The Events of Tiananmen Square: Will Our Students Understand?
This story has many happy endings.
That's because five year olds are writing all kinds of stories in classrooms where teachers are teaching with IBM Language Arts Courseware.

It all starts with IBM’s acclaimed Writing to Read program.* It’s a self-paced, interactive program that teaches kindergartners and first graders how to write anything they can say and read anything they can write.

And once students learn to write, IBM’s Primary Editor Plus program gives them a simple and fun way to actually learn the fundamentals of word processing. So the skills your students use to write and edit their own life stories at five will be with them at 25.

Writing to Read and Primary Editor Plus are just two of the many high-quality programs that run on the IBM PS/2 Model 25
desktop computer.

The Model 25 combines the power, speed and graphics capabilities of the IBM Personal System/2 family in a compact classroom desktop unit. Combined with our courseware, it puts a complete library of flexible teaching tools at your fingertips.

Thousands of schools are teaching English, math, physics, chemistry, foreign languages and much more on IBM PS/2s with IBM Educational Courseware.

And with good reason.

*Developed by Dr. John H. Martin
Our courseware has been developed with the help of over 200 active teachers nationwide. IBM makes courseware programs for students from kindergarten through high school — courseware that complements your curriculum and the textbooks you're currently using.

But courseware isn't the only way IBM is bringing subjects to life. IBM LinkWay, for example, is a new, fun-to-use interactive multimedia tool that actually combines full-motion video with sound, text and color graphics. With it, teachers can create their own special multimedia shows that work with their curricula.

And there's so much more we're working on to help you teach. Together we can help students watch atoms collide, listen to Shakespeare, master geometry with the ancient Egyptians — or help a five year old write his own life story.

For a free catalogue and/or classroom poster, or for further information, call: 1 800 IBM-7257, ext. 152 or write: IBM Corporation P.O. Box 3900 Peoria, IL 61614

IBM is a registered trademark, and Writing to Read, Primary Editor Plus, PS/2 Model 25, and LinkWay are trademarks of IBM Corporation. © 1989 IBM Corporation.
Tuition Assistance/Financial Aid. Any new soldier may be eligible to have part of his or her tuition paid by the Army. Additionally, the Montgomery GI Bill Plus the Army College Fund can offer as much as $25,200 toward continuing education, for qualified soldiers.

Of course, in addition to the educational benefits, the Army also offers your students some other valuable lessons about character and discipline. Lessons that will lead to success not just in college, but in life.

ARMY EDUCATION.
BE ALL YOU CAN BE.

YOUR STUDENTS CAN ACHIEVE MANY DEGREES OF SUCCESS IN THE ARMY.
"It’s Like . . ."
The Bridges Teachers Build

“It’s like . . .” may be the phrase most frequently heard in the classrooms of good teachers struggling to help students understand new concepts. Recall this scene from Stand and Deliver and send us your favorite example.

China’s Untold Story
By André Ryerson

The Tiananmen Square massacre was the latest confrontation between the Chinese people and a system of government responsible for the death of millions. But students who study popular educational materials would know little of the Chinese government’s ongoing repression and nothing about the Chinese people’s desire for freedom.

Putting Minds to Work
By Dennis Gray

Too many children go year after year to school without ever feeling that ideas can be very exciting. A well-led seminar can change that. Find out how you can get started in your classroom.

A Museum Is Something You Do
By Karin Chenoweth

Science museums have developed the knack for making science exciting for children. Now they’re helping teachers bring the same hands-on style to school.

The Harvard Education Letter

Work is under way to make teacher evaluation more meaningful than the current principal-standing-in-the-back-of-the-room-with-a-checklist method. Read about this and related developments in this special sample issue of HEL.

A Girl and Her Books
By Annie Dillard

Anyone who has ever gotten lost in a book—and then returned to this world richer for the journey—will want to read this stirring memoir by the Pulitzer prize-winning author.
IF YOU’RE DOING MORE THAN JUST TEACHING BY THE BOOK, CUT IT OUT.

Announcing the Third Annual A&E TEACHER GRANT COMPETITION

If using Arts & Entertainment’s quality television programming in your classroom interests you, tell us about your plans. In addition to enriching your students’ education, you may end up winning a grant to support your project, and a U.S. Savings Bond for yourself.

