Battle of Lexington, April 19, 1775. Most of the documents contain sworn testimony, collected at the time, regarding the events at Lexington. Some of the testimony conflicts; taken as a whole, it raises and leaves questions. The three pictures were painted or engraved at different times; generally, one may discern the evolution of a myth in these pictures. The candidate has thirty minutes to examine these materials. In the next hour, the examiner asks various questions concerning both

the use of the documents and pictures in a historical interpretation of the events at Lexington and the use of those same documents and pictures in history teaching. One question is, "How could you capitalize on the differences among the three pictures?"

Evaluation of Students' History Papers (90 minutes).

The candidates receive a set of six papers written by students in an eleventh-grade U.S. History class in response to an essay question that is shared with the candidate. The candidate then has forty-five minutes to grade six of the papers and to answer five questions about the grading, e.g., "What do these grades mean? Explain your grading system." Then the candidate gets three more student papers, is asked to make comments on the papers that would be useful to the students, and is interviewed again. The focus of the second interview is on what the candidate learned about each student, e.g., "What success or failure did this student have with the content in the essay question?"

History Textbook Analysis (3 hours).

The candidate is asked to assume the role of a teacher, in a district that is generally described, who has been asked to provide a candid review of a textbook. For the sake of time, the candidate is to concentrate on a photocopied portion of the teacher's edition of the text, along with the worksheets and

chapter tests that go with it. The candidate records her review on a response form that asks for comments about the historical soundness of the text, features of the text that might help or hinder students, the value of the worksheets, and so on. Also, the candidate can attach yellow "Post-it" notes with comments to parts of the text to which she wishes to call attention.

Cooperative Small Groups (90 minutes).

Prior to attending the assessment center, the candidate receives information about this exercise, along with two brief readings on the use of cooperative student groups in the classroom. At the assessment center, the candidate is provided a work area, ten reference books and articles on the role of women and minorities during the American Revolution, and an additional article on the "Jigsaw" method of teaching students in small groups. The candidate is asked to assume a role in a hypothetical situation and to prepare a plan for a jigsaw activity and materials for use by one of the "expert" groups employed in that activity. The candidate employs a prepared form to complete the task. □

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teachers brings a new pool of talents. The staffing pattern that makes sense in September might best be rearranged come November or February. But, with a modicum of imagination, a variety of organizational staffing arrangements can be identified that would be distinct improvements on the current lock-step approach.

What Teachers Should Know And Be Able To Do

The fundamental requirements for proficient teaching are relatively clear: a broad grounding in the liberal arts and sciences; knowledge of the subjects to be taught, of the skills to be developed, and of the curricular arrangements and materials that organize and embody that content; knowledge of general and subject-specific methods for teaching and for evaluating student learning; knowledge of students and human development; skills in effectively teaching students from racially, ethnically, and socioeconomically diverse backgrounds; and the skills, capacities, and dispositions to employ such knowledge wisely in the interests of students.

This enumeration suggests the broad base for expertise in teaching but conceals the complexities, uncertainties, and dilemmas of the work. Teaching is work of

the most demanding sort, for teachers must make dozens of decisions daily, command a wide body of knowledge and skill, learn to react instantly, and be disposed to act wisely in difficult situations. And while there are principles and precepts, skills and techniques to guide the work, teaching is also an activity with artistic aspects, a craft calling for reflection and judgment.

Although complicated, teaching nonetheless evokes simple, reductionist analysis. Much of the discourse on teaching and learning pulls apart what must be joined in practice. Chroniclers of teaching, for example, often assign the teacher's primary loyalty to the student or to the subject, with elementary teachers often characterized as "student centered" and secondary teachers seen as "subject centered." This dichotomy is false. Sound teaching merges commitment to students with allegiance to knowledge at all grade levels. All teachers must uphold the claims of knowledge, yet strive to build spacious avenues from such knowledge to students' understanding.

There is likewise a tendency to frame teaching either in terms of imparting valuable knowledge or as encouraging the acquisition of skills. But knowledge and skill are not disjointed. Knowledge—in the form of specific facts and organizing principles—is necessary to the exercise of most skills, just as a range of skills is necessary to the acquisition and construction of knowledge.

IN WHAT FIELDS WILL CERTIFICATES BE MADE AVAILABLE?

According to current plans, the initial certificates to be developed will be in the fields listed below. However, as the Board's research and development programs progress, the final structure of the Board certificates may be modified as the result of consultations with the various disciplinary communities, the shape and organization of the knowledge base in particular fields, and/or assessment considerations revealed during the course of the Board's extensive research and development program. The Board plans to phase in its certificates. The first set, which should be ready within five years, will be chosen so as to make as many teachers as possible eligible for certification. Other certificates will come on line within several years. The objective is to provide all experienced teachers with the opportunity to seek National Board Certification.

Early Childhood (Ages 3-8)
Generalist

Middle Childhood (Ages 7-12)
Generalist
English Language Arts
Mathematics
Science
Social Studies/History

Early and Middle Childhood (Ages 3-12)
Art
French
Guidance Counselling
Library/Media
Music
Physical Education/Health
Spanish*

Early Adolescence (Ages 11-15)
Generalist
English Language Arts

Mathematics
Science
Social Studies/History

Adolescence and Young Adulthood (Ages 14-18+)

English Language Arts
Mathematics
Science
Social Studies/History

Early Adolescence through Young Adulthood (Ages 11-18+)

Art
French
Guidance Counselling
Library/Media
Music
Physical Education/Health
Spanish*
Vocational Education—Agriculture
Business
Health Occupations
Home Economics
Industry/Technology

The Board will also develop certificates for teachers of special needs students—limited-English-proficient students (e.g., English as a second language, bilingual education) and Special Education and Exceptional Needs Students (e.g., moderately handicapped, severely and profoundly handicapped, speech impaired, hard of hearing and deaf, visually handicapped, deaf and blind, and gifted and talented). □

*As resources allow, additional certificates would be offered in German, Latin, Italian, Russian, and Japanese.

While teaching demands crisp reasoning and few settings yield to only a single approach, teachers do not have free rein to select any approach that strikes them as felicitous.



Knowledge and skill cannot be pulled apart, nor can one assume pride of place over the other.

Another commonplace fallacy is to distinguish "basic" from "higher-order" skills and to regard mastery of the basics as a precondition to advanced forms of reasoning and functioning. Accomplished teachers realize that higher-order thinking is the hallmark of successful learning at all levels. Students, for example, can not become good writers without engaging in complex problem-solving processes, nor can they effectively learn basic mathematics simply by memorizing rules for manipulating numbers. There can be no neat division of teaching labor along a basic-to-advanced skills continuum. All teachers must concern themselves with higher-order skills, with the executive functions of reasoning, and with students' capacities to monitor their own learning.

To unify these dichotomies in practice, however, requires skill, wisdom, and judgment. Teachers regularly find themselves confronting hard choices—sometimes sacrificing one goal for another, sometimes

making compromises.

While teaching demands crisp reasoning and few settings yield to only a single approach, teachers do not have free rein to select any approach that strikes them as felicitous. Rather, their choices are anchored in their own experience and in the settled ground of the knowledge base that defines both efficacious and flawed practice. Being able to apply steady, disciplined judgment and reflective scrutiny within the bounds set by this constantly expanding body of knowledge is the hallmark of professionalism in teaching. As such, these values will be found at the heart of the standards the National Board will promulgate.

AS ITS title indicates, the National Board is committed to professional standards for teaching. The term "professional" is an honorific in our society and denotes occupations characterized by certain attributes. Chief among these are a body of specialized, expert knowledge together with a code of ethics emphasizing service to clients. The knowledge base typically provides substantial, but not complete, guidance for professional practice. Professionals possess expert knowledge but often confront unique, problematic situations that do not lend themselves to formulaic solutions. Professionals, then, must cultivate the ability to cope with the unexpected and act wisely in the face of uncertainty.

Professionals deal with urgent human problems: matters of life and death, justice, hope, and opportunity. Essential to their work is the trust of clients. What warrants such trust is the obligation, upheld within the community of professionals, to pursue an ethic of service and to employ special knowledge and expertise in the interests of their clients.

These general observations apply to teaching, but with important distinctions. While teachers employ their knowledge and skill on students, they also strive to empower students to continue the quest for understanding, so that one day the pupil may surpass the instructor. In this regard, teaching is the most democratic of professions. It aims to place within the hands, head, and hearts of students the means for them to teach themselves.

The ethical dimensions of teaching also distinguish it from other professions. Unique demands arise because the client's attendance is compulsory and, more importantly, because the clients are children. Thus, elementary, middle, and high school teachers are obligated to meet a stringent ethical standard. Other ethical demands derive from the teacher's role as a model of an educated person. Teaching is a public activity; a teacher works daily in the gaze of his or her students, and the extended nature of their lives together in schools places special obligations on the teacher's behavior. Students learn early to read and draw lessons from their teachers' characters. Teachers, consequently, must conduct themselves in a manner students might emulate. Their failure to practice what they preach does not long elude students, parents, or peers. Practicing with this additional dimension in mind calls for a special alertness to the consequences of manner and behavior. Standards for professional teaching ought, therefore, to emphasize its ethical nature. What follows is an elaboration of these

principles, stated in terms of five core propositions that go to the heart of the Board's perspective on accomplished teaching.

Proposition #1:

Teachers Are Committed to Students and Their Learning.

Board-certified teachers are dedicated to making knowledge accessible to all students. They act on the belief that all students can learn. They treat students equitably, recognizing the individual differences that distinguish their students one from the other and taking account of these differences in their practice.

Accomplished teachers understand how students develop and learn. They incorporate the prevailing theories of cognition and intelligence in their practice. They are aware of the influence of context and culture on behavior. They develop students' cognitive capacity and their respect for learning. Equally important, they foster students' self-esteem, motivation, character, civic responsibility, and their respect for individual, cultural, religious, and racial differences.

Teachers Recognize Individual Differences

To respond effectively to individual differences, teachers must know many things about the particular students they teach: Alex has a stutter, Maria loves science fiction, Toby is anxious about mathematics, Marcus is captivated by jazz. But accomplished teachers know much more—whom their students go home to at night, how they have previously performed on standardized tests, what sparks their interest. This kind of specific understanding is not trivial, for teachers use it constantly to decide how best to tailor instruction.

As diagnosticians of students' interests, abilities, and prior knowledge, skillful teachers learn to "read" their students. When planning a unit on aging, for example, they will anticipate what concepts and activities certain students may find problematic. Watching a student work on a computer, they will look for signs of progress. By keeping a finger on the pulse of the class, teachers decide when to alter plans, work with individual students, or enrich instruction with additional examples, explanations, or activities.

Proficient teachers learn from their experiences. They learn from listening to their students, from watching them interact with peers, and from reading what they write. The information they acquire about students in the course of instruction subsequently becomes part of their general knowledge of education. Such monitoring and learning is no easy feat. What teachers are able to see, hear, and learn is colored by their own prior knowledge and experience. Thus teachers must, in their efforts to work with children different from themselves, monitor both what they see and hear and what is not so close to the surface. They must strive to acquire a deep understanding of their students and the communities from which they come, which shape students' outlooks, values, and orientation toward schooling.

Teachers Understand How Students Develop and Learn

In addition to particularistic knowledge of their stu-

dents, teachers use their understanding of individual and social learning theory and of child and adolescent development theory to form their decisions about how to teach. They are familiar with the concepts generated by social and cognitive scientists that apply to teaching and learning. Moreover, they integrate such knowledge into their personal theories of learning and development generated from their own practice. For example, accomplished teachers know that old theories of a monolithic intelligence have given way to more complex theories of multiple intelligences. Current thinking no longer casts "intelligence" as a context-free, one dimensional trait. Instead, it recognizes different kinds of intelligence—linguistic, musical, mathematical, spatial, kinesthetic, personal. This perspective also holds that there are variations in sources of intelligence (e.g., practical experience versus formal study) and the forms of intelligence (e.g., procedural skills versus propositional knowledge). Both their knowledge of these theories and their experiences in classrooms have taught teachers that each student has different strengths, perhaps even gifts. Teachers think about how to capitalize on these assets as they consider how best to nurture additional abilities and aptitudes.

Moreover, teachers recognize that behavior always takes place within a particular setting that, to some extent, defines the behavior. They know, for instance, that students who cannot flawlessly recite multiplication tables may still be able to multiply in other contexts (e.g., in calculating whether they have enough money for items at the grocery store). Accomplished teachers are aware that school settings sometimes obscure a clear vision of students' aptitudes and intelligences. Therefore, they strive to provide multiple contexts in which to promote and evaluate those abilities.

They also recognize the ways in which intelligence is culturally defined. That is, what is considered intelligent behavior is largely determined by the values and beliefs of the culture in which that behavior is being judged. Accomplished teachers recognize that in a multicultural nation, students bring to the schools a plethora of abilities and aptitudes that are valued differently by the community, the school, and the family. The knowledge, skills, abilities, and dispositions that are nurtured in a native American community in the state of Washington will differ from those valued in a Hispanic community in Florida. Likewise, those cultivated by a suburban community in Utah will differ from those developed in urban New York. Thus, teachers are attuned to the diversity that is found among students and develop an array of strategies for working with it. This includes providing educational experiences that capitalize on and enlarge the repertoire of learning and thinking that students bring to school.

Teachers Treat Students Equitably

As stewards for the interests of students, accomplished teachers are vigilant in ensuring that all pupils receive their fair share of attention and that biases based on real or perceived ability differences, handicaps or disabilities, social or cultural background, language, race, religion, or gender do not distort relationships between themselves and their students. This, however, is not a simple proposition. Accomplished teachers do

PREREQUISITES FOR NATIONAL BOARD CERTIFICATION

PREREQUISITES ARE part of the framework of standards the Board will establish. They are an efficient means for attesting that all Board-certified teachers possess certain qualifications that contribute to their competence. Prerequisites strengthen standards. They complement standardized assessments that, no matter how sophisticated and extensive, are inevitably limited in their ability to certify competence. The Board seeks to assure that only fully accomplished teachers become certified, yet the practical means for gaining such assurances provide an imperfect warrant. Prerequisites can improve that warrant by requiring that candidates possess certain qualifications and/or have undertaken certain experiences.

Grounds for justifying prerequisites are the same as for the assessments themselves. One is to contribute to teaching effectiveness. Another is to reform and improve teaching. A third is advancement of the teaching profession. Prerequisites should strengthen the process of ensuring that individual candidates for Board certification possess knowledge, skills, and dispositions associated with effective teaching as defined by disciplined inquiry and professional judgment. They also have a collective function: representing commitments of the profession to improvement and to reform. Consequently, each of these grounds might justify particular prerequisites.

Prerequisites serve as elements in a standards framework but operate in part through perceptions. This is a significant point. Support for and the legitimacy of the Board standard is at stake in these perceptions. The Board may establish prerequisites on principled grounds, but if important constituencies *perceive* the prerequisites as invalid and unjustified—as barriers that artificially restrict access to



certification—then this can jeopardize the certification process. In general, the more restrictive the prerequisite, the more difficult it is to legitimize.

There are twin dangers to avoid. One is that the framework of standards will be insufficiently rigorous, so that too many teachers of lesser accomplishment may become cer-

tified. Such an outcome would surely undermine the Board in the long run. Conversely, it would be equally damaging if, in the name of rigor, the standards framework excludes too many teachers widely perceived as excellent. The Board has kept these dangers in mind in developing its policy on prerequisites.

In evaluating the range of potential prerequisites, the Board posited four criteria:

- Eligibility for Board certification should be as *open* as possible without compromising essential properties of the standards.
- Any prerequisite adopted should lend itself to being applied *uniformly and fairly* to all candidates.
- Any prerequisite adopted should be set in a *nonarbitrary* manner.
- Prerequisites should be *administratively feasible*, lending themselves to straightforward verification.

Four prerequisites were considered:

- Possession of a baccalaureate or advanced degree.
- Graduation from an accredited program of teacher education.
- Years of teaching experience.
- Possession of a valid teaching license.

These options could be applied independently or in various combinations. These are now explored one at a time.

BACCALAUREATE OR ADVANCED DEGREE?

A minimum education prerequisite that the Board might set would be possession of a baccalaureate degree. This requirement would exclude few, if any, candidates. With rare exception, one can no longer teach in the United States without a college degree. The Board might assert as an entitlement standard that all

Board-certified teachers must be liberally educated and that this requires, at minimum, a four-year course of study at an accredited college or university. Such a prerequisite would have broad legitimacy as it affirms the widespread view that teachers should be educated persons.