Sponsored by A&E and Action for Children’s Television, Inc., this national Teacher Grant Competition is designed to reward the creative use of A&E programming in the schools. The competition seeks to assist teachers in using modern technology as an effective educational tool. All teachers of Grades 6-12 at state-accredited public or private schools are eligible.

First Prize: a grant of $2,000 and a $1,500 U.S. Savings Bond. Second Prize: a grant of $1,500 and a $1,000 U.S. Savings Bond. Third Prize: a grant of $1,000 and a $500 U.S. Savings Bond.

For further information and a contest application, cut out the coupon and mail it in. We look forward to hearing what you’re doing with our programming.

Fill out this coupon, and mail to: Teacher Grant Competition, Arts & Entertainment, P.O. Box 1610, Grand Central Station, New York, NY 10163-1610

Name: ____________________________

School: ____________________________

Address: ____________________________

City: ____________________________

State: ____________________________ Zip: ____________________________

©1989 A&E Cable Network HEARST/ABC/NBC.
Hemingway finds a novel way to save on textbooks...

Purchasing Fine Used Books
SAVES 1/3 TO 1/2
Elementary and High School Textbooks and Workbooks • All Publishers
Used and New • Current and Older Editions

WILCOX & FOLLETT BOOK COMPANY
A Division of Follett Corporation
1000 West Washington Blvd.
Chicago, Illinois 60607
1-800-621-4272

(Circle below, call, or write for our FREE catalog)
Parent Preparation

We all know that a student's success in school is aided when his parents are involved. But unless the parent herself was a good student, she may be unsure about what it takes for her child to excel. A new Urban League publication, developed with support from the College Board, meets this problem head on with advice to parents that goes well beyond such familiar suggestions as "make sure your child has a well-lit desk area."

Each of the 151 big-print pages in What Students Need To Know is easily duplicated and packed with information for parents. It contains both facts about schooling that will enable parents to be better advocates for their children and practical ideas for promoting informal learning around the house.

The section on math warns parents that decisions about ability grouping made in grade school and about curriculum made in junior high will determine a student's college preparedness years later. If a grade-school child is placed in a lower ability group, parents are urged to "make sure that as progress is made [the child] is moved into courses that challenge his/her ability." It tells parents that without algebra, "students will find it hard to score well on standardized math tests" and reminds them that "general mathematics, business mathematics, and arithmetic courses often do not count as credit toward college entry."

To improve students' English skills, the publication offers such practical ideas as giving children the opportunity to fill out order forms and application blanks and to have the student call stores for information.

What Students Need To Know also includes great lists: free and inexpensive materials for parents, magazines for children and youth, and community organizations interested in education.

The publication costs $10 and can be ordered by writing: Stephanie Robinson, Urban League, 500 East 62nd St., New York, New York 10021.

Video Values

With the number of movies available on video growing daily, it becomes increasingly difficult to choose among them. With the average family now viewing five videos each month, more parents also want to know which of these movies are out of bounds for children, which are minimally appropriate, and which are genuinely rich offerings. A brief answer to these questions—along with a one-sentence capsule review—can be found in The Family Guide to Movies on Video, which sells for $12.95. To order, call Harper and Row at 800-658-3030.

Harvard: Another Preview, A Last Chance

'Teacher': A First Chance

Through a special arrangement with The Harvard Education Letter, we are letting our readers take a look at an entire sample issue (see page 31) of this very useful little publication. We hope you'll agree that its six information-packed issues per year are well worth the $12 subscription rate offered to AFT members—just a little over half the regular rate. Last chance, everybody.

And while we're talking about education publications, we would like to extend a welcome to the new Teacher Magazine, which premiered this month. Published by the same folks who do such a good job on Education Week, Teacher will come out monthly and will focus on "the growing movement toward professionalization" among teachers. Every profession needs common frames of reference that facilitate the exchange, debate, and refinement of ideas, and Teacher Magazine is a good addition to that effort. It can be subscribed to for $18 a year by writing to: Teacher Magazine, P.O. Box 2091, Marion, Ohio 43305-2091.
The high school years are drawing to a close for your students. Which careers will they choose? How can you help them to unlock their potential?

The ASVAB program can help. A valuable resource for counselors and students, it focuses on career possibilities, combining ASVAB-14, the most widely used aptitude test in America, with an easy-to-use reference library.

First, the **ASVAB Counselor’s Manual** provides information on the test and how to use it.

Second, **Exploring Careers: The ASVAB Workbook** is provided to each student who tests. This workbook contains exercises to encourage military and civilian career exploration.

Third, the **Military Career Guide** helps students use their ASVAB scores to explore military occupations.

Fourth, **Military Career Paths**, a new publication, helps students explore career progression patterns for 38 enlisted and officer occupations.

Designed by the Department of Defense, the ASVAB program can assist your students in unlocking the door to career possibilities. Make ASVAB part of your counseling curriculum.

For more information, call 1-800-323-0513 (In Illinois, call 312-688-4933 Collect).

**ASVAB** A Valuable Career Planning Resource.
How do we help children understand new and often mystifying concepts? In this excerpt from his speech to the AFT QuEST conference this past summer, Lee Shulman of Stanford University used a scene from the popular movie Stand and Deliver to call attention to a time-honored teaching technique:

WHAT'S STRIKING about these recent movies—Stand and Deliver and The Dead Poets Society—is that the hero in the movie doesn't just happen to be a teacher who then has his or her adventures. These movies are filled with classrooms. They're about teachers and kids learning together in classrooms. One of the things I loved about Stand and Deliver—the movie about Jaime Escalante—was that there were some classroom scenes that I thought were exquisite pieces of pedagogy.

Let me remind you of one scene near the beginning of the movie. Escalante has decided he is not going to teach general mathematics to this group. He is going to teach them algebra. And the kids say to him—because kids are very wise—they say, "Mr. Escalante, you don't understand. If we could learn algebra, we wouldn't be in your class." And there is this wonderful scene where he tells them how important it is that they understand the concept of positive and negative numbers. He begins the litany, "plus two, minus two, plus two, minus two." And then, his hands shaping the forms in the air, he says—he knows what they're thinking, remember they're in L.A.—he says, "you go to the beach"—ah ha, he's got their attention—"you go to the beach and you dig a hole in the sand. You dig a hole in the sand. You put the sand next to the hole. The hole; minus two; the pile of sand: plus two. You see that? The hole is minus two, the pile of sand is plus two."

Now he's walking down the middle aisle and he levels his gaze at the student in the back of the room who has one foot and one lobe out the door already—that's the frontal lobe—and he says, his hands still gesturing. "What happens when you put them back together, the plus two and the minus two, what do you get?" The kid resists but the hook is set and after some silence the kid mutters under his breath—God forbid the others should hear him answer—"zero." Escalante says, "That's right, zero. You know not even the Greeks understood zero. Your ancestors," he says, "the Mayans, they invented zero." End of scene.

And what a remarkable scene it is. Because if you look at it and take it apart, it teaches you an enormous amount about what it means to be a teacher. What has Escalante demonstrated about what a teacher needs to be able to know and do? First of all, Escalante shows that you've got to know your subject matter. There is no substitute for that. You've got to know the territory. And Escalante clearly does, but he then demonstrates that content knowledge just is not enough. We've all seen examples of very well-educated mathematicians who can't educate anybody else in mathematics. It's a very difficult subject to teach. Those of you who teach mathematics know that. Knowing the subject is indispensable. Merely knowing the subject is insufficient.

And so we see that Escalante also is masterful in his ways of representing the key ideas. As you watch this movie, you see him use so many analogies, so many examples, so many stories, so many metaphors and similes, so many demonstrations. He exemplifies the most important single principle of learning, which is not reinforcement any more. That was twenty years ago. We know more now. The most important single principle of learning, we now understand, 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 a 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." Like. The teacher is always saying, well it's like this, it's like that, helping students make connections. And if you study what Escalante does in that movie, he's always helping to make those connections, those links. He understands how critical it is to transform new ideas into representations that kids can begin to connect with. He builds bridges for his students to walk across. And that is part of what we understand to be the essence of good teaching.
“Why isn’t there a computer system designed with the teacher in mind!”

PCs can work for you—Discover the SchoolMate™ Solution!

If you’ve shied away from PCs because they’re too intimidating, now there’s good news! Say hello to SchoolMate, the "people-oriented" network for teachers and students. SchoolMate uses the DeskMate™ Graphical User Interface to bring a friendly look and feel to classroom computing. Every person on the network uses the same easy commands throughout.

SchoolMate uses the proven 3Com workgroup to link together Tandy and other PC-compatible computers throughout a classroom, department, or even an entire school. Every person on the network uses the same easy commands throughout.