In some states (e.g., California, New York), an advanced degree is now required for permanent licensure. While a strong case exists that four years of college-level study do not provide sufficient time to encompass the breadth of coursework and the rich clinical experience that this profession demands, many excellent teachers are now practicing in the schools having attained no degree higher than a B.A.

If an advanced degree were warranted, the Board would have to establish criteria defining a sound program of professional preparation. Any advanced degree would not do. This would lead the Board down the road of specifying an appropriate program of teacher preparation, a burdensome task when there is great diversity of opinion in the teaching community about the most appropriate means to prepare teachers. Such a course also would add to the cost of Board certification for the many teachers who had yet to attain an advanced degree.

Two possible choices emerge from these considerations. The Board could avoid emphasizing such credentials and place greater reliance on its own rigorous assessment processes. Alternatively, the Board could adopt advanced preparation standards set by some other distinguished and trustworthy body upon which the Board could depend. This leads to the next option.

GRADUATION FROM AN ACCREDITED PROGRAM OF TEACHER EDUCATION?

Because assessments alone are limited in their ability to gauge competence, most professions rely on program accreditation to complement examination-based

standards. The combination of a rigorous assessment, an extended course of professional study, and a well-supervised clinical practicum provides the strongest warrant of competence. Such a requirement assures not only that certain studies have been completed but also that certificate holders have been socialized in college and university settings where there is extended time for interaction and reflection with peers and faculty on matters of professional practice, ethics, and tradition. Similarly, engagement in professional training on a full-time basis enhances the character of study, the quality of inquiry, and the commitment to scholarship of the entering novice.

In teaching, however, this option is both controversial and difficult to legitimize. It would exclude candidates who have not graduated from accredited teacher education programs. This would include some portion of public school teachers, a larger share of private school teachers, and postsecondary faculty who might otherwise be eligible. Moreover, it raises the issue of what constitutes valid accreditation—and whether a restrictive or permissive model of accreditation should be considered.

The permissive version is *any* form of accreditation, including the “approved program” approach used in most states. However, there is almost as much variety among such state standards as there are states. The demands placed on candidates for Board certification would vary depending on where they completed their professional training, thereby violating the fairness criterion.

The restrictive version would designate a professional body, such as the National Council for the Accreditation of Teacher Education (NCATE), as the agent for program standards. But this would limit certification to graduates of NCATE-approved institutions. Endorsement of the restrictive option would exclude large numbers of teachers, no doubt generating considerable controversy and opposition. Even if the Board chose to weather this storm, it would mean becoming dependent on the practices of

another body whose standards it would not control. Should future controversies arise over accreditation standards, the Board's credibility could be undermined. This seems a risk hardly worth taking for a fledgling enterprise attempting to establish its own legitimacy.

All these considerations aside, almost any education prerequisite runs up against the Board's fundamental orientation toward performance rather than toward design standards. With the focus of the Board on “what teachers should know and be able to do,” and not on the means of acquiring such knowledge and skill, the case is weak for proceeding beyond what amounts to a liberal arts and sciences requirement.

YEARS OF TEACHING EXPERIENCE?

A third option would require successful completion of several years of teaching for eligibility. Defining what constitutes “success” might become a stumbling block, but by emphasizing the value of experience in acquiring competence in teaching, the Board would be recognizing a well-accepted view that accomplished teaching only comes with practice and time. This is not the same as asserting that the more one teaches the better one gets, but only that several years of seasoning are necessary, though not sufficient conditions, for development of genuine proficiency and wisdom.

Such an option is not likely to be controversial, even though it would exclude beginning teachers. Indeed, it would underscore the distinction between voluntary, professional certification and mandatory, state licensing. The disadvantage is that novice teachers, however competent, could not gain immediate access to full professional status.

As a practical matter, the Board might have difficulty in implementing criteria for guaranteeing that years of experience, in fact, amounted to “successful” teaching. It may be enough for eligibility purposes to rely on the continued employment of a teacher over some prescribed number of years, leaving

judgments of teaching success to the assessment process itself.

POSSESSION OF A VALID TEACHING LICENSE?

Simply accepting any state's licensure requirements would be an efficient means to set minimum eligibility requirements with no implementation costs. It has the advantage of assuring that candidates have met some standard of education and, in almost all states, have passed an examination, however modest. Still, nonlicensed private school teachers and post-secondary faculty would be excluded. Consequently, it limits the openness of the process.

Under this option, the Board would have to define what constitutes a "valid" license. A permissive definition would be *any* license issued by a state whether permanent, provisional, temporary, or otherwise limited. A restrictive definition would permit only permanent licenses. The restrictive version is in keeping with a commitment to professionalism but might lead to opposition from state officials who favor flexible entry requirements at a time of sharp increases in demand for teachers.

Requiring a permanent license would also raise difficult equity issues. In some states, a permanent license is granted after one year of practice, while in others, upwards of five years are required.

This would mean that by virtue of locale some teachers could stand for Board certification after one year's experience, while others would have to wait until they had taught for five years—hardly an even-handed policy.

The issue here turns on the great diversity of licenses issued by the states. The Board should not attempt to pick and choose among those it finds virtuous and those that are less so. Suggesting that one state's temporary license is sufficient, while another's permanent license (that takes several years to acquire) is required, would be a professional and political quagmire, to say nothing of the equity issues it would raise for teachers in the respective states.

ADDITIONAL CONSIDERATIONS

The choice of prerequisites depends on a conception of the assessment process itself. If assessment consists solely of examinations, then an experience requirement is useful in establishing a candidate's competence on the job. However, if the assessment process includes assembling a portfolio of materials created on the job over time, and/or an attestation of consistent high-quality practice, then teaching experience is built into the assessment process and need not be a prerequisite. Or, certification requirements might begin to be met during the course of teacher education with the assembling of evidence and materials. This approach would link certification to teacher education without requiring the Board to endorse program accreditation.

* * *

THE TIDIEST course for the Board to take is to establish a completely open process with no prerequisites at all. All possibilities of invidious discrimination would be eliminated. All candidates would be treated equally. No artificial or flawed hurdles would be invoked. No one best or three best or seven best pathways to professionalism would be selected to receive the Board's imprimatur. And, the Board would remain true to its performance orientation; only asking, "Do you know and do what an accomplished teacher should know and be able to do?" not, "Have you properly prepared yourself to be an accomplished teacher?" However, this course places all the Board's cards on its assessments and may not advance professionalism as much as an alternative course that incorporates a prerequisite or two. Consequently, the Board will require its candidates to meet the following prerequisites before receiving certification:

- acquire at least a baccalaureate degree from an accredited institution (one recognized by the appropriate regional accrediting body), and
- successfully complete three years of teaching at one or more elementary or secondary schools.

Both criteria treat all candidates uniformly, as there is little ambiguity in demonstrating whether or not the prerequisite has been satisfied. In addition, place of employment does not provide any particular advantage or disadvantage in meeting these prerequisites—which cannot be said of other options discussed.

Experience can also be seen as a de-facto licensing prerequisite, for in the public sector, and at a fair number of private institutions, one cannot acquire such experience without some official sanction by the state. Similarly, an experience prerequisite also serves as a de facto education requirement, for, to the extent that state licensing requires a particular education requirement and, to the extent that teachers have to be licensed to gain experience, requiring that teachers be experienced will, in most jurisdictions, mean requiring that they satisfy a state-approved education standard.

While the experience criterion modestly limits access, it does so at a time in a teacher's career when, almost by definition, his or her practice is at less-than-an-accomplished level. It suggests that there is a period of apprenticeship and that no matter how well a beginning teacher has been schooled or prepared, some time is needed for the development of mature practice.

The extent of the experience requirement is subject to debate, but three years is an appealing period as it coincides with tenure decisions in many jurisdictions. To be sure, some teachers may be capable of meeting the certification standard after a year or two of practice, and there is no empirical basis on which to claim that three years' experience is strongly associated with proficiency. But the Board judges that most educators will regard this time period as, on average, a reasonable eligibility criterion. □

Adapted from "Toward High and Rigorous Standards for the Teaching Profession." ©1989 National Board for Professional Teaching Standards.

not treat all students alike, for similar treatment is not necessarily equivalent to equitable education. In responding to differences among students, teachers are careful to counter potential inequities and avoid favoritism. This requires a well-tuned alertness to such matters and is difficult, as we have only modest knowledge of human differences and how best to respond to them. Hence, accomplished teachers employ what is known about ineffectual and effective practice with diverse groups of students, while striving to learn more about how best to accommodate those differences.

Teachers' Mission Extends Beyond Developing the Cognitive Capacity of Their Students

Teachers are concerned with their students' self-concept, with their motivation, with the effects of learning on peer relationships, and with the development of character, aspiration, and civic virtues. These aspects of the student—important as they are in their own right—are also essential to intellectual development. Proficient teachers consider students' potential in this broader sense when making decisions about what and how to teach.

Proposition #2:

Teachers Know the Subjects They Teach and how To Teach Those Subjects to Students.

If one cardinal precept of teaching is a commitment to the welfare and education of young people, the other is a commitment to subject matter. Board-certified teachers have a rich understanding of the subject(s) they teach and appreciate how knowledge in their subject is created, organized, linked to other disciplines, and applied to real-world settings. Thus, elementary teachers know about geography and its relationship to commerce and history. Foreign language teachers know how language and culture interact and fuse. But, it is not sufficient that teachers know the facts that fall into these different content domains.

Teachers Appreciate how Knowledge in Their Subjects Is Created, Organized, and Linked to other Disciplines

Teachers in command of their subject understand its substance—factual information as well as its central organizing concepts—and the ways in which new knowledge is created, including the forms of creative investigation that characterize the work of scholars and artists. Physics teachers know about the roles played by hypothesis generation and experimentation in physics; mathematics teachers know the modes of justification for substantiating mathematical claims; art teachers understand how visual ideas are generated and communicated; history teachers know how historians use evidence to interpret past events; and English teachers understand the relationships among reading, writing, and oral language. Many special education teachers have a slightly different orientation—focusing on skill development as they work to help profoundly handicapped students achieve maximum independence in managing their lives.

Understanding the ways of knowing within a subject

is crucial to the Board-certified teacher's ability to teach students to think analytically. Critical thinking does not occur in the abstract, for the thinker is always reasoning about something. Proficient teachers appreciate the fundamental role played by disciplinary thinking in developing rich, conceptual subject matter understandings. They are dedicated to exposing their students to different modes of critical thinking and to teaching students to think analytically about content.

Teachers represent the collective wisdom of our culture and insist on maintaining the integrity of the methods, substance, and structures of disciplinary knowledge. In the face of pressures to portray knowledge in weak and diluted forms, they remain firm. Their role, however, is not just to reinforce the status quo. Rather, appreciative of the fact that there are multiple perspectives and interpretations in each discipline, accomplished teachers encourage students to question prevailing canons and assumptions to help them think for themselves.

It is sometimes assumed that elementary school teachers need not be equipped to approach their subjects critically. But all accomplished teachers, regardless of the ages of their students, are charged with teaching students about something, and in order to do so, they must appreciate its complexity and richness. Teachers must possess such knowledge if they are to help their students develop higher-order thinking skills—the hallmark of accomplished teaching at any level. Being able to engage elementary school children in the broad array of subjects they can profitably come to appreciate makes elementary school practice especially challenging. This does not imply that fourth-grade teachers should have the same command of biology as high school biology teachers. However, it does mean that they have an understanding of science that allows them to present basic precepts to their students and introduce them to the joy of discovering—and thinking about—the natural world of which they are a part.

Teachers Command Specialized Knowledge of How To Convey a Subject to Students

Knowledge of subject matter is not synonymous with knowledge of how to reveal content to students so they might build it into their systems of thinking. Accomplished teachers possess what is sometimes called "pedagogical content knowledge." Such understanding is the joint product of wisdom about teaching, learning, students, and content. It includes knowledge of the most appropriate ways to present the subject matter to students through analogies, metaphors, experiments, demonstrations and illustrations. Subject-specific knowledge also includes an awareness of the most common misconceptions held by students, the aspects that they will find most difficult, and the kinds of prior knowledge, experience, and skills that students of different ages typically bring to the learning of particular topics. Proficient science teachers, for example, know that some students have misconceptions about gravity that can influence their learning, while proficient art and music teachers know that young children arrive at school at various stages of maturity with respect to eye-hand coordination. Teachers use this knowledge of their students to structure instruction that facilitates further

Such understanding is the joint product of wisdom about teaching, learning, students, and content.



development.

Thus, subject-specific pedagogical knowledge is not a bag of tricks but a repertoire of representations that combines instructional techniques with subject matter in ways that take into account the mix of students and school contexts that confront the teacher. Such subject-specific teaching knowledge embodies a way of reasoning through and solving the problems that arise in the daily work of teachers—decisions ranging from what

aspects of the subject matter to emphasize to decisions about how to pace instruction. In making these choices, teachers bring to bear their knowledge of students *and* learning *and* teaching *and* subject matter.

Professional teachers' instructional repertoire also include knowledge of available curricular resources such as primary sources, models, reproductions, textbook series, teachers' guides, videotapes, computer software, and musical recordings. Their commitment to learning about new materials includes keeping abreast of technological developments that have implications for teaching; for example, how to engage students in the rapidly expanding field of computer technology, as well as how to use the computer to enhance their own teaching. Thus, able teachers keep current with the growing body of curricular materials—including literature available through their professional organizations—and constantly evaluate the usefulness of those materials based on their understanding of curriculum theory, of students, of subject matter, and of the school's and their own educational aims.

Teachers Generate Multiple Paths to Knowledge

Knowledgeable teachers are aware there is value in both structured and inductive learning. That is, while it is useful to teach students about the concepts and principles that scholars have generated in the various disciplines, it is also valuable to engage students in learning by discovery, where they themselves search for problems, patterns, and solutions. Proficient teachers help students learn to pose problems and work through alternative solutions, in addition to teaching them about the answers that others have found to similar problems.

The posing and solving of problems on their own is central to the development of true understanding by students—moving far beyond the rote memorization of facts, the easy manipulation of formulas, or the facile playing of a musical scale. Teaching for understanding requires students to integrate aspects of knowledge into their habits of thinking rather than simply store fragmented knowledge bits. It also means learning to think in a nonlinear way, approaching issues from different angles, weighing multiple criteria, and considering multiple solutions.

Proposition #3:

Teachers Are Responsible for Managing and Monitoring Student Learning.

Professional teachers hold high expectations for all students and see themselves as facilitators of student learning. To fulfill these responsibilities, teachers must create, enrich, and alter the organizational structures in which they work with young people. Accomplished teachers command a range of generic instructional techniques, know when each is appropriate, and can implement them as needed. They are as aware of ineffectual or damaging practice as they are devoted to elegant practice. Because time is a precious commodity in schools, teachers attempt to make the most efficient use of it. To accomplish these tasks, teachers seek to master the body of generic pedagogical knowledge.

(Continued on page 40)

DESEGREGATING DELAWARE'S PROFESSIONAL DAYS

The Role of the AFT

BY BEN STAHL

This July's AFT convention, being held in Boston, marks the beginning of the union's seventy-fifth year. A great chapter in AFT history is the story of our active support for racial integration at a time when the idea was anathema to many Americans, and even to many teachers. To celebrate this seventy-fifth anniversary year, we present this article, which highlights the role of one AFT local in bringing about the desegregation of education.

We also note that Labor's Heritage, the magazine from which this article was reprinted, will be offering a teaching guide with each issue beginning this fall. To subscribe to the magazine or to get a free sample teaching guide, write Labor's Heritage, the George Meany Memorial Archives, 10000 New Hampshire Avenue, Silver Spring, Maryland 20903. Subscriptions for teachers are \$13.50, payable either by major credit card or check to the George Meany Center for Labor Studies.

—Editor

DELAWARE'S LABOR movement made the first major breakthrough against the state's pattern of public racial segregation in 1945 in a bold and unprecedented move by the Wilmington Federation of Teachers, Local 762, of the American Federation of Teachers.

World War II was nearing its end, but the Wilmington, Delaware, area was still booming in employment and industrial growth. Three shipyards, a basic steel plant, an airplane factory, and various metal, textile, chemical and clothing plants were all producing for the war effort. Membership in the Congress of Industrial Organizations had expanded dramatically.

In New Castle County, the northern industrial area, the labor movement was becoming a significant factor despite the strong du Pont family influence in the politi-

Ben Stahl was a field representative for the CIO and for the AFL-CIO and later worked with the AFL-CIO's Human Resources Development Institute. He has been a member of the Philadelphia Federation of Teachers since 1959. This article is adapted with permission from "Labor's Heritage," the quarterly magazine of the George Meany Memorial Archives.



cal and social life of the state. Republican U.S. Senator Clayton Douglas Buck was a member of the family, as were many state officials. Nearly every social agency—Red Cross, Family Service, etc.—was headed by a member of the family.

I had come into the labor movement after working for the Works Progress Administration during the Depression. From January 1937, just after my twenty-first birthday, until the WPA closed down in about 1941, I worked on the WPA Workers' Education Project in Philadelphia. It was my first job after graduating from college, and it



A home economics class at the Newport Colored School, Newport, Delaware, in October 1940. The classroom is reflected in a mirror.

The Bethesda Colored School, New Castle County, Delaware, in 1926, is typical of the one-room schoolhouses then serving the rural population of Delaware. Schools were segregated throughout the state.

turned out to be one of the best WPA workers' education projects in the nation. A local of the American Federation of Teachers represented all area workers in the WPA education and recreation program—about two thousand workers—and I became the local's secretary. After WPA, I worked for the state of Pennsylvania and was a member of the CIO's State County and Municipal Workers of America (SCMWA). In February 1943, I came to Wilmington to work as a field representative for the CIO in its Delaware regional office and to serve as executive director of the New Castle County Industrial

Union Council, CIO. Remuneration for the latter was a twenty-five dollar war bond per month.

DURING THIS period, Delaware was a completely segregated state. Hotels, restaurants, and other public accommodations flaunted the usual "no colored" signs. We used to say that the union offices were the only buildings in the state with desegregated toilets. Black union officials coming into the state (for example, officials of the United Transport Service Employees) could not eat in a decent restaurant or stay in a decent

hotel.

War industries had attracted workers from both the North and the South to the Wilmington area. They brought with them their own philosophies and biases. One shipyard local actually withdrew from the CIO Council—it later returned—because the Council passed a resolution urging baseball clubs to accept black players. It was tough speaking out on civil rights issues in that atmosphere.

Delaware's education system was segregated. Black teachers taught black students in schools separate from white students with white teachers. The Delaware State Education Association (DSEA), a National Education Association (NEA) affiliate, was the recognized professional organization, but it excluded blacks from membership. Only the Wilmington Teachers Association (WTA), the DSEA's local arm, admitted blacks to membership. The local's dynamic president was Evelyn Dickey, a P.S. du Pont High School gym teacher who later taught social studies and general science. She taught in the Wilmington schools for forty-four years in all.

Dickey was distressed by the impact of segregation on Delaware's teacher training programs. The state's policy was to close all schools for two days each October so that teachers could participate in training programs sponsored by the DSEA. But only white teachers were permitted—in fact, required—to attend. Black teachers could not stay at home, however, nor could they attend their customary schools, which were closed. In order to

be compensated for the two days, they had to observe classes at Pennsylvania schools, primarily in Chester and Philadelphia—at their own travel expense—and bring back written reports. This practice had been in effect for several years.

As the WTA's delegate to the DSEA conference, Dickey was an outspoken advocate of integration. Black teachers responded enthusiastically to her unsuccessful attempt to have the October 1942 DSEA conference abandon the color barrier. Letters supporting Dickey's stand are preserved today in the Pauline A. Young Memorabilia Room of the Howard High School Career Center.

In a letter dated October 28, 1942, members of Howard's own faculty, then all black, called Dickey "fearless and courageous" and reflected:

The cause was just, but we realize how few brave souls dared to jeopardize their popularity and friendship with their colleagues by espousing so nobly and openly the cause of a minority group. You had all to lose and nothing to gain except the consciousness of righting a great wrong at a time like this.

They predicted that Dickey had "blazed the trail to a future desirable and just goal . . ."¹

Dickey's reply to another congratulatory letter captures the force of her views at the time.

The tragedy of the Negro, as I see it, is his bewilderment and his unmistakable loss of faith in our leaders—and I do

TEACHERS' MOVE TO WIDEN SCOPE OF D. S. E. A. FAILS

Lack of Notification Thwarts Action On Admitting Negroes

T. W. Mulrooney Elected Head of Group; Virgil B. Wiley New Vice-President

The Representative Assembly of the Delaware State Education Association yesterday afternoon tabled a resolution condemning as "un-American" the section of its constitution that limits membership to white teachers and proposed that the constitution be amended "at the earliest possible opportunity." If

ultimately adopted, 200 Negro teachers could join.

No opposition developed to the motion to table the resolution when members and the chair pointed out that proposed constitutional amendments must be submitted in writing to all members of the assembly twenty-four hours ahead of the meeting. The proponents of this one submitted it only to the president.

Mrs. Evelyn H. Dickey, a delegate to the Representative Assembly and president of the Wilmington Teachers' Association, submitted the resolution from the floor and spoke for it as a concrete expression of democracy, a blow at false Hitlerian racial theories, and a demonstration of Christian brotherhood.

"Among our allies in China, in Russia, in the Philippines, and in Africa," declared Mrs. Dickey, "are millions of men whose pigmentation does not meet the Hitlerian test; but their blood is red and it is flowing freely in the defense of those ideas that we profess. I ask this assembly—an assembly that represents the best thinking in every community of our state—can

it be true that death is the only great democratizer?"

"For many years, perhaps ever since its inception, this association has restricted its membership to white teachers. Such a restriction is arbitrary, unscientific, and, in this day of crisis, even unpatriotic: For it is precisely this attitude or prejudice as exemplified by our restricted membership that provides ammunition for the Nazi propagandists who accuse us of being democratic hypocrites. . . . Certainly among us, teachers, the leaders of youth—among us, should be found the staunchest defenders of real American democracy."

TEXT OF PROPOSAL

The resolution follows: "Resolved: That this assembly condemn as un-American, Article 2 of Section 1 of the constitution of this association, which restricts membership to white teachers; and be it further resolved that appropriate action be taken to amend the said article at the earliest possible opportunity."

—Excerpted from the *Wilmington Mail*, 23 October 1942.



COURTESY OF EVELYN DICKEY

Evelyn Dickey, president of the Wilmington Federation of Teachers, Local 762 of the American Federation of Teachers, at the local's first charter anniversary dinner in 1944.



COURTESY OF BEN STAHL

Ben Stahl, ca 1943-1944

not except those in education. Too many of us have exploited him, promised him much and given him nothing. Isn't it too bad that those men who have accepted public office have not the vision to see clearly that prejudice against minorities, perhaps, will one day legislate against our idea of political, social and economic democracy?

I heartily agree that there is unrest among the Negroes of the state and I am sure it goes a great deal deeper than many of us suspect. Too few of us are truly "human beings," I am afraid. Small wonder the Negro is restless.

Dickey closed by reiterating her commitment to "helping these Negroes achieve those cultural opportunities which we white teachers enjoy" despite "the temporary set-back."²

The following spring, in 1943, Dickey organized the Wilmington Federation of Teachers (WFT)—Local 762 of the AFT. Delegates to the inaugural meeting voted to affiliate with both the Wilmington Central Labor Union and the Delaware State Federation of Labor—the city and state affiliates of the American Federation of Labor.

Dickey served as president of the new group, open to all teachers "regardless of color, creed, race or marital status," with the exception of communists or fascists. More than 500 of Wilmington's 650 teachers became members of Local 762, including virtually all of the city's black teachers. Some black teachers from Dover, Shelbyville, and other southern Delaware school districts and a few white teachers from the same areas were also members. This was remarkably high participation, considering that in this period the AFT had no collective bargaining contracts and emphasized legislative and public initiatives to obtain its goals. The local was very active and vocal in exerting pressure on the school board and administration for salary increases and other improvements for teachers.

In her continuing effort to promote integration, Dickey and Howard High School's Pauline A. Young established an interracial youth committee that met at the Walnut Street Christian Association. It drew students from Howard as well as Wilmington High, P.S. du Pont, and the Friends School. This was one of a growing number of interracial activities involving the schools that also included athletic games between Howard and Friends schools, boys club teams at the Howard gymnasium, and the sharing of assembly speakers and performing artists by P.S. du Pont and Howard.³

AT THE 1944 DSEA convention, Dickey, who remained for a while in the DSEA while also serving as WFT president, proposed modifying the constitution by striking out the clause stating that membership was open to white teachers. Her substitution read, "membership shall be open to all qualified teachers regardless of race." Dickey recounted to me in 1989 how, after she made the motion, someone shouted from the balcony: "Where would you put them—the niggers—up here in the balcony?" A large majority voted against her motion.

In what would prove to be an important connection in the integration struggle, Dickey and other WFT officers became activists with the Joint Labor Committee on Education (JLCE). The JLCE was the instrument through which the New Castle County Industrial Union Council-CIO and the Central Labor Union-AFL cooperated on a broad range of issues, working for state and

Letter from C.L. Adams, member of the advisory board to School No. 29, thanking Evelyn Dickey for supporting integration of the teachers' association in 1942.

School No. 29
12th & Poplar Sts.
Wilmington, Del.
Oct. 27, 1942.

Miss Dickey, President of the Wilmington Teachers' Association
Wilmington, Del.

My dear Miss Dickey,
The teachers and principal of School No. 29 having been informed by the press of the courageous stand you took for social democracy in the Educational Program of the Delaware State Education Association, so recently, in session in our city, hereby express to you our

COURTESY OF PAULINE A. YOUNG

respect and appreciation for the work so nobly begun.
We wish you good speed in your every work while endeavor.
Yours truly,
Pauline A. Young
Member of Advisory Board School No. 29

city legislation and on fundraising for war relief as well as on educational matters.

It was in September of 1945 that Dickey brought to the JLCE's attention the practice of excluding blacks from DSEA conferences. The Joint Labor Committee decided to support a separate conference, one to be sponsored by the Wilmington Federation of Teachers and open to all Wilmington teachers. The conference was scheduled at the same time as the DSEA conference, October 18 and 19, 1945. The superintendent of schools agreed to permit the WFT to use Wilmington's Warner Junior High School for the conference and to

April 17, 1944

Mr. Kermit Eby
Congress of Industrial Organizations
718 Jackson Place, N.W.
Washington 6, DC

Dear Brother Eby:

I believe your office would be interested in the enclosed program adopted by the A.F.L., C.I.O., and Railroad Brotherhoods of New Castle County, Delaware. A joint education committee was established to work on the problem of education and the schools. This general program, the result of the work of the committee, was presented to the New Castle County Board of Education at its regular meeting last week. A committee of three members of the AFL, three of the CIO, and three of the Railroad Brotherhoods attended the last meeting of the Board of Education, presented the program, made comments on the status of education in the nation, and got acquainted with the Board as the first step in keeping after the Board, City Council, and the Legislature on the problems of schools and education.

The committee representing the CIO at the Board of Education meeting consisted of Otis Swain, Vice-Chairman of CIO Council, Walter Turoczy, Local 36 IUMSWA, and Ben Stahl, Council Secretary.

The program was published in full in the newspapers and is a step in the right direction. Cooperation with the AFT helped get the program under way. Other points in the program, not included in the enclosed, include an elective school board (present one lousy) and pressure on legislature, and city council. We were treated very well at the Board meeting. The Dupont attorney (a member of the Board) even stated—"nothing in the program conflicts with the Board's attitude."

I'll keep you informed of any other developments.

Fraternally yours,

Ben Stahl
Executive Secretary

cc: Bro. Smith
John Brophy
CIO News

give credit to teachers who attended equal to that which they would have received at the DSEA program.

Only a few weeks were available to plan the WFT conference, to invite speakers, publicize, and finance it. The conference organizing committee met often in the CIO regional office. Kermit Eby, the CIO's director of education, provided guidance and help. Through his contacts in Washington, he approached Eleanor Roosevelt and Archibald MacLeish, noted poet and Librarian of Congress, to speak, but neither was available. He was successful, however, in obtaining Charlotte Carr, executive secretary of the Citizens' Committee for Children and a leader in the many years' struggle for federal child labor laws, and Indiana Republican Congressman Charles LaFollette, cousin of the two Wisconsin LaFollettes, who recommended federal aid to education—a notion not popular at the time. Anna Arnold Hedgeman, director of the Fair Employment Practices Committee, closed the conference with a fiery speech calling for the desegregation of all the nation's schools.

To help finance the conference, the Jewish Labor Committee donated two hundred dollars: It sent its greetings to the conference by way of a reporter from Harlem's *Amsterdam News*, who showed up at the conference unexpectedly. This appearance of a black speaking for a Jewish organization—in Delaware, in 1945—made a deep impression on the assembled teachers. Black and white teachers eating lunch together in the school cafeteria—another first—added to the conference spirit.

WFT WAS intent on changing DSEA's segregation policy. Prior to the October 1945 conference, WFT adopted a resolution that it sent to DSEA president Paul Hodgson, urging DSEA to change its constitution. It read:

Whereas, the Wilmington Federation of Teachers, Local 762, American Federation of Teachers, A.F.L., is an organization of classroom teachers, founded upon democratic principles, without any restrictive racial or religious qualifications for membership; and

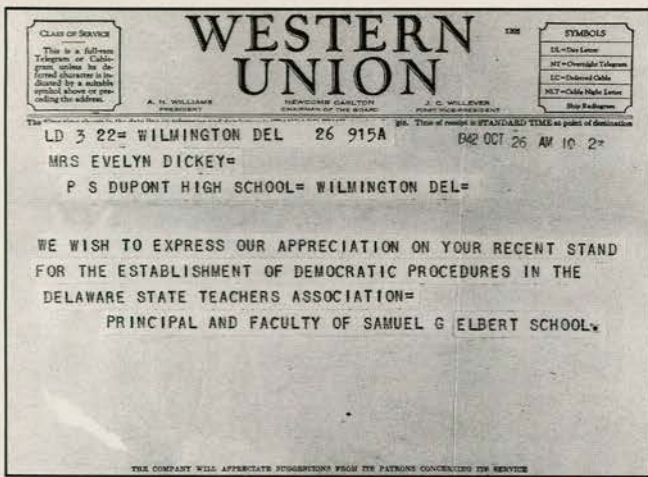
Whereas, we are unequivocally opposed to any philosophy which is destructive to our national unity;

Therefore, be it resolved that the officers, executive committee, and chairman of all standing committees of the Wilmington Federation of Teachers condemn as un-American, the restrictive racial clause in the constitution in the Delaware State Education Association.⁴

Delegates to DSEA's October 1945 convention voted down seventy-six to seventy-five the Wilmington teachers' recommendation to remove from the constitution the racially restrictive clause. The motion required a two-thirds vote to pass. The New York newspaper *PM* commented:

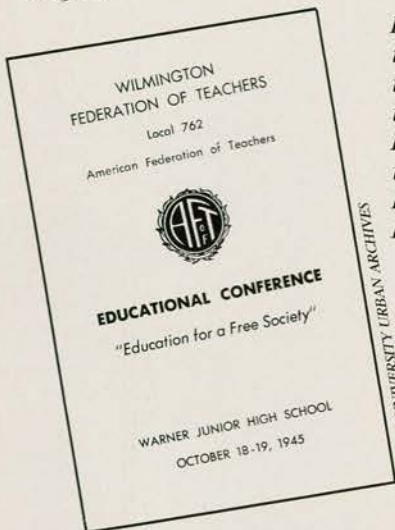
Actually the fight was lost weeks before the meeting when the delegates were instructed by their constituents. At the meeting they were forced to vote as instructed. Many members were careful to make the point by announcing the roll call: "According to instruction, I vote no."⁵

The DSEA delegates may have been reacting to the pressure of public opinion generated by the WFT conference. Webster L. Jolly, president of the Delaware State Teachers Association—an organization of black teachers—refused to deliver the DSTA's traditional greetings to



COURTESY OF PAULINE A. YOUNG

Telegram from the faculty of the black Samuel G. Elbert School thanking Evelyn Dickey for petitioning the Delaware State Education Association to integrate in 1942.



Program cover, "Education for a Free Society," the first desegregated teachers' conference in Delaware, sponsored by the WFT and the Joint Labor Committee on Education.