The ultimate in "teacher ease." SchoolMate puts the teacher in charge, with a wide choice of programs by leading publishers that can be placed on the network. Plus, built-in classroom productivity tools let you quickly create a class roster, set up a grade book, schedule lessons and generate exams.

Make it easy on yourself. Call 1-800-321-0160, and let one of our Education Marketing Managers tell you how to get the SchoolMate solution working for you.

Make it easy on yourself—discover the SchoolMate Solution at . . .
CHINA'S UNTOLD STORY

Social studies materials distort reality, ignore questions of democracy and repression.

BY ANDRÉ RYERSON

A YOUNGSTER studying his lesson on China in Exploring World Cultures (Ginn & Co.) will learn of the selfless dedication that inspires China's Communists, the society's new elite:

The life of a Communist Party member is not easy. Members are expected to carry out party decisions regardless of hardships or personal sacrifices. They are expected to be an example to the people by promoting hard work and thrift. Yet no shortage of candidates for party membership exists.

A teacher's guide published by China Connections (Community Learning Connections, Boston) concludes that

the Chinese government is trying to: 1. improve education throughout the country; 2. build more industries in the countryside; 3. reduce economic inequality; 4. manage and reduce its population; 5. improve Chinese women's rights.

André Ryerson, a former professor of French and Humanities at Amherst College, is a freelance writer and educational consultant who has written previously about peace and global education.

One of the tasks that students are assigned is, "Explain why the Chinese government has the trust of the Chinese people."

One might think the question would have occurred to either of the guide's two authors: Since China is not a democracy and is a country where free expression is not permitted, how do we know that the government "has the trust of the Chinese people"?

Questions like this—about democratic government, democratic values, and human rights—seem not to occur to most of those writing educational materials on China. Indeed in a review I have made, a majority of popular educational materials on China omit the reality of a totalitarian government suffocating its people. Instead, the picture of China that emerges is of a nation defying the odds in developing itself, feeding its people, housing them, providing education and building new factories, while allowing its citizens the pleasures of traditional family life. Rural work teams encourage sharing. Street and factory committees help individuals with their private problems. The textbooks display color photographs that show well-stocked food stores, women doing industrial work, and a countryside of lush agricultural landscapes. Here is a people that has rid itself of old and primitive traditions, a people and government committed to the ideals
of equality, and while the government is structured somewhat differently from ours, the people seem to elect local officials, and the Communist Party works to improve the people's lot. It may be a more controlled society than ours, but the Chinese are not disturbed by this fact. A few of the campaigns of Mao Zedong did not work out so well, admittedly, despite their noble aims. But whatever the problems under Mao, the post-Mao regime has made adjustments, increasing private initiative, and the Chinese people—though less wealthy than we—are happily striving toward a better life.

American students taught with these materials must have been incredulous at the events in Tiananmen Square last spring. Why would Chinese students demonstrate against a government so dedicated to answering the people's needs? And how could such a government respond with a massacre?

* * *

**THE DISTURBING** truth is that most American educational materials on China, with remarkable consistency, avoid those questions that pertain to issues of democratic government, democratic values, and human rights. Questions such as: How are people's basic rights and civil liberties protected? If they are not protected, to what extent are they violated? What institutions are available for people to express their will? How strong are these institutions? Through what modalities does the government or party seek to control people? How effective and total are these controls?

Whether such questions should inform students' study of nondemocratic countries has been an issue of some debate in the field of global/international education. Many global and international educators have argued that it is inappropriately "ethnocentric" to look at other countries through our own democratic lens. As Michael Gordon writes in *Approaches to World Studies,* "Not everyone wants to be like us." Many educators also view global/international education as an extension of multi-cultural education, as an opportunity to increase appreciation of diverse cultures and customs. This group is, understandably, eager to present foreign cultures in the best possible light, so as to thwart students' natural instincts toward prejudice. Indeed, many texts and guides in the international/global field include prefatory notes urging teachers to see such education as an antidote to students' tendencies to ethnocentrism and stereotyping.