TEMPLE UNIVERSITY URBAN ARCHIVES



PAULINE A. YOUNG MEMORABILIA ROOM, HOWARD HIGH SCHOOL, WILMINGTON, DELAWARE

Pauline A. Young in 1980. In the 1940s, Miss Young and Mrs. Dickey established an interracial youth committee in Wilmington.

the DSEA. He wrote Dickey: "I have been asked to bring greetings to the DSEA from the DSTA but because of the discriminatory clause in the constitution of the DSEA, our executive committee as well as our teachers, have bluntly asked me not to appear at the meeting."⁶

The press gave critical attention to the DSEA's color line. Joseph Martin, editor of the *Wilmington Sunday Star*, was one of the panelists at the Wilmington Federation of Teachers conference. An editorial in his newspaper on October 21 observed:

These conferences, considered so much worth to the teachers that two days are given to them, have been barred to Negro school teachers. Why, if they are of any value to white teachers they should not be of equal value to Negro teachers we cannot understand. We think the Wilmington Federation of Teachers is to be commended for seeking the end of discrimination. An industrial employer who sets up a costly educational program to be carried on during working hours, in order to make his employees more efficient, would be deemed a fool if he deliberately withheld needed education from a . . . [portion] of those employees.⁷

Said the du Pont-controlled *Wilmington Journal* on October 22, reflecting on the singing of "Ballad for Americans" at the DSEA conference:

However, if those who voted not to change the constitution of the association . . . would take the time to read the words of the "Ballad for Americans" . . . they might reconsider their vote. . . . "Ballad for Americans" is one of the strongest pleas for unity among all groups, regardless of race, creed, or religion—or color.⁸

The following year, in the aftermath of the war, DSEA did change its constitution, removing the discriminatory clause. Evelyn Dickey, whom I talked with in 1989 when she was eighty-five, looked back on this victory of forty-three years earlier as "the high point of my life." She saw the struggle as the first step in Delaware's desegregation, and she took tremendous satisfaction from her role in it.

I was interested in educating the whole child—not the black child nor the white child but the whole community, and that was my feeling. And then you saw that they didn't have the opportunities that we had, they didn't have the materials that we had—so it was discrimination not only against the teachers, but the segregation was actually discrimination against the children. It seemed to me more than a little unfair.

Evelyn Dickey died January 14, 1990. □

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THE WHYS AND HOWS OF THE MULTI-AGE PRIMARY CLASSROOM

BY KATHLEEN CUSHMAN

YOU WOULD never know, talking to the teachers who do it, that running an elementary school classroom of mixed-age children is such a big deal. From the outside, to be sure, it seems a radical concept, ambitious and fraught with difficulties of every kind. Why else would the open-classroom mixed-age experiments of the sixties and seventies have dwindled so sharply in the past decade and a half? Why else are so few public schools now trying it, so few researchers studying it, and so many filled with mistrust at the whole idea of "family groupings" in a primary classroom?

Yet in Norma Leutzinger's combined first- and second-grade classroom at New York City's Central Park East II Elementary School, the concept fits as comfortably as a favorite suit of clothes. Around the room at groups of tables, twenty-eight children work quietly, reading books they have chosen or writing in their journals. They group and regroup frequently, at Norma's prompting: now into a fifteen-minute discussion with the whole class in a circle; now dispersing to chat while they choose materials to work with in groups of two and

three; now intent again at their tables as the teacher and her aide move from child to child to speak with them in lowered voices.

Leutzinger's class, which includes twenty-eight children ranging in age from six to nine by the end of the school year, is one of a small but increasing number of classes in this country where early grades are combined in different ways. We tracked down three of them to see what is going on, both in theory and in practice, when a school chooses a mixed-age alternative to the conventional single-grade system. What we discovered was a range of techniques loosely linked by a developmental, child-centered philosophy of learning but otherwise as idiosyncratic as American education itself. If this is a trend, it is one with room for individual variation; and the schools here represent not only different approaches but different stages of those approaches.

One way to structure classes is that of Central Park East, where teachers like Norma Leutzinger have a combined class of first- and second-graders or third- and fourth-graders, and children stay with the same teacher for two years. Aside from her students' forays outside the classroom for music and the arts, Norma is responsible for teaching all subjects herself, and she organizes

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ILLUSTRATED BY SUSAN DAVIS

the class differently for instruction depending on her goals. In social studies and science, the group often meets as a whole; but when it comes to math, she will teach two separate lessons at first- and second-grade levels. Language arts is so integral a part of classroom life that it cannot be categorized: sometimes the class meets together, sometimes in small groups, and sometimes on an individual basis.

Across the river in the Brownsville section of Brooklyn, children in a P.S. 41 class of seven- and eight-year-olds are working on simple addition, while in the classroom next door a class of eight- and nine-year-olds does higher-level math problems. But since the classrooms open onto a common hall—along with another room of special needs students ages six to ten—any student can easily move into another class for work in this subject. It takes joint planning to carry this off; the teachers in P.S. 41's "core teams" of three or four teachers share the same free period and lunch period, allowing them time to talk things through. They know all the children in their cluster of classrooms and work with them all at some point, possibly in a project that involves several classes together, or because children cross class lines for special instruction, say, in reading. And though children will not necessarily stay with the same teacher for two

years, the cluster technique de-emphasizes their grade level in favor of an identification with the core team as a whole.

AT P.S. 41, teachers work together to determine how best to share instruction of their different-aged children. But at Sands Montessori elementary school in Cincinnati, teacher Mary Motz knows beforehand exactly what the Montessori system expects in her classroom of six- to nine-year-olds. Montessori schooling is notable in the United States for the extent to which it puts into practice a comprehensive theory, complete with training and materials. Working on the floor around her classroom, some of Motz's students are absorbed in private tasks; others work in mixed-age groups of two or three, helping each other with different activities. All will work their way eventually through a series of learning tasks that make up the Montessori curriculum; and even though one younger child appears to be doing nothing at all with his materials, Motz is happy. "He's watching the children on the next mat," she whispers. "He'll be asking me if he can learn that next."

That expectation of continuous progress through a series of skills marks a few other well-organized educa-

tional systems here and abroad. Individually Guided Education (IGE), developed by the Wisconsin Research and Development Center for Cognitive Learning, provides guidance to participating schools that want a "continuous progress" method of learning in a non-graded class. And in Great Britain, where primary schools have been organized since the 1960s into mixed-age groupings, the system expects every seven-year-old, for example, to be able to demonstrate mastery of certain math skills before moving into the next level of mixed-age learning.

All these models depend, at their core, on a philosophy of learning based on the developmental theories of Jean Piaget, Jerome Bruner, and others. Children in the early years of school do not learn at the same pace, such educators agree. In fact, they enter school with a "mental age" that varies by as much as four years, and they progress at their own rate from a largely concrete way of learning and thinking to the more abstract one reached in later stages. Because the pace of this development is so varied, mixed-age advocates say, it makes little sense to sort and label children into fixed grade levels from an early age—especially if the result is retention and an early sense of failure for the child. Better to extend the age range of a primary class and thus provide a nurturing, success-oriented environment for children at widely different developmental levels.

By creating a model that expects diversity rather than uniformity among kids, many of the "problems" in a single-grade class lose their destructive grip over teachers and students both. More advanced students can learn together in mixed-age groups, and slow ones can be given the time they need to master skills at their own pace. At other times, children of different levels can be put in groups where they can learn from each other; the effectiveness of this strategy has been widely recognized in the trend toward cooperative learning and peer tutoring. Social skills grow in a mixed-age group, as children develop attitudes of responsibility and tolerance for those of different capacities. And in classes that stay with the same teacher for more than one year, proponents say, the teacher-student relationship can become so personal that both academic and discipline problems diminish.

The Open Classroom Reborn?

To many teachers who were around in the 1960s and early 1970s, mixed-age groupings sound suspiciously like the "open classrooms" of that era. And, in fact, such groupings only work if certain aspects of the open classroom are incorporated: a flexible use of space that uses "learning stations"; a wide variety of concrete materials available to children as they need them; a teacher's willingness to let children work in small groups rather than lecturing to them en masse; evaluations that record each child's progress through a continuum of skills. But the bugaboos that led many teachers to reject the early open classrooms are by no means ever present in the new mixed-age groupings. Most classrooms have walls, though some open the doors between them. Many teachers work in teams, but just as many classes are self-contained. Some mixed-age groupings take place for as little as an hour of shared time a day; others keep the mixed group together only for certain subjects; and

some keep them together all day. The classrooms visited here represent only a few of the ways teachers interested in a developmental, child-centered approach are moving toward mixed-age groups.

Central Park East is one of the few schools whose open classrooms survived the conservative reform wave of the late 1970s and 1980s, and its director, Esther Rosenthal, points to very practical reasons why the earlier trend toward mixed-age groupings failed. Unlike Great Britain's, most American teacher training programs did not teach developmental theories or provide model classrooms to practice them in, she says. By 1975, when a recession began to spark teacher cutbacks in districts across the nation, the newer teachers were the first to go, and many innovative programs died with their departure. The lack of bureaucratic support also made new ways hard for teachers: Everything from required testing to mandatory grade-level textbooks was organized to counter mixed-age principles. Little wonder, she says, that excitement about the idea among educators and researchers dropped dramatically by the mid-1970s. Still, education runs in cycles, she points out. "We are entering a new cycle with a more humanistic style. Pockets remained here and there, and now that movement is a-borning again."

IN MANY elementary schools, for instance, teachers excited by new pedagogies such as the whole-language approach to reading have begun turning to each other for new classroom structures in which these ideas can be carried out. This could mean teaming with another teacher to share ideas and resources—and even if that teacher is at another grade level, it could mean sharing students as well. The whole-language reading approach provides the flexibility to group children at different ability levels together, encouraging them to work with and learn from each other. Whether teaming is part of the picture or not, whole-language instruction can result, then, in a new openness toward mixed-age grouping.

In some schools, the push comes from another direction. At P.S. 41, the change to multi-age groups was regarded as a first step to getting teachers to try out new pedagogies. Once core teams of mixed-age groups were established, says Assistant Principal Gary Wexler, teachers found it both useful and necessary to personalize their classroom instruction. "Nongrading is the only way to *get* teachers to personalize, sometimes," he argues. "Because the only way nongrading can possibly work is to use cooperative learning, peer tutoring, learning centers." For P.S. 41, multi-age grouping is only one method of generating a spirit of enthusiasm and ownership among its teachers; and though the school's program incorporates only some aspects of the multi-age theory, it clearly has succeeded on one level. The school is alive with cooperation and pride; around the lunch tables and in their common planning period, teachers talk continually about new ways to work with their students together.

Which Ages Go Together?

All these models rest on the principle that children do better when they work in small groups with flexible age boundaries—so that their success is measured not

against others of the same age, but by their mastery of new skills as they become ready. How best to mix the ages to achieve this goal is another question. Most educators agree that between the ages of five and eight (grades K-3) children proceed through certain key developmental stages—and during this period they learn best by contact with as many sensory, concrete experiences as possible. But should the five-year-olds be put with the older children?

Few of the teachers combining grades 1 and 2 or grades 3 and 4 think so. "For the most part, the five-year-olds still belong in kindergarten with the babies," says Norma Leutzinger. "There's a big difference in what a five-year-old is ready for."

As she approaches six, a child makes a key transition, these teachers agree—not from a concrete mode of learning to a more abstract one (which happens later), but from a more individual way of learning to a group-centered one. Some schools acknowledge this by creating K-1 (or "transition") combinations where a child can comfortably work in both modes. As a child matures socially, he can work together with the class's older children.

Teachers and researchers also disagree about where the third-grader belongs. At the schools described here, most teachers felt strongly that by third grade a child has moved into a new mode of learning that calls for grouping with fourth-graders. Only in the Montessori elementary school was there a commitment to grouping six- to nine-year-olds (first- to third-graders) together in the same class. At Sands Montessori, for funding reasons, kindergarten makes a class of its own with five- and six-year-olds, though Montessori schools normally group three- to six-year-olds together.

"Montessori classes are divided into overlapping age groups [3-6, 6-9, and 9-12 years old]," says Sands principal Sandra Sommer, "to acknowledge the developmental passages that a child goes through around six years old and nine years old." By including six-year-olds

both with younger and older children, Montessori acknowledges the "bubble" that includes some sixes with the fives and some with the older children. A similar process occurs at nine, Sommer says, and so narrow grade groupings of grades 1-2 and 3-4 are inappropriate.

"When you take an eight-year-old away from the sixes and sevens, you miss the beauty of the mixed-age experience," agrees Mary Motz. "By the third year in my class, the older child is very sensitive to the younger ones' progress. He can help check their work, for example, and by teaching a younger child he really shows mastery of the material." Children gain socially from the broader three-grade grouping too, she says, and self-esteem goes up. "A bright child in the middle year can go as fast as he wants, but a slow child in the middle isn't isolated as different."

Still, Motz says, teaching three grades in one classroom is unquestionably harder in some ways. She works all day on Saturday, she says, planning the week ahead: what to present to the whole group, which children need attention in which areas. And like all of the mixed-group teachers described here, she keeps meticulous progress records on each child through a combination of methods. Children keep journals that can be used to track their reading, writing, and language skills; and she records their mastery of specific skills in another log.

Discipline, a potential problem that scares off many teachers from combining age groups, seems less of a problem to Motz. In some ways, this is because she knows her students so well; when only a fraction of the class is new to the teacher each year, she has an automatic advantage. In fact, the theory is that mixed-age grouping fosters good discipline because older children take responsibility as leaders and models for the younger ones. Still, this does make work on the teacher's part; all the classrooms described here give a great deal of attention to routines that foster mutual respect and conflict resolution.

SUGGESTIONS FOR SUCCESSFUL MULTI-AGE CLASSROOMS

- Provide plenty of flexible space and divide it into functional areas or "learning centers."

- Supply a selection of concrete materials to foster math concepts and language play. You won't need twenty-five of everything, since most activities will only involve a few children at a time.

- Provide a wide variety of "real books" at every reading level. If you do use reading textbooks, do so only as a check.

- Structure into the day opportunities for older children to tutor younger ones. Pair a youngster at the early edge of acquiring a skill with one who is more confident but still needs practice. Or allow an

older student to check a younger one's work.

- Involve students in making work plans or "contracts" on a daily, weekly, or monthly basis.

- Allow children to freely explore the room and to choose their activities individually or in groups.

- Structure the curriculum around themes that can integrate learning across content areas.

- Use plenty of support staff—in art, music, physical education, special needs. Be sure to include them in planning of curriculum themes.

- Don't sort, track, label, or retain kids. Break down the idea that June is "promotion" time. A

child can remain in the group until his mastery of appropriate skills shows he is ready to move on.

- Try sharing responsibilities with another teacher if your subject matter expertise lies in different areas.

- Switch teaching assignments frequently in graded schools. This increases empathy and cooperation among teachers, familiarizes them with students of different ages, and helps them think of themselves as learners.

- Train student teachers in many grades, not just one. Include courses in early childhood development in their requirements for certification. □

K.C.

What To Do in Class

In a Montessori classroom, children of different ages learn together for both social and academic reasons. But how do they do it? How does a six-year-old work alongside a nine-year-old without one of them being bewildered and the other bored stiff?

The answer, say Motz and Sommer both, lies in the nature of the Montessori curriculum. It covers math, language, and cultural subjects in a series of concrete tasks—bead games, map puzzles, and the like—that can be taught to a larger group and then practiced again and again, with the teacher in smaller clusters and on one's own, until they are mastered. Motz and her students track their progress using monthly or weekly work plans, lists of activities from which the children can make their own choices. Through this tracking, teachers can help assure that each child is always working at the level he or she is comfortable with, prompted to try new things by curiosity about what is going on around him, and taught the necessary skills as the occasion arises. For a class of twenty-four six- to nine-year-olds, Motz makes up half a dozen such work plans or "contracts" monthly, some of which overlap in the academic areas they address.

Motz argues that the contract approach motivates children to acquire skills on their own, like math facts, that might otherwise be punishing rote routines. "The contract is actually unnecessary for most of the class, except as an aid to me," she confesses. "The children know that if they want to use a certain activity they need to take certain steps before they'll be able to. They have freedom; they're not told what day they have to do anything."

Contracts are also a key part of the IGE system, which organizes learning around a four-step cycle of assess-

ment, selecting objectives, following a learning program, and then re-assessment. Using 9 x 12-inch "task cards" the teacher can record each child's progress in six or seven broadly defined areas (such as "letters"). Teachers use formal assessment methods to place children at the start and then move them ahead based on continuous, informal assessments of their mastery.

The Integrated Curriculum

Whatever their formal construct or rationale for teaching mixed-age groups, most teachers use another powerful classroom technique to pull together their learning objectives. Each year they select a theme—whales, for example, or "workers in the neighborhood," or "families from long ago"—and organize every aspect of the curriculum around it. Children practice language skills as they read about the theme and write about it; they measure and graph its component parts using math and science skills. Social studies material like history and geography is all tied in; and the whole class takes field trips together around the theme, practicing social skills along the way. In a class that stays with the same teacher from year to year, the theme shifts yearly; so teachers must plan on at least a two-year cycle.

Integrating a curriculum around a theme allows children of different ages and stages to work together in a group as well as to practice skills at different levels. "I might read an oversized picture book to the whole class," says Norma Leutzinger. "The older kids and early readers will be following the text, and the younger ones will get something from the pictures and the discussion, as well as from being read to aloud." Working together on a theme-related project, an eight-year-old may write down a story dictated by a six-year-old, type it, and bind it into a book illustrated by the nonreader, then give it back to the nonreader, who can use it to practice reading his own work.

The challenge of moving toward a mixed-age grouping can seem formidable when all the standard classroom materials are geared toward single-grade content areas. But in practice, say the teachers who do it, having to come up with theme-related activities and materials is a powerful spur to trying new ways of teaching. Because the children are still at a developmental age at which learning must be largely organized around concrete objects, useful learning materials can be as ordinary as bottle caps, bread tags, and popsicle sticks; and their collection can involve parents in the life of the classroom, too. And teachers learn from each other, sharing ideas as well as materials, planning together, and scheduling joint class activities. P.S. 41 encourages its teachers to visit other schools committed to mixed-age classes, like the model school at Bank Street College of Education.

Another good source of support, ironically, is the guidebook published by the Canadian province of Manitoba for teachers in small rural schools where mixed-age grouping is more necessity than choice. A down-to-earth manual crammed with ideas for themes, schedules, record-keeping and assessment, and dozens of other subjects, it is useful for long-range and short-term planning both. (For ordering information, call EDRS at 800-227-3742 and ask for ED300814.)

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DIFFERENT WAYS TO GROUP CHILDREN OF DIFFERENT AGES

One key to the success of a multi-age classroom is a variety of groupings that afford students the opportunity to advance at their own pace, tutor others, and mix with different children. Some types of grouping are:

- **Problem-solving grouping**, in which learners are grouped around a common unsolved topic or problem; for example, a group discussion related to the main idea of a story.
- **Needs-requirement grouping**, in which students are instructed in a concept, skill, or value; for example, extra instruction in consonant blends.
- **Reinforcement grouping**, for learners who need more work in a specific area or task.
- **Interest grouping**, for learners who want, say, to read poetry out loud.
- **Learning-style grouping**, for those with a common pattern of learning, such as through manipulation of objects.

Adapted from Language Arts Handbook for Primary-Grade Teachers in Multi-Graded Classrooms, Winnipeg: Manitoba, Department of Education, Canada, 1988.

THE WORKSITE SCHOOL

BY ELLEN HOFFMAN

ITEM: MILLIE De Villa, mother of first-grader Alexander, has two "jobs"—one as a scheduler for a cargo airline at the Miami airport and the other as a volunteer art teacher at the Miami International Airport Satellite Learning Center.

Item: Parents of kindergartners and first-graders at the Miami Dade Community College Satellite Center are talking with campus officials about how their youngsters might benefit from close access to science labs and other community college facilities.

Item: An employee of the American Bankers Insurance Group in Miami may sign up to spend part of the lunch hour in class with his or her child at the satellite learning center on the grounds of the corporation. Once notified, teachers make sure that the child is involved in a small-group academic activity—such as a reading lesson—so that the parent can participate and observe during the visit.

SUCH PARENT commitment and participation are both the primary goals and benefits of a new breed of educational institution that is attracting both interest and approval from educators, employers, and parents: Public schools located at parent worksites and operated as a joint venture by the school system and the employer.

Dade County, Florida (which includes the city of Miami), where the concept is being pioneered, now has three "satellite learning centers," and other school systems in Florida, Minnesota, and other states have also started similar programs.

Brainchild of former Dade County Superintendent Joseph Fernandez (now head of the New York City school system), the satellite learning center concept is a simple device for meeting several goals: providing working parents with convenient, flexible education programs for their children; enhancing opportunities for involvement of working parents in their children's education; combating employee absenteeism and turnover by reducing stress from concern about or problems with their children; and relieving budgetary pressure faced by a school system that grows in enrollment by ten thousand to fifteen thousand students each year.

From the day former Dade County school superintendent Joseph Fernandez floated the idea of satellite schools to a Miami Chamber of Commerce audience in 1987, it was only three months until the first one opened. It was a kindergarten housed in a trailer on the grounds of the American Bankers Insurance Group.

That original class of twenty-four kindergartners has

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blossomed into a full-blown primary school, located in a new building on the ABIG grounds and attended by more than seventy students in kindergarten through second grade.

And now Dade County has two more satellite centers, both serving kindergartners and first-graders and slated to admit second-graders next year—one at Miami International Airport and one at Miami-Dade Community College's North campus.

A formal contract guides the school system-employer relationship in each case, specifying that the employer provide the school facility and maintenance and security for it and that the school system provide the staff, furniture, equipment, and supplies that are normally found in any county school. A lead teacher is in charge at each school site, but ultimate operating and legal responsibility for the satellites remains with the principal of a nearby "host" elementary school.

THE EBB and flow of the daily schedule at satellite centers begins as early as 7 A.M., when parents on their way to work drop off their children. The children may play or watch television in a supervised setting until school starts around 8:30. The school program ends at 2 P.M. and is followed by an afterschool program staffed and conducted either by the YMCA or the county's community school unit. Although some parents take their children home around 2 or 3 P.M., most stop by later in the afternoon, after completing their work day.

Educators and parents alike consider the private parent-child time in the car to and from work each day an important benefit of the program. Cynthia Collins, for example, works as a personnel specialist in the Department of Aviation at the airport. The mother of five-year-old twins Stacey and Tracee says: "I get an extra thirty minutes each way (in the car) with the kids. . . . It gives me a chance to do the homework with them and find out who did what in school. It's fantastic."

Physical proximity of parents to children, both in case problems develop during the day and to facilitate parent involvement in school activities, is another plus cited by advocates of the satellite concept. The result, they say, is an increased sense of security for both parents and children.

American Bankers center teacher Karen Borgmann recalls the day a youngster fell and split her lip even before class started in the morning. "Her mother (who was working less than five minutes away) picked her up, took her to the dentist and the child was back in school with ten stitches by 11 A.M.," Borgmann recounted.

Mona Comeau, a divorced parent who is studying electronic engineering at the community college campus, explains that "it feels good" to have her daughter nearby all day: "I bring Chelsea (a 5-year-old) here from eight to five. My classes are from eight to one-thirty. . . .

It's right across the campus. I can come and have lunch and as I drive by, I can see the children playing."

The lead teacher in each center plays a pivotal role, combining teaching and administrative responsibilities with supervision of other teachers and aides.

Under Dade County's teacher professionalization initiatives—which are set forth in the union contract between Dade public schools and the United Teachers of Dade—a lead teacher can play a variety of different roles. "In a secondary school, a lead teacher is more like a department head," observes Thomasine Morris, lead teacher at the airport center. "But we are at a site responsible for a program.

"I don't teach any differently," explains Morris, "because we have the same Dade County objectives." But before she ever got up in front of her new kindergarten class, Morris had been deeply involved in planning the conversion of an office building into the school, in the selection of furniture and equipment, and in hiring staff.

The satellite program is "giving teachers a chance to blossom," she says. "Instead of following a given format, we are creating and designing."

The lead teachers from each of the three worksite schools note also that the satellite center's small size and its physical separation from a larger school have created a dynamic in which center staff are constantly exchanging information and ideas about the children and the program.

Nonetheless, all involved in the program stress the importance of developing and maintaining strong ties between satellites and host schools, for staff and children alike. For staff, the connection is an important safeguard against the professional isolation that can occur when a teacher works in a school with as few as three staff members. While most staff members interviewed said that they don't feel isolated in their centers, they stressed the positive effects of participating in regularly scheduled faculty meetings and other activities at the host schools.

Staff of the satellite schools acknowledge that they could also benefit from more collaboration among the three centers. When this reporter invited the three lead teachers to meet with her for this story, it was the first time they had gotten together as a group, without the presence of school system officials or other "outsiders." A number of staff of the centers had never visited the other satellite centers on a school day.

Contact with the host school is also seen as critical to the development of students in satellite centers, who must be prepared for the transition from a very small school—in which many of their classmates have been friends since they attended the same day care programs—to a much larger one.

For satellite school students, visits to the host schools may offer the only window on the experience they will encounter when they transfer to a larger school in third grade. Coping with lunch in a large cafeteria, for example, looms as a daunting prospect for these youngsters. To help prepare the children for this, Roberta Keiser, lead teacher at the American Bankers center, has arranged for school lunches to be served cafeteria style at her satellite. Field trips, holiday parties, and other joint activities for the children are scheduled at the host

schools throughout the year.

WITH THE American Bankers center in its third year of operation and the other two in their second year, is the Dade County satellite learning program working?

Data collected by ABIG show that employee absenteeism is down 30 percent and turnover, 13 percent. A company vice president, Philip Sharkey, says enthusiastically that the benefits to the employer go far beyond expectations, and beyond the \$375,000 invested in construction of a new building to house the school.

But there are no other data—such as compilations of test scores—on the program yet, and until the school system implements a pending plan for an evaluation, other measures of success must be used.

One way parents vote is by enrolling their children. Two of the three centers are at capacity and face the prospect of having more enrollees than they can accommodate next fall. Muriel Lundgren, director of the preschool on the Miami-Dade campus, has a six-year-old in the satellite and a four-year-old in the preschool. "I feel like," she struggled for the exact word, "... blessed ... not only to have the convenience but also to have the continuity for the children's education," which, she stressed, is very important for working parents.

"Our employees (parents) are here on time, they are here daily, and if something happens to their kids, they don't have to lose two hours, because the children are five minutes away," sums up Esterlene Lewis, chief of administration and community affairs for the Dade County Aviation Department.

Parent participation and involvement in the satellite schools clearly exceed that in the average school. Points

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HOW WORKSITE SCHOOLS AND OTHER SCHOOL REFORMS CAN GENERATE SOCIAL CAPITAL

AN INTERVIEW WITH JAMES COLEMAN

Our schools were designed for another era. Mass public education came of age when men, who used to work at home and train their sons there to work as farmers and craftsmen, left the home for the factory. Public schools then took over responsibility for the education and training of America's young. But the responsibility for children's nurturance and moral development remained in the home, where it was shared by the mother, by extended families, and even by neighbors, who were well known by both parents and children, thanks to the lively daily interaction among neighborhood housewives and because many neighborhood adults were involved with the children and with each other in scout troops, PTAs, religious gatherings, and neighborhood pot lucks.

Extended families within the home are now rare, the mobility of American families has eroded the ties among neighbors, and now a majority of women are working away from home during the day.

*What should this mean for schools? As James Coleman, a sociologist and author of *Public and Private High Schools: The Impact of Communities*, reminds us: "Schools are a constructed institution, a result of public policy, designed to complement the non-constructed, spontaneous institution, the family, which has principal responsibility for childrearing. This implies that schools, to be effective, must change as families change."*

At one level, society is adapting its structures to meet the needs of the changing family: Programs such as day care, before-school care, and latch-key programs continue to expand. But, says Mr. Coleman, these new structures only replace the home's custodial functions. Other roles of the traditional home—transmitting values and standards and equipping students with a sense of self—are only inadequately filled by these new structures. Much of what these structures fail to provide is termed by Mr. Coleman as "social capital."

If "human capital" is the education and culture each of us has stored within ourselves, "social capital" is the education and culture we make available to others, especially, in this case, to children.

—Editor

Editor: *I want to discuss how public schools can help generate social capital. But please start by telling us as simply as you can what social capital is and how it aids in raising children.*

Coleman: The concept of social capital is broader than child rearing per se, but it is very relevant to this. The generic term "capital" refers to an asset that a person or persons can use as a resource. "Social capital" is any kind of social relationship that is a resource to a person. Various relationships, then, constitute social capital for, let's say, the parent-child relationship. One such relationship is that which exists among parents in the community. Such relationships allow parents to establish common norms and common rules for children. These relationships also function as a communication link. Just as a telephone line is an element of physical capital, a communication link between parents is social capital—in the sense that one parent can feel

*James Coleman, a distinguished sociologist, is the author of *Public and Private High Schools: The Impact of Communities*.*



ILLUSTRATED BY DAN SHERO

free to call another and discuss their children's behavior, their whereabouts, and so on. A common form of social capital is the set of personal obligations that people have toward one another. Can one person call on another for help and services of different kinds? For example, immigrant ethnic groups differ very sharply in the degree of this kind of social capital they have. That's a broad review of what's meant by social capital.

More specifically, there are really six kinds of relationships that are especially relevant in the context of school. One is the relationship among students themselves. Another is the relationship among teachers themselves, the third is the relationship among parents themselves. Then there is the relationship between teachers and students, between students and their parents, and between teachers and parents.

Editor: *We'll talk about the school relationships in a moment. But talk for a moment about the relationship among parents. Why is that so important?*

Coleman: I think it's very important to remember that young people today, and families today, find themselves in a peculiar situation; there are an extraordinary number of attractions and demands pulling on children and young people from sources that are outside the school and outside the family, in the area of popular music, clothes and fashions, and commercial entertainment. Television, in particular, is probably the strongest kind of competitor to the demands that are generally made by schools and parents. If parents are to be able to make these demands effectively, they need more than their own strength and more than their own standards. It's very easy, for example, for a child, or a set of children, to play one set of parents against another. It's hard for a single parent to resist his child's plea that "So and so can stay out late. Why can't I?" Strong relations among parents and also between parents and teachers constitute some degree of opposition to, and insulation from, the pull of the youth community on the one hand and the commercial community on the other.

Editor: *In your writings, you have stated that, with the decline of the traditional neighborhood and the resulting loss of social capital from it, perhaps the best hope for creating new social capital lies within the workplace.*

Coleman: The workplace is where parents are—often both parents are there. One way to re-create or strengthen the connections between parents and children and among parents with children in the same school is to bring the children and the school to the workplace. Moreover, a parent's closest friends are often their co-workers; thus at a worksite school the soil exists for building strong intergenerational communities in which groups of parents with similar values can support each other's child rearing.

Editor: *The worksite schools described in this article benefit from simply having parents and children—and parents' friends and their children—at the same location. But are there additional steps that could be taken at these schools to maximize the creation of social capital?*

Coleman: I think that it would be very wise for the school district to heed the parents' desire to have the worksite schools continue beyond the second grade.

Editor: *Why—because as students get older their*

need and their parents' need for social capital increases?

Coleman: That's part of it. But I also worry about the short-lived nature of a K-2 school; it breaks the elementary school into two subparts and thus interrupts what should be growing relationships between children and their teachers, between teachers and parents, and among the children themselves. If those relationships are shut off after second grade and begun anew, they will be of less depth and, therefore, of less use. I don't share the concern of the Dade County personnel about not returning children to their neighborhood schools by third grade. In many, if not most, cases, the neighborhood to which the children would be returned is an "evacuated" neighborhood, without the social relationships that typify a traditional neighborhood.

I also think that if the schools are to take full advantage of this worksite location to strengthen important relationships, they need to create more structured activities for the parents. The scheduling of such activities would have to be reconciled with the demands of the parents' workday. Perhaps they could be scheduled coincident with parents' lunch breaks.

Let me give an example that illustrates one way in which many parents can be involved in a functional way. In southwestern Chicago, in Evergreen Park, there is a large school with a very impressive degree of parental participation. The parents participate through about twenty parent clubs, each of which is a support group for a different extracurricular activity. One parent group supports the school band; another the chorus; there was one for each sport; one for each musical activity, and so on. Each parent group then had some kind of functional connection to the activity in which their own child was involved; and each parent was relating to the parents of his or her own child's friends. You end up with little communities within the school.

I would also like to see worksite schools for high school-age children. Here I would like to see the employer much more completely integrate these older students into the workplace in a functional way. For example, the student might work part time or serve as an apprentice during part of his school day. In this way, the student could become integrated into a community of adults at a time when his or her need of adult influence is high.