A third strain noticeable in global/international materials is the belief that in our interdependent world, under the shadow of nuclear weapons, the future of world peace may depend on educating students to see the commonalities among different peoples, not the differences, for differences can lead to hostility, conflict, and war. This group of educators prefers a curriculum geared to topics such as families, languages, the arts, and other subjects that focus on peoples' common humanity. If they must deal with issues such as government and values, they tend to do so in a neutral voice, implying that just as all peoples have families, some being nuclear and others extended, so all peoples have governments, some being democratic and others not.
Outspoken critics of these various approaches have argued that when international education materials are not animated by a commitment to democratic principles and values, civic education is undermined. Students are left thinking that there are no universal human rights, that democratic values are merely optional, a matter of personal taste, nothing about which to get overly concerned—even possibly—something to be compromised when the going gets tough.

These criticisms raise serious questions about the assumptions, methods, and civic values that presently shape international education. By looking at how a particular country's history and culture are taught, we can better judge the weight of these otherwise abstract arguments. By virtue of its distance, both geographic and cultural, China is a logical choice for a case study of how the doctrines of international/global education are being translated into actual teaching materials.

For this study, I reviewed those textbooks and teacher's guides on China that are among the most widely publicized or used. The twenty-eight reviewed items include thirteen textbooks (five of the most popular secondary world history texts, five of the most popular elementary texts, and three global studies texts) from major publishers with recent copyright dates (mostly 1986-89), plus fifteen teaching guides on China (or with substantial sections on China) from the six most frequently recommended* distributors of supplementary educational materials on China, mainly university-based resource centers for international studies.

It should be noted that the complexity, scope, and level of these materials varies enormously. The textbooks, which aim at an overview of selected countries, devote anywhere from seven to seventy-three pages to China; obviously depth, detail, and concern for history will vary accordingly. Among the teaching guides, three are geared to elementary students and emphasize such topics as China's animals, its calligraphy, and its arts —although they also make small, possibly naive, but essentially dishonest dips into politics and values. Four guides, from the Stanford Project in International and Cross-Cultural Education (SPICE), focus on specialized topics such as the family, education, and rural development in China.

One cannot expect the early elementary guides and the narrowly focused topic guides to give full attention to questions of government and values; but one can insist that they not mislead the reader by distorting facts or ignoring realities that properly fall within their scope. Nonhistorical materials can ignore details of history; but their contemporary accounts should reflect the history that has shaped the present, just as we expect any fair account of contemporary black life in America to make some reference to blacks' second-class status prior to the Civil Rights Movement.

On the issues of democracy and human rights posed earlier, of the twenty-eight materials under review, only six can be said to do a fair job within the limits of their genre. These books have faults, but they are honest efforts in pursuit of truth: *Our Common Heritage: A World History* (Ginn & Co.) by Daniel Roselle; *Eastern Hemisphere** (Macmillan) by Barry Beyer, Jean Craven, Mary A. McFarland, and Walter C. Parker; *History and Life: The World and Its People* (Scott, Foresman & Co.) by T. Walter Wallbank, Arnold Schriker, Donna Maier, and Patricia Gutierrez-Smith; *The World Yesterday and Today* (Silver Burdett & Ginn) by Kenneth S. Cooper and Gary S. Elbow; *China* (Dushkin Group) by Suzanne Ogden; and *Values in Conflict: Literature on China's Youth* (Stanford Program on International and Cross-Cultural Education—SPICE 1988) by Sally Clark, Rod Hollingsworth, Robert Rudholm, and Stan Seaberg.

The remaining twenty-two items fail to give students a fair, honest accounting of what life without democratic rights is like. The overall picture presented in these materials leaves students with little sense that the people of China are not free, that the government's agencies of social control are pervasive, arbitrary, and beyond the rule of law, and that the Chinese people are not happy with this state of affairs. Nonetheless, the extent to which these materials fail varies greatly. Some soften or even applaud features of totalitarian rule. Others offer no more than a lifeless sentence or two about the abuse and extent of Chinese state power. A few do venture, however timidly, into the less benign features of China under Communist rule, or else manage, however crassly, to ask students to intelligently discuss political rights or economic choices, though without providing sufficient facts to nourish such discussion. *China Workbook* (Columbia University's East Asian Curriculum Project), *Economic Choices: China After Mao* (SPICE) and the *World Past and Present* (Harcourt Brace Jovanovich) fall into this last category.