Editor: *What else might public schools—whether they be at the worksite or in the neighborhood—do to create additional social capital?*

Coleman: The Köln-Holweide school in Cologne, Germany (*American Educator*, Spring 1988), pairs a team of five subject-matter teachers with the same group of students for five years, from grade four to grade eight. I think something like this is worth trying, because it makes possible very rich relationships that develop and deepen over a number of years.

There is a downside, of course—the one noted by the Dade County teachers: The children will be exposed to a fewer number of adults over the course of their school career, and that can be narrowing. But I think in our current circumstance, the community outside the school is often sufficiently weak—as is the family itself in some cases—that this kind of continuity may be

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And then They Asked for Hamlet

The American Educator solicits for this section readers' specific accounts of the lessons or units they have successfully used to present challenging, "high-track" education to students supposedly "unable to handle it." Essays should be 750 to 2,000 words and should be sent to "And then They Asked for Hamlet," American Educator, 555 New Jersey Avenue, N.W., Washington, DC 20001. We will pay \$150 for essays that we publish.



ILLUSTRATED BY ROBERT BARKIN

Getting to Thanatopsis

BY DAVID MCGRATH

THE PASSING bell is due to ring. Twenty-eight sophomores eye the minute hand on the clock. They fidget, gathering bookbags and purses, generating the familiar "about to get out of here" noise.

"Tomorrow," announces the teacher, "we start poetry."

The groans are predictable. News that tomorrow they would have to clean the classroom floors would have enjoyed a more cordial reception.

* * *

The fact is, poetry holds little appeal among teenagers. For many, especially the boys, it's "sissy stuff"—dusty verses, complex or indecipherable, hiding melancholy messages that only teachers seem to understand.

An English instructor contemplating a unit on poetry, must, therefore, wage a war against fears and negative attitudes, even before he can begin to treat the concepts intrinsic to poetry appreciation. What should he do?

At Chicago Vocational High School (CVS), where I teach, some consideration was given to scrapping poetry altogether. Of our predominantly Afro-American enrollment of three thousand, approximately half of the families of pupils are at or below the poverty level, and seniors who take the ACT score, on average, at the 40th percentile. Would a curriculum without poetry be more academically nutritious? Aren't there more important language and literature skills to digest, the learning of which would reap more practical benefits for the students anyway? Will exposure to Emily Dickinson help Cindy get into nursing school? Will recognizing the style of e.e. cummings enhance Johnny's chances of becoming an accountant? Ought not their time be spent on job skills, with activities like composing résumés or rehearsing interviews for personnel directors?

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The answer is a resounding "No!" For while students are merely trained in the practical sciences, they are ennobled and educated by the arts. Poetry makes the very finest use of language in order to stimulate a student sensually, emotionally, intellectually, thereby heightening his life's experience.

A high school graduate with no exposure to poetry and the arts is a robot, somewhat skillful, but hollow, to whom life's many and varied levels of happiness are inaccessible. If a human mind has no opportunity to expand, it atrophies and closes, leaving behind a student whose scope of existence is limited to the number of channels on his TV dial.

BUT ARGUMENTS for art are understood only by those who already appreciate it. It's so much "preaching" to the average teen, and cannot, thus, serve as motivation for learning poetry. What can a teacher do to overcome the resistance and to get kids to want to read poems? At CVS, I anticipated the reasons for the resistance, and then I used several familiar, reliable teaching methods to get the kids involved.

The first step was to keep in mind that one doesn't learn to ski by starting at the top of Devil's Chasm; one begins on the bunny hill. Unfortunately, many high school courses are structured as literature surveys, presenting the poetry of England or the United States in chronological order. Often a sophomore's or a junior's first exposure to poetry might be to Bryant's *Thanatopsis*, or to one of Spenser's sonnets—both valuable, to be sure, but selections whose degree of difficulty constitutes a turn-off for a youthful urbanite. Instead, to start out, I chose something contemporary, short, and in American English; and something with a strong story line and a heroic speaker. Very importantly, I did not formally announce, "Let the poetry begin." I simply asked one morning, "Do you mind if I read something to you?" and let William Stafford do the rest in his poem:

TRAVELING THROUGH THE DARK

Traveling through the dark I found a deer
dead on the edge of the Wilson River road.
It is usually best to roll them into the canyon;
that road is narrow; to swerve might make more
dead.

By glow of the tail-light I stumbled back of the car
and stood by the heap, a doe, a recent killing;
She had stiffened already, almost cold.
I dragged her off; she was large in the belly.

My fingers touching her side
brought me the reason—
her side was warm; her fawn lay there waiting,
alive, still, never to be born.
Beside that mountain road I hesitated.

The car aimed ahead its lowered parking lights;
under the hood purred the steady engine.
I stood in the glare of the warm exhaust turning
red;
around our group I could hear the wilderness
listen.

I thought hard for us all—my only swerving—
then pushed her over the edge into the river.

I don't know that fifteen-year-olds can ever be described as "enraptured," but that's the closest they ever came in CVS Room 102 in 1989. An intense discussion followed, full with interpretations, questions, clarifications, and a sometimes angry debate over the speaker's decision. I was even asked to re-read the 4th stanza, as some were obviously moved by the moment described. This allowed me to give a pep talk on sensual imagery as the most distinguishing characteristic of poetry (I had finally said "poetry," now that class was nearly over).

Their resistance having been conquered in that first lesson, I took advantage of another basic education tenet, which is to make use of students' likes and interests. In the teen hierarchy of values, ranking somewhere just after rock music, is the "hip phrase," especially if it resonates with rhyme, rhythm, reason, and rebellion. Song writers make millions on this affinity. I say this without condescension. It shows a genuine love of language, and a potential basis for love of poetry.

So on Day 2: "Do you remember what the best part of yesterday's poem was?" "Fourth stanza," said Edward. "Do you remember why?" "It makes you feel . . .," said Patricia. "It makes you hear . . .," said Steven. "It makes you think of . . .," said Sean. "It makes you see . . .," said Rhonda. "It makes you smell the . . .," said Elijah, and so on. "Let me read this little one by Gwendolyn Brooks that I happen to have here. What is the best phrase in this poem?"

THE BLACKSTONE RANGERS

There they are.
Thirty at the corner.
Black, raw, ready.
Sores in the city
that do not want to heal.

There followed a fierce contest between "sores in the

city" and "Black, raw, ready," with this moderator fighting for the floor to label the poetic techniques that made both verses worthy contenders. The success thus far made me heady enough to lead my team from the Bunny Hill to the intermediate slope.

But first we paused at the bottom for some chair-lift instructions. As they would be taking over the reading chores, I coached them to recite not in a sing-song, but in a natural fashion, pausing for punctuation, not line endings. I explained reasons for reading out loud and cautioned that the first rendering seldom released all the "goodness"; it might take a second, third, and maybe a fourth time to "satisfy" us.

Then we went to the text, to something of Robert Frost's, and I issued again the challenge to find the very best verse. Diana read, and Terrence quickly chose what he fancied to be the best phrase, without knowing fully why, so Cornell gave a second reading (to applause—some of it sincere). Diana asked what "bracken" was, which sent Edward to the dictionary; and soon we were into what seemed like a traditional poetry class analysis of a contemporary poem. Only there was still enthusiasm and wonderment and actual insistence on each one's turn to read.

I next asked the students to choose a poem (from a list of artists I had carefully preselected; be mindful, we were still on the intermediate slope) to read the next day in front of the class, and to then lead the group to discover the very best line. This would take two or three classes, after which I believed they would be ready to begin the textual survey, beginning, yes, with *Thanatopsis*.

Predictably, nothing went exactly as planned. I had to interfere more than I had wanted in order to correct some fallacious notions of the presenters, lest they lead the other students astray.

The textual survey itself had its highs and lows. They absolutely hated some poems. Elijah said that Emerson was a "drag"—his poetry seemed without catchy or memorable phrases. Poe was everybody's favorite.

But from Bryant to Poe, Robinson to Cullen, the rewards were continuous. Surely, we might have gotten stalled one drizzly morning with Walt Whitman, but we were feeling goose bumps of discovery with Emily Dickinson the very next day. By the midway point of the five-week survey, each student could independently apply our homespun formula of reading a poem aloud, then determining the identity of the speaker, his situation, how his situation ultimately changed, how the poet used imagery, what the very best verse was and why, and what the poet's main purpose was in writing the poem.

I don't think we would have gotten that far, with our spirit intact, had we blindly waded into the mire of the Colonial Period, with only the teacher bent on completing the journey. Instead, our progress was dictated by the hunger of the students, at first for the stories, then for the sound, soon for the eye-opening scenes re-created from nature, and ultimately for the chance of experiencing an exhilarating epiphany from a poet's wondrous notion or ingenious observation.

And how did *Thanatopsis* play at CVS? On his homework paper the following day, next to his name, as though it were part of his name, Elijah wrote: "Brother to the insensible rock." □

MULTI-AGE CLASSROOM

(Continued from page 32)

Who Most Benefits?

Do children in mixed-age groupings do better in the long run than those in single-age classes? Some categories of students do, some don't; but none seem to fare worse in mixed-age classes. The research on this question is somewhat inconclusive, partly because just what defines a "nongraded primary classroom" is often not clearly spelled out. Still, study results generally show a pattern of improved language skills among mixed-group students; in other academic areas, tests either favor mixed-age or show no difference. Nobody falls behind, these measures show; although those students on developmental and academic extremes benefit most—boys, blacks, the slow and the gifted, and children with low self-esteem. Some researchers report that such grouping is particularly effective for bright but immature children, who need both academic stimulation and a social environment more suited to a younger child. Others have shown that the longer children stay in nongraded classes the more their achievement scores rise in relation to their ability.

Most of the available research measuring these results is fairly old; but more recent research on how children learn tends to support the mixed-age structure as well. For example, children have been shown to adjust their language from an early age depending on who their audience is—so in a mixed-age class, a younger child could be stimulated to rise to the older children's level. Researchers have shown that in social situations, children spontaneously tend to choose mixed-age situations over same-age ones, lending weight to the argument that such arrangements foster social development. And peer tutoring has been shown to be a particularly effective learning technique between students of different ages—especially if the "novice" is already within a certain key range of the "expert" in her grasp of the topic. Finally, mixed-age groupings make it virtually impossible for a teacher to lecture on the same material to a large group, and research clearly shows that the more personal and individual the lesson, the more effective it is.

So Why Not?

Given all these advantages to mixed-age grouping, why are more schools not doing it? The most conservative answer is that such classes are not necessarily best for every student. Even the National Association for the Education of Young Children (NAEYC), whose 1988 position statement strongly advocates "developmentally appropriate" child-centered practice in the primary grades, recommends family groupings as only one of the desirable ways to achieve this. Classroom groups should vary in composition, the NAEYC says, depending on children's needs, and children should be placed where it is expected they will do best—"which may be in a family grouping and which is more likely to be determined by developmental than chronological age."

Some teachers shy away from mixed-age grouping at first, for understandable reasons. For one thing, over the last twenty years teachers have often been assigned to

such classrooms simply to accommodate population overflows, not for pedagogical reasons—and so this has become the least-desirable assignment in the school, involving as it does two entirely separate preparations every day. The solution, say advocates, is to combine the class for many subjects and to adapt one's teaching style to a more individualized approach, rather than lecturing to two "classes" who vary considerably within themselves in any case.

The team teaching that often inspires mixed-age grouping can be difficult for some teachers. "You have to be realistic about the interpersonal stuff," says CPE director Esther Rosenthal. "With collaborative work, you have to be constantly talking about what you're doing, and it gets to be a strain." Other teachers who have teamed up agree that the right match of chemistry and teaching styles can make all the difference in how it works.

Teachers who are not trained to work with different ages at once may object to the idea. Few education schools offer courses that directly support this, and few open classrooms exist for practice teachers to learn in. As an interim step, therefore, some principals re-assign teachers annually to different grades until they are comfortable enough with several levels to combine them easily.

Until elementary teachers must study early childhood education before they work with the early grades—something that is required in Great Britain, and that NAEYC recommends—the skills to run a developmentally based mixed-age program may be lacking. So far, the U.S. educational establishment has simply not supported the development of mixed-age elementary teaching.

The bureaucracy of a central testing system also gets in the way of teachers trying out new ways. "To do this, you've got to trust yourself to introduce skills in your own way," says Norma Leutzinger. Though test results eventually prove that it works, she says, it takes a lot of confidence to change a traditional system.

Finally, a powerful system of textbook publishing that serves mainly single-grade classes impedes progress toward a more developmental approach. In the "scope and sequence" curriculum models of the last decade, children at every grade level were trained in carefully delineated subject areas before they moved on to the next grade. Mixing classes together, even if only for selected subjects, messes up that system. If it is to work, publishers will have to adapt—as they are beginning to already, prodded by the whole-language movement.

In the end, change may come bit by bit, as teachers find ways to team with each other comfortably, to give up absolute control at the head of the class, and to support new teachers on unfamiliar ground. The rewards are many, according to those who do it. "It's a whole different dimension," says Norma Leutzinger, "and it changes you. It's wonderful, but draining—just as intense as having a family. But then you see kids leave you, at the end of your two years together, with the confidence to stand up in front of the class and speak about something. And you see them come back, year after year, they visit your class, you read to them, and you play with them on the playground. I wouldn't do it any other way for the world." □

CREATING A PROFESSION OF TEACHING

(Continued from page 21)

Teachers Call on Multiple Methods To Meet Their Goals

Accomplished teachers know and can employ a variety of generic instructional skills—how to conduct Socratic dialogues, how to lecture, how to oversee small cooperative learning groups. Although much of instruction is determined by the content to be taught, there are some commonalities about teaching methods that guide their practice. They are aware of what can reasonably be covered in a forty-five-minute roundtable discussion, when to hold back and let students figure out their own solutions, and what types of questions provoke the most thoughtful conversation. But it is not sufficient that teachers know about different modes of instruction; they also must know how to implement those strategies. Traditional distinctions between knowing and doing have obscured the fact that thought and action interpenetrate in teaching—knowing about something and knowing how to do something are both forms of understanding central to teaching.

Because students vary in learning styles and because different settings afford differing learning opportunities, accomplished teachers know when and how to alter the social and physical organizational structure of the learning environment. It is not enough to be a master lecturer, for there are many times when lecturing is not an effective way to teach. An outdoor experiment, a mock trial, or an economic simulation, for example, may be more appropriate. Alternatively, a playlet or a debate might be a more effective way to engage students in thinking and learning. Teachers know about the breadth of options available to them, such as innovative instructional formats that involve discovery learning, conceptual mapping, brainstorming, working with computers, as well as more traditional tried-and-true methods.

Teachers not only have the opportunity to vary instructional settings and to employ a range of instructional materials, they also have the opportunity to call on various human resources to custom-tailor the working environment for students. Accomplished teachers know how to mobilize students to tutor their peers and how to engage aides and volunteers as teaching assistants. In schools where staffing arrangements are not fixed and inflexible, teachers also have a good appreciation of their colleagues' skills and the circumstances in which their colleagues' talent can best complement their own. Professional teachers wisely enlist the knowledge and expertise of their fellow faculty members in a variety of ways as they seek to provide their students with as rewarding a learning experience as possible.

Accomplished teachers also know the strengths and weaknesses of these options and their suitability or incompatibility for certain students and groups. The settings that a teacher chooses are not just matters of personal preference but are grounded in the literature of teaching. Teaching, to the accomplished teacher, is an elegant web of alternative activities in which students are engaged with the content; sometimes with the teacher, sometimes with each other, sometimes alone.

Teachers Orchestrate Learning in Group Settings

Teachers know how to manage groups of students. They are responsible for setting forth the social norms by which students and teachers act and interact, helping students learn to adopt appropriate roles and responsibilities for their own learning and that of their peers. This includes teaching students to work independently without constant direct supervision by a teacher.

Accomplished teachers have developed systems for overseeing their classrooms so that students and teacher alike can focus on learning, not on controlling disruptive behavior. Discipline and management techniques vary, and no one system has been proven most effective. Hence, proficient teachers consider the desired learning results, their knowledge of their students and the social context, and their own prior experience in selecting management strategies.

Teachers also know that different instructional formats often require different norms of social interaction. Accomplished teachers can alternate among organizational arrangements and understand how different structures cast students and teachers in different roles.

They also continually search for new forms of organization that may expand their repertoire and prove effective.

Teachers Place a Premium on Student Engagement

Facilitating student learning is not simply a matter of placing young people in educative environments, for teachers must also motivate them, capturing their minds and hearts and engaging them actively in learning. Thus, the Board-certified teacher understands the ways in which students can be motivated and has strategies to monitor student engagement. The teacher's role in building upon student interests and in sparking new passions is central to building bridges between what students know and can do and what they are capable of learning.

Proficient teachers also know that motivating students is not always equivalent to making learning fun, for learning can be difficult work. Developing an acute sense of one's body in dance, for example, requires intense intellectual and physical concentration. Writing

Teaching, to the accomplished teacher, is an elegant web of alternative activities in which students are engaged with the content.

a short story requires drafting and re-drafting, editing and re-editing, occasionally submitting oneself to the critiques of peers and teachers. To practice effectively, teachers need to know how to encourage students even in the face of temporary failure and the inevitable doubts that students meet as they push themselves to new affective, intellectual, and physical planes. With such learning comes the real joy in education: the satisfaction of accomplishment.

Teachers Regularly Assess Student Progress

While teachers are not always the central actors in their students' educational experiences, they are ultimately responsible for the creation and maintenance of those experiences and bear a considerable responsibility for what students learn at school. Proficient teachers, therefore, can judge the relative success of the activities they design. They can track what students are learning (or not learning), as well as what they, as teachers, are learning.

Assessment in teaching is not a simple task: Teachers must monitor the successes and failures of individual students and evaluate their classes as collectives of learners. Additionally, they make judgments about themselves as teachers in relation to those students and classes. Although these judgments are interdependent of one another, they are not necessarily synonymous. One of the essential tensions of teaching is that teachers teach individual students while managing groups. Accomplished teachers do not treat a class as a monolith. They know that a class does not learn; individual students do. But individuals neither learn the same things nor learn at the same pace.

Accomplished teachers use information about how the students in their classes are doing "on average" as a guide to making judgments about the relative success or failure of an instructional strategy. But they do not forget that there are few average students. They know that some students have moved far beyond that "average" evaluation, while others trail. And while they have to make decisions about what to do with the class as a whole, proficient teachers find ways to accommodate what they know about individual students and what they are learning in their plans for the whole group.

Accomplished teachers understand that the purposes, timing, and focus of an evaluation affect its form. They are astute observers of students—their movements, their words and their minds. Teachers track student progress with a variety of evaluation methods, each with its own set of purposes, strengths, and weaknesses. Their knowledge extends to creating their own, sometimes innovative, tools for evaluation, including portfolios, videotapes, demonstrations, and exhibitions. In addition, they may use more traditional measures such as quizzes or exams. Sometimes teachers ask questions in the middle of a group discussion in order to assess how well students are following the presentation of information; or they may talk individually with students while they are engaged in independent work. At other times, they watch their students' behavior as they read to each other or work in the laboratory.

Teachers frequently do not assign grades, for evaluation is not always for the purpose of recording grades;

rather, it allows students and teachers to assess where they stand. Teachers also assess students to determine how much they have learned from a unit of instruction, be it a week on seeds, a semester of photography, or a year of athletic training. Student responses then contribute to teachers' decisions about whether to reteach, review, or move on. By continually adding to their repertoire of methods for assessing what students have learned, as well as constantly monitoring student progress, accomplished teachers are able to provide constructive feedback to students, parents, and themselves. Finally, such teachers help their students to engage in self-assessment, instilling in them a sense of responsibility for monitoring their own learning.

Teachers Are Mindful of Their Principal Objectives

Teachers also know about planning instruction—identifying and elaborating educational objectives, developing activities to help them meet their goals, and drawing upon resources that will serve their purposes. Experienced teachers do not all plan alike. Some do not write elaborate plans prior to teaching, having automated their planning through years of experience in classrooms. Other teachers plan in detail (e.g., creating individual educational plans for special education students). No matter what form their final plans take—scribbles on a scrap of paper or lengthy and detailed outlines—accomplished teachers can clearly articulate their goals for students.

Proposition #4:

Teachers Think Systematically about Their Practice and Learn from Experience.

As with most professions, teaching requires an open-ended capacity that is not acquired once and for all. Because they work in a field marked by many unsolved puzzles and an expanding research base, teachers have a professional obligation to be lifelong students of their craft, seeking to expand their repertoire, deepen their knowledge and skill, and become wiser in rendering judgments.

Board-certified teachers are models of educated persons, exemplifying the virtues they seek to inspire in students—curiosity, tolerance, honesty, fairness, respect for diversity, and appreciation of cultural differences—and the capacities that are prerequisites for intellectual growth: the ability to reason and take multiple perspectives, to be creative and take risks, and to adopt an experimental and problem-solving orientation.

Teachers Are Continually Making Difficult Choices that Test Their Judgment

The demands of teaching often present stiff challenges that do not lend themselves to simple solutions. Conflicting objectives regularly require teachers to fashion compromises that will satisfy multiple parties. A Western Civilization teacher, for example, attempting to reconcile demands for coverage with demands for in-depth understanding, will do what is necessary to race from Plato to NATO, yet set aside time to develop in students the understanding that history is evolutionary

rather than a series of events strung together chronologically. Likewise, a third-grade teacher will find a way to introduce students to the idea that writing is a thinking process, while ensuring that students are learning the basics of spelling and grammar.

Teachers also face choices that force them to sacrifice one goal for another. For instance, teachers who are committed to teaching mathematics for conceptual understanding want to teach students to see number relationships in the real world, to represent them with appropriate symbols, and to use their knowledge of mathematical formulas and computational skills to manipulate those numbers. Such teaching requires giving students time to frame their own problems, find their own solutions, and compare those solutions with alternatives posed by their classmates. Students who have learned through experience that math class involves filling out worksheets and doing problem sets may dislike the uncertainty inherent in problems with multiple or no solutions; they may be troubled that their teacher now wants them to discuss the reasons why a particular solution makes sense. Abandoning speed and accuracy as the criterion of success may temporarily jeopardize students' performance on standardized tests, even as the teacher fosters growth in the depth of students' mathematical competence.

Such circumstances call on teachers to employ their professional knowledge of what makes for sound practice, with the interest of their students given paramount consideration. While more than one satisfactory path may be derived to balance noncomplementary objectives, teachers' decisions will be grounded in established theory and reasoned judgment.

Teachers Seek the Advice of Others and Draw on Education Research and Scholarship To Improve Their Practice

Aware that experience is not always a good teacher, proficient teachers search out other opportunities that will serve to cultivate their own learning. As savvy students of their own teaching, they know the value of asking others to observe and offer a critique of their teaching. They also know the value of writing about their work and of soliciting reactions from parents and students. Thus, masterful teachers develop specialized ways to listen to their students, colleagues, and administrators and reflect on their teaching in order that they might improve their practice.

Able teachers are also students of education scholarship and are cognizant of the settled and unsettled territory in their field. They stay abreast of current research and, when appropriate, incorporate new findings into their practice. They take advantage of teacher centers and special conferences and workshops. They might conduct and publish their own research, if so inclined, for testing of new approaches and hypotheses is a commonplace habit among adept teachers, even if a normally overlooked and undocumented one.

Wise teachers understand the legitimacy and limitations of the diverse sources that inform teaching, and they continuously draw upon them to enrich their teaching. Their enthusiasm for and commitment to continued professional development exemplifies a disposition they hope to nurture in students. Hence, the

thinking, reasoning, and learning that characterize first-rate teaching are doubly valuable: Not only are thoughtful teachers able to teach more efficiently and effectively, they are also models for the critical, analytic thinking that they strive to develop in our youth.

Proposition #5:

Teachers Are Members of Learning Communities.

Teaching most commonly is regarded as the daily conduct of lessons and the provision of learning experiences. But the work of teaching reaches beyond the boundaries of individual classrooms to wider communities of learning. In order to take advantage of the broad range of professional knowledge and expertise that reside within the school, accomplished teachers have a range of duties and tasks outside the direct instruction of students that contribute importantly to the quality of the school and to student learning.

There are two broad areas of responsibility. One involves participation in collaborative efforts to improve the effectiveness of the school. The second entails engaging parents and others in the community in the education of young people.

Teachers Contribute to School Effectiveness by Collaborating with Other Professionals

Teaching is often portrayed as the implementation of policy and curriculum developed by others—as following orders. The National Board advocates a more proactive and creative role for teachers: engaging them in the analysis and construction of curriculum, in the coordination of instruction, in the professional development of staff, and in many other school-site policy decisions fundamental to the creation of highly productive learning communities.

While state authorities and local school district leadership establish broad goals, objectives, and priorities for the schools, professional teachers share responsibility with colleagues and administrators for decisions about what constitutes valuable learning for students. This includes their participation in critically analyzing the school curriculum, identifying new priorities and communicating necessary changes to the school community. Teachers' knowledge of curriculum and their students are essential to discharging these responsibilities effectively. But a readiness to work collaboratively on such matters and not blindly accept curricular conventions are also necessary.

Accomplished teachers attend to issues of continuity and equity of learning experiences for students that require schoolwide collaboration across the boundaries of academic tracks, grade levels, special and regular instruction, and disciplines. Such boundaries, constructed as much out of traditional patterns of school organization as out of instructional rationales, are often dysfunctional and damaging to student learning. Board-certified teachers cultivate a critical spirit in appraising such schooling commonplaces, together with a willingness to work with administrators toward schoolwide improvements that can include revision of organizational as well as instructional features of schooling.

The development of curriculum and the coordination of instruction are particularly important functions shared among teachers and administrators. Proficient teachers collaborate in planning the instructional program of the school to ensure continuity of learning experiences for students. They possess the interpersonal skills needed to work on teams and a willingness to work together in the interest of the school community. Their understanding of the technical requirements of a well-coordinated curriculum enables them to participate in planning and decision making within teams, departments, or other educational units outside the classroom, laboratory, or studio.

Consonant with their role in curriculum planning and coordination, teachers are aware of the learning goals and objectives established by state and local authorities. Professional practice requires that teachers be knowledgeable about their legal obligation to carry out public policy as represented by state statute and regulation, school board directives, court decisions, and other policies.

Accomplished teachers also participate in the coordination of services to students. Today's schools include a wide variety of educational specialists, and with increasing specialization has come the need for coordination, lest pupils' educational experiences become fragmented. The increased practice of "mainstreaming" special-needs students to assure that they are being educated in the least restrictive environment has meant that general and special education teachers need to work with one another. Compensatory education programs typically involve teaching pupils outside regular school settings. The various forms of English as a second language, bilingual and English-immersion programs often require cooperation among teachers of non- and limited-English-speaking youth. Board-certified teachers are adept at identifying students who might benefit from such special attention and at working in tandem with specialists.

In addition to working on the improvement of school-wide curricula and the coordination of instruction, teachers work together to strengthen their teaching. Sometimes they observe each other teach; at other times they engage in discussions about teaching; and occasionally they collaborate in trying out new instructional strategies.

Strong schools emphasize a process of continuous improvement. They are organized to find and solve problems and to locate, invent, and experiment with different methods of instruction and school organization. Teachers within such schools work not only on

professional development but also on schoolwide improvements.

The conventional image of the accomplished teacher as solo performer working independently with students is narrow and outdated. Committed career teachers assume responsibility in cooperation with their administrators for the character of the school's instructional program. They are team players willing to share their knowledge and skill with others and participate in the ongoing development of strong school programs. This participation may take many forms, such as mentoring novices, serving on school and district policy councils, demonstrating new methodologies, engaging in various forms of scholarly inquiry and artistic activity, or forming study groups for teachers.

Teachers Work Collaboratively with Parents

Teachers share with parents the education of the young. They communicate regularly with parents and guardians, listening to their concerns and respecting their perspective, enlisting their support in fostering learning and good habits, informing them of their child's accomplishments and successes, and educating them about school programs. Kindergarten teachers, for example, can help parents understand that reading stories to their children is more important to literacy development than completing worksheets on letters.

In the best of all worlds, teachers and parents are mutually reinforcing partners in the education of young people. But three circumstances complicate this partnership. First, the interests of parents and schools sometimes diverge, requiring teachers to make difficult judgments about how best to fulfill their joint obligations to their students and to parents. Second, students vary in the degree and kind of support they receive at home for their school work. The effects of culture, language, and parental education, income, and aspirations influence each learner. Teachers are alert to these effects and tailor their practice accordingly to enhance student achievement. However, when faced with an unavoidable conflict, the teacher must hold the interest of the student and the purposes of schooling paramount. Third, the behavior and mind-set of schools and families can be adversarial. Some parents are distrustful of the school's values, and the schools sometimes underestimate the family's potential to contribute to their children's intellectual growth. Students get caught in the middle, their allegiance to and affection for each party challenged by the other. Accomplished teachers develop skills and understandings to avoid these traditional pitfalls and work to foster collaborative relationships between school and family.

A teacher's foremost responsibility is to the intellectual development of our youth, but they are mindful of the broad range of children's needs, including the need for guidance and the strong presence of caring and nurturing adults. This is a difficult set of obligations to fulfill. On the one hand, teachers are prepared neither by training nor by role to serve as parent surrogates or social workers. The distinctive mission of teaching is to promote learning, a complex undertaking in itself. On the other hand, education's broad and humane purposes do not admit any narrow specialization. Students' phys-

Wise teachers understand the legitimacy and limitations of the diverse sources that inform teaching, and they continuously draw upon them to enrich their teaching.

ical, emotional, and social well-being cannot be separated from their intellectual growth.

Teachers Take Advantage of Community Resources

Professional teachers cultivate knowledge of their school's community as a powerful resource for learning. The opportunities are many for enriching projects, lessons, and study: observing the city council in action; collecting oral histories from senior citizens; studying the ecology of the local environment; visiting a nearby planetarium; drawing the local architecture; or exploring career options on site. Any community—urban or rural, wealthy or poor—can be a laboratory for learning under the guidance of an effective teacher. Moreover, within all communities there are valuable resources such as other teachers and students, senior citizens, parents, business people, and local organizations that teachers can engage to assist, enhance, and supplement their work with students. Teachers need not teach alone.

Teachers also cultivate knowledge about the character of the community and its effects on the school and students. They develop an appreciation of ethnic and linguistic differences, of cultural influences on students' aspirations and expectations, and of the effects of poverty and affluence. Cultural and other discontinuities between home and school frequently can confound teachers' efforts to promote learning. Conversely, the cultural diversity represented in many communities can serve as a powerful resource in teaching about other cultures, in encouraging tolerance and understanding of human differences, and in promoting civic ideals. Accomplished teachers seek to capitalize on these opportunities and to respond productively to students' diverse backgrounds.

* * *

ACCOMPLISHED TEACHING involves making difficult and principled choices, exercising careful judgment and honoring the complex nature of the educational mission. Teachers employ technical knowledge and skill yet must be ever mindful of teaching's ethical dimensions. The primary mission is to foster the development of skills, dispositions, and understandings, while responding thoughtfully to a wide range of human needs and conditions. Teachers owe joint allegiance to the forms and standards of knowledge within and across disciplines and to the students they serve. They must acquire and employ a repertoire of instructional methods and strategies yet remain critical and reflective about their practice, drawing lessons from experience. Teachers' professional responsibilities focus on instructing the students in their immediate care, while they participate as well in wider activities within the school and in partnership with parents and the community.

Teaching is often portrayed as a conserving activity—transmitting culturally valued knowledge and skills to succeeding generations. It is that and more. Teachers also have responsibility to question settled structures, practices and definitions of knowledge, to invent and test new approaches, and, where necessary, to pursue change of organizational arrangements that support

instruction. As agents of the public interest in a democracy, teachers through their work in school contribute to the dialogue about the kind of society they seek both to preserve and improve, and they initiate future citizens into this ongoing public discourse.

In the development of its assessment procedures and certification standards, the Board will seek to represent these ideals faithfully and comprehensively. But it acknowledges that even state-of-the-art assessments probably cannot fully capture teaching's complexities, and the standards it eventually will ask candidates to meet may not be as rich as the portrait of a Board-certified teacher sketched above. Still, wishing not to limit its view of professionalism in teaching by the assessment technology of the moment, the Board plans to embark on a program of research and development to ascertain the extent to which it can incorporate this vision of teaching into its assessments. Over time, the Board will strive to improve and refine its assessments, so that the vision will merge with the reality.

Questions will arise about relationships and priorities among the assertions made here. What is most important to excellence in teaching, and what is peripheral? What is necessary for all teachers, and what is optional? What constitutes minimally acceptable levels of competence? Are there principles of substitution, such that demonstrated knowledge and skill in one area may compensate for deficiencies in another? Should superior performance be required in at least one domain, or special consideration be given candidates with extraordinary facility in a particular aspect of teaching? To become Board certified, must a teacher master all that is claimed here in the name of professionalism and excellence? These are difficult issues that will be addressed as the Board's standards are defined in operational terms during the next stage of policy development.