* * *

SINCE THE Communist victory over the Nationalists in 1949, China has been a modern dictatorship of the extreme, totalitarian variety. The distinction is not trivial. (Whether this distinction should drive U.S. foreign policy is a matter of controversy, but that is a separate issue.) Traditional dictatorships have been narrowly political in nature, allowing the people to continue established practices of family life, commercial arrangements, and religious worship. Only when the power of the regime itself is challenged, whether in the form of hostile newspapers or rival political parties, does the government move to crush its opposition. Terrible and often bloody as such dictatorships are—the regime of Ferdinand Marcos is a good recent example—their aims are relatively confined: to perpetuate the regime in power and profit from its monopoly.

Totalitarian regimes, by contrast, have cosmic ambitions to fundamentally change human nature. They aspire to create the "new Nazi Man," the "new Soviet Man," the "new Maoist Man." Not only are political rivals outlawed; all features of traditional society—from religion and commerce to the most basic bonds of

---

*The global education field is not well organized. Though a rigorous effort was made to identify the most recommended materials, it is possible that something has been missed.

**This text should not be confused with the Scott, Foresman & Co. book bearing the same title.

†While this text meets the minimal standard of truth-telling set forth here, it should be pointed out that it devotes a total of only twelve paragraphs to Revolutionary China and, if judged on general criteria such as depth or writing quality, it would certainly be found wanting.
family—are seen as bothersome elements obstructing the way to total control by the state over the lives of individuals. An official ideology becomes the official faith, mandated teaching for every school, farm, factory, and office; its slogans and demands replace all others, and obedience to it paves the narrow road for upward mobility.

After the troops of Mao Zedong defeated the Nationalists, they launched a land reform program that included summary trials and the execution of some 5 million landlords and "rich peasants." Following land reform came other campaigns against counterrevolutionaries and "Rightists" in which millions more Chinese were killed. Of the twenty-eight textbooks and guides, twelve acknowledge these executions, with one text estimating the victims as "possibly as many as 2 million," another as "millions," a third as "about a million," another as "thousands," two others as "many," and the rest of the twelve using quite inaccurate characterizations such as "only the worst landlords" or landlords who were "not willing to give up their land" or who "resisted" the regime or "those who opposed the government" were put to death. In fact, the executions were based on class or political status with people killed simply for having belonged to the "wrong" political party or the "wrong" economic class.

Nonetheless, landless peasants were given land in accordance with Communist promises, the country after years of civil war and chaos was united under a single authority, women were given rights of greater equality, and a mood of cautious optimism prevailed. But scarcely had the peasantry begun cultivating their land when Mao ordered them in 1953 to begin forming collectives and in 1958 compelled them to combine land when Mao ordered them in 1953 to begin forming collectives and in 1958 compelled them to combine into even larger and more impersonal communes, neither of which measures the peasants wanted and to which they offered sullen but telling resistance. The success and popularity of the early achievements is conveyed by most of the materials; the disillusionment is not.

As part of his "Great Leap Forward" campaign, to catch up with the developed world, Mao in 1958 ordered peasants to create whole industries, to make steel in their villages, as if ideological commitment could take the place of technology and expertise and lead the peasants to perform miracles. In place of miracles, China reaped disaster. The diversion of energies from farming to "backyard iron foundries" in a country just barely feeding itself, the resulting chaos in the transport system, and, above all, directives from the party ordering peasants to use lunatic farming methods, produced famine. The Cambridge History of China puts the death toll at anywhere "from 16 million to 27 million" people, calling it "the most devastating famine of the twentieth century in China (and probably in the world)", for one must go back to the Chinese famine of 1877-78 when 9 to 13 million perished "to find a disaster on the scale of the Great Leap."

This terrible consequence of a dictator's whim surely deserves to be known by students learning about China. Yet of the twenty-eight textbooks and guides, only one gives an estimate of 20 to 30 million deaths, another says "millions died," and a third says there was "hunger." For the rest of the books, complete silence on this great

famine reigns. (A textbook especially marked by errors of fact, Exploring World Cultures, affirms: "China has not had a famine since the Communists came to power.")

ANOTHER CAMPAIGN dreamed up by Mao was the "Great Proletarian Cultural Revolution," by which Mao sought to destroy the remnants of traditional Chinese culture (while conveniently crushing his Communist Party rivals and critics), but twenty texts say not a word about the orgy of persecution that struck—even in the estimate of China's official People's Daily—about 100 million people. Only one text among the exceptions goes so far as to cite that number.

SPICES Values in Conflict offers a short story with one of the few graphic passages on the human toll of the Cultural Revolution:

Liang Xia was ten years old in 1966 when the Cultural Revolution began. . . . Her father, a leader in his office, was dragged out one night by people who broke into their home. Then her mother was separated from her. Liang Xia, bewildered, was left alone at home, cooking meals to take to her parents. . . . She did this until one day a man told her not to prepare any more for her father, since he had died five days earlier. . . . Because of her parents, she too was criticized from time to time. In those unhappy days, Liang Xia often dreamed that she was being weighed down by a heavy stone. Unable to remove it, she would cry herself awake. But in time she became accustomed to the snears, and hid the hatred in her heart. After her mother was released, she accompanied her mother to a cadre school to do manual labor in the countryside.

The fictional Liang Xia reflects the reality of nearly 20 million city people deported to the poorest districts of the countryside (the largest forced movement of human beings in recorded history). Mao's frenzied young Red Guards killed, usually after torture, at minimum several hundred thousand persons, virtually none of whom was guilty of anything except having an education, having spent time in the West, or owning "bourgeois" books or records. Soon Red Guard factions were fighting among themselves as well, bringing the death toll to between 2 and 3 million in the judgment of Jurgen Domes in The Government and Politics of the PRC (Westview Press 1985). Some Chinese privately compare it to Europe's Holocaust. (When the Khmer Rouge in Cambodia launched a similar campaign a decade later that killed about a million people, one-sixth of the population, their inspiration was Mao's Great Proletarian Cultural Revolution.)

Only seven texts mention the deportations in any way, and in at least one case, Teaching about World Cultures (Center for Teaching International Relations [CTIR], University of Denver) the mention is favorable: "Students gained a greater respect for the peasants by actually taking part in farm labor and talking with them about the hardships of their life," and "they had a feeling of being an important part of building socialism" in China, of helping the nation to develop. A different picture emerges from those who endured the experience.

In People and Our World (Holt, Rinehart & Winston) by Allan Kowalski and Terry Smart, the photograph that accompanies the section on the Great Cultural Revolution (having said nothing about its human cost) shows
smiling young men and women in uniform with Red Guard armbands, gesturing before a white statue of Mao. It bears the caption: “The Chinese government sent out dance groups, such as the one above, to teach about Mao and communism. How is [sic] media used today to spread political belief?”

Only two texts ever use the word “totalitarian” to describe the nature of the Chinese government. In neither book are details offered to make clear just what this means, and in one of them the text is otherwise a homage to the good life under totalitarian rule. A third text bravely uses the word “dictatorship.” All others avoid such words perhaps from concern that they might provoke “negative stereotypes,” against which teachers and students are constantly warned.

Accounts of China’s governmental system are quite misleading. The teacher’s edition of *Eastern Hemisphere* (Scott, Foresman & Co.) by Joan Schrieber, et al. offers the following description of how China is run:

General elections, in which all the people vote, are held only at the commune and urban-district level. All Chinese citizens can vote for officials of their local people’s congress. Candidates do not have to be Communist Party members, but must be approved by the Communist Party. Members of the local congress elect members to the congress at the level above them. This goes on all the way up to the National People’s Congress. In this way, all levels of China’s government are closely tied together, like a giant pyramid.

The impression conveyed is of a “bottom-up” system of authority in the hands of the people. The same picture is painted by other texts, such as *An American Family in China* (Community Learning Connections, Boston): “Chinese elections are indirect. That means the Chinese can only vote for candidates running for small, local offices, like a neighborhood committee. These local officials in turn elect those who serve in higher offices.”

Teachers who read such guides must conclude that China’s “Democracy Movement,” launched more than a decade ago (long before the Tiananmen Massacre), was the creation of a few grumbling malcontents.

Few textbooks seriously examine China’s legal system. One that does is *Global Studies: China* (Dushkin Group) by Suzanne Ogden. It includes an article by Otto Ulc, a Czech who is now a professor in the United States, who toured China to compare his experience as a judge in Czechoslovakia with the Chinese justice system. He found it to be completely subordinated to the state and the Party, and he asked Mr. Li, a former judge he met, “How did you feel after you had condemned an innocent person because the Party ordered you to do so?” Mr. Li tries to avoid answering, but finally concedes: “Yes, the innocent are bound to be liquidated; there is nothing that can be done about it. Law serves politics. Law serves politics,” he repeated. Nothing comparable is found in other texts.

The instruments of political repression are very developed in China. The courts and prison