Assertions about what teachers should know often conceal inadequacies in the current state of knowledge. In this respect, teaching is not unlike other professions where practitioners confront unavoidable uncertainty in their work. However, the knowledge base for teaching is growing steadily. Professional consensus and research findings have begun to provide authoritative support for knowledge related to many of the tasks, responsibilities, and results of teaching. But much remains to be learned. The National Board will draw on existing knowledge in developing its standards, but also will rely on the professional judgment of accomplished teachers and scholars in designing its assessment procedures. Recognizing

In the development of its assessment procedures and certification standards, the Board will seek to represent these ideals faithfully and comprehensively.

that new knowledge about teaching is continually being formulated, the Board will establish a regular review process to consider new findings and to update its standards as appropriate.

The Board will also have to consider the effects of school context on standards for teaching. The very existence of a National Board suggests common standards that prevail across teaching's many settings. However, teaching in an Alaskan village exacts demands far different from teaching in Chicago. Teachers in both settings, though, blend and adapt their knowledge of teaching with their knowledge of the community in which they work to ensure effective student learning. The lessons teachers learn, the wisdom of practice that they accrue, depend on the settings in which they work, the communities they serve, and the students they encounter. This is not an argument for local standards but a recognition that general assertions about excellence in teaching must acknowledge the importance of context.

The assessment procedures developed by the National Board will, therefore, need to take context into account in a variety of ways. This may be accomplished by the use of assessment formats such as essays, interviews, simulations, and teaching under real or controlled conditions that would allow Board examiners to account systematically for a range of contextual factors in candidates' responses and to explore candidates' adaptability to different mixes of students and situations. The challenge of balancing the need for standardization against the influence of context is an issue the Board must resolve in the development process ahead.

Encouraging professionalism in teaching will improve student learning. The Board, therefore, is committed to making certification available to all qualified teachers irrespective of the teaching environments in which they work. But the opportunities available to teachers to acquire and exercise many of the professional capacities and responsibilities endorsed by the National Board will vary markedly from community to community. Some schools feature strong professional cultures whose norms support collaboration, innovative teaching, a high degree of collegiality, and participation in a broad array of professional activities. Other schools provide few such opportunities, and some even discourage such activity. To reconcile this tension between current realities and emerging ideals, the Board's assessments will, where appropriate, attempt to carve out multiple paths to meeting the certification standards that take into account the diversity of teaching environments.

These are among the touchstones that will guide the development of the National Board's certification standards and assessment processes. As the Board begins its program of research and development and seeks to reach decisions on its fundamental policies, this document will serve as an orienting point. Our view of the responsibilities of the Board-certified teacher as specified here is deliberately complex and demanding, for this is how we see the work of American professional teachers, challenged as they are to create a kind and quality of education never before attempted for all of our nation's youth. □

SCHOOL REFORMS

(Continued from page 36)

necessary to provide the social capital that otherwise will be absent. The school model in which children have different teachers in each grade, and in high school in each subject as well, may have been optimum for the kinds of communities that existed when schools were designed some one hundred years ago—but not at all optimum for the current situation.

Editor: *The downside of keeping people together is simply the reduced exposure to other people?*

Coleman: People also need the opportunity to shed their reputations and get a new start. The ability to do this could be reduced if students are stuck in the identical community for five years. What's needed is a balance. The Köln-Holweide school goes very heavily in one direction. Most of our schools go very heavily in the other direction.

In thinking about how schools can generate additional social capital, it's useful to think about this: Of the six kinds of relationships I described as offering social capital, the Köln-Holweide school is very impressive with respect to three (among students, among teachers, between teachers and students). The worksite schools are potentially impressive with respect to the three others (between parents and students, parents and teachers, and parents and parents), but there is little overlap.

In the German school, relations among students themselves are greatly strengthened, first by the continuity of the relationships over five years but also because the Köln-Holweide school provides most of its instruction through cooperative learning groups. Such groups change the key dynamic among students from interpersonal competition to intergroup competition. There is a lot of evidence that, over time, intergroup competition offers all sorts of benefits as compared to interpersonal competition; in particular, for students, it means they have a greater opportunity to get support from those they are closest to.

Through its teams of teachers who stay together for five years, Köln-Holweide also makes possible stronger relationships among teachers, something that I think our schools usually neglect and that makes teaching a particularly hard job. I think the strong relationship among teachers strengthens them vis a vis the students and must greatly reduce the isolation teachers often feel. Something has to be done in schools to make the teacher's job more powerful than it is now. While most people's jobs in society have gotten easier in recent years, the teacher's has gotten harder.

In Cologne, they are trying to create a community within the school; in Dade, there is an effort to reconnect schools and children with parents. Both are valuable strategies. If, of course, the two strategies could be pursued in tandem, the effects could be even more dramatic. That's the direction I would look in.

I hope as the worksite school matures, it can become more than simply a useful convenience for parent and company. But its staying power and the release of its deeper usefulness will depend on building stronger structural linkages between the worksite parents and the school. □

WORKSITE SCHOOLS

(Continued from page 34)

out ABIG teacher Barbara McMillan, "We are in contact with the parents all day long. They talk to me when they arrive, when they pick up the kids . . . and I have their phone numbers."

Parents of children in the satellite centers may belong to both the Parent-Teacher Association at the host school and a parent group at the center. The latter meets several times a year so that parents can be updated on school activities and receive tips on subjects such as how to supervise children's homework or how to prepare children to take standardized tests.

Each school has its regular parent volunteers such as Ronald Gutierrez, a recent graduate of a computer course who oversees the computer lab on Fridays at the airport center, where his son is a student. Others are more informal, such as the parent who came to pick up his child in Thomas' classroom at the community college. "Is everything okay here? Do you need anything?" he queried. Pointing to a light that was out, he asked if he should fix it.

School events, such as Christmas parties and fathers' day brunches, draw not just a few parents, the teachers report, but virtually 100 percent attendance.

Test scores and other academic measures of the children's progress will be evaluated in the future, but teacher Karen Monuse, from the community college satellite, observes that the constant presence of parents in the school and their contacts with teachers have a positive effect on children's study habits: "There's a difference in the kids as a result of the parent contact. Because they are aware that parents are always on top of things, they're not so likely to slack off. If I say I'm going to call their mom, they know I'm going to do it."

Although integration was not originally a goal of the satellite centers, it appears that social, economic, racial, and ethnic integration is greater in the satellite schools than in most. The 268,000 students in Dade County in 1988-89 included about 44 percent Hispanics; a third black non-Hispanic; 21 percent white non-Hispanic; and a small percentage of native Americans and other ethnic groups.

Each of the satellite schools has a racial and ethnic mix of about one-third of each of the three largest groups—Hispanic, black, and white. In the American Bankers school, two little girls in the same reading group are respectively the daughters of a company employee and her boss and are said to be good friends. The economic and social mix also occurs naturally when the sponsor employs parents who do everything from maintain the lawns to manage the company.

In Dade County, as in many metropolitan areas, the workplace is more integrated than the neighborhood. "These are all equal-opportunity employers," explains Morris, "so the schools offer equal opportunity for the children."

Data have not been compiled, but teachers in the schools say that they also have a mix of children who come from single-parent families (including some being raised by their fathers); two-parent families; and both one- and two-wage earner families.

EXPOSURE OF youngsters in the satellite programs to the work and career possibilities of the on-site employers is one area that may be developed more in the future, teachers say. Children at the airport have toured the facility, and many at the American Bankers center have visited their parents' offices. But Roberta Keiser points out that it would be possible in future career units to introduce children to such areas as food service, security, computer, and mail room operations, all at the nearby company headquarters.

The generally positive feelings about the satellite schools have promoted a movement toward expansion that has raised a variety of logistical and educational issues.

Expansion could take several forms: more K-2 classes at existing sites; more satellite centers; extension beyond second grade, perhaps up through sixth grade. All of these options present issues that are being discussed within the school system and by participants.

Each of the existing centers is located near a previously established day care program. The majority of the children in the K-2 classes were also together in day care, and this offers some of the benefits of continuity so valued by both parents and teachers.

Some parents would like children to remain in the satellite school beyond second grade. This presents space problems and also raises what Beulah Richards, principal of Cutler Ridge, the host school for the American Bankers satellite, calls "a socialization issue. When children get to third grade," she suggests, "they probably need to be in a neighborhood school."

There are no current commitments—other than adding a trailer to accommodate the second-grade class at Miami Dade next year—to providing additional space for the satellites. ABIG's Sharkey says that he is working with school personnel to try to accommodate all parents who want to enroll their children. The Aviation Department's Lewis sees both budget constraints and the difficulty of meeting state requirements (for outdoor space, etc.) as barriers to expanding.

Several potential sponsors, including an industrial park and several hospitals, have been talking with the school system about establishing programs. But so far, they have run into barriers ranging from community concern about potentially harmful pollution to church-state conflicts.

The county, which faces continuing pressure to build new classrooms, has a powerful incentive to identify sponsors who will work with them because the result is "free classrooms," a boon to both the school system and the taxpayer. Lynn Shenkman, a spokesperson for Dade County Schools' Department of Professionalization, emphasizes, however, that the school system is not totally wedded to the existing models and is willing to consider other options that might be proposed.

In the meantime, Dade's satellite schools serve as a model to other school systems seeking solutions to the challenge of providing quality education to the children of working parents. They respond to a steady stream of visitors—more than four hundred came last year—and inquiries. They have also inspired creation of similar programs sponsored by General Electric and Pinellas County in Tampa, by the state transportation department in Tallahassee, and a bank in St. Paul, Minnesota. □

LETTERS

(Continued from page 4)

instances of biases, neglect, and omissions. Among them are:

- the role of African Americans in the Revolutionary War; and
- an incomplete version of the United States' war with Mexico, and later with Spain.

After doing considerable research on the role of Hispanics/Latinos in U.S. history, co-authoring four textbooks on this topic, and writing and editing sixteen biographies on prominent Hispanics, I am able to cite specific instances of biases, neglect, omissions, and distortions, as did the consultants of the New York State report. Some examples:

1. Most U.S. history textbooks and curriculum guides discuss in great detail the Virginia Settlement of 1607 and the story of the pilgrims. However, many early Spanish explorers are omitted, as is the earlier Spanish settlement of Florida and other southeastern states. One cannot find the name Pedro Menéndez de Avilés, who founded our first permanent city at St. Augustine in 1565 and six other settlements and many missions.

2. Almost no guides or textbooks discuss the important role of Spain and its colonies, Mexico, Cuba, and Puerto Rico, during the American Revolution. How many have heard of General Gálvez's campaigns in the Mississippi Valley, of the capture of Mobile and Pensacola, or of the Spanish and Cuban financial assistance to the thirteen colonies? How many are aware that over seven thousand Hispanic/Latino soldiers fought on U.S. soil, and that the Spanish navy operated in the Gulf of Mexico during the Revolutionary War?

3. What about Hispanic/Latino participation in subsequent wars? Not even David Farragut, our first admiral and Civil War hero, is recognized for his Hispanic/Latino ancestry.

4. Who has heard of the Hispanic/Latino participation in the labor and civil rights movements, or their present contributions in politics, government, business, labor, the arts, education, etc.?

Our curriculum must, of course, recognize the enormous influence of Europeans in the United States. After all, 80 percent of the U.S. population traces its ancestry to Europe; in addi-

tion, our legal system, the Declaration of Independence, the Constitution, and our political and economic institutions are all rooted in Europe. Nevertheless, our curriculum must include the extensive history and contributions of our nation's minority groups. The changing demographics and our sense of historical justice and fair play dictate this correction. We need more history, not less. We need to enrich the language arts, science, art and music, the humanities, and mathematics with the valuable contributions of non-western and minority groups.

—FRANK DE VARONA

ASSOCIATE SUPERINTENDENT,

DADE COUNTY PUBLIC SCHOOLS, MIAMI, FL

Diane Ravitch responds:

Michael Kluznik would surely like the supposedly "Eurocentric" curriculum of New York, because it holds that the Haudenosaunee political system was one of the foundations of the American constitution. It goes further to claim that European intellectuals—Rousseau, Locke, Montesquieu, and Voltaire—were influenced by native Americans. However, the former is a matter of conjecture and the latter has no scholarly support whatsoever. Benjamin Franklin admired the Iroquois Confederacy. No one knows to what extent it influenced Franklin's unsuccessful proposal for the Albany Plan of Union in 1754; elements of that plan were later incorporated in the Articles of Confederation and the Constitution. James Madison, John Jay, Alexander Hamilton, and other key figures in constitutional debates made no reference to the Iroquois Confederation. Like Franklin, they often alluded to writings of the ancient Greeks, Romans, and the Enlightenment. Tracing the relative weight of different influences is never simple, but it always must be based on documentary evidence of some sort.

Frank de Varona errs in accepting the charges of bias against the New York curriculum at face value and in assuming that the New York state curriculum suffers the same flaws as other curricula he has reviewed. In fact, to respond to just a few of his criticisms, the New York state curriculum does include the

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African American role in the American Revolution (Grade 7, p. 47) and its does not dictate how to teach the United States' war with Mexico and Spain. It contains a major unit on the history of Latin America, and it gives as much attention to Spanish colonies in the New World as it does to English and French colonies. Of course, the Spanish influence is a European influence, both in North America and Latin America.

Mr. de Varona misconstrues the purpose of a state curriculum. A state curriculum should provide general guidance as to course content (world or American? state or local? which period? which curricular strands should be emphasized?). The state curriculum in history is not a script for classroom teachers. Therefore, every curriculum is always open to charges of omission because it is impossible to include everything.

While learning about our nation's multicultural heritage, we also need to learn what we have in common as Americans and as human beings. New York City's Mayor David Dinkins likes to talk about our "gorgeous mosaic" of races, religions, and cultures. Let us not forget that a mosaic needs cement, or it falls apart. The multicultural curriculum must teach us about the pieces, each with its own distinctive qualities, but it must also provide the cement—democratic values—so that children realize that we are citizens of the same society, sharing a common heritage and common aspirations.

FUNDING BY FORD

I would like to correct one statement in your article "Anyone can learn Math" (Spring 1990). The work undertaken by the University of Chicago School Mathematics Project in teacher development is not underwritten by the Ford Foundation, but by the Ford Motor Company.

Whereas one would expect the Ford Foundation to contribute to a project like ours, the (\$1.2 million) grant we have received is from the Ford Motor Company.

—ZALMAN USISKIN
PROFESSOR OF EDUCATION
DIRECTOR, UCSMP, CHICAGO, IL



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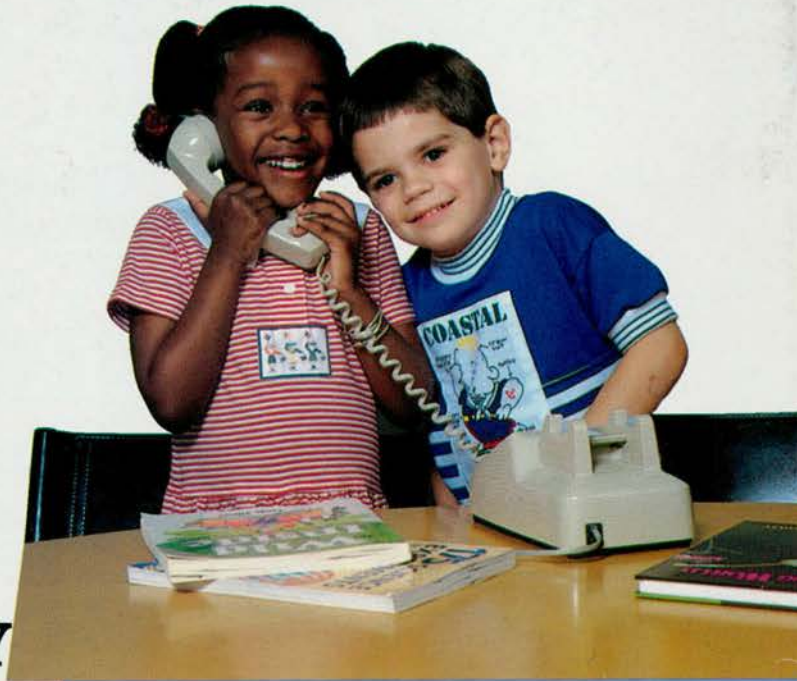
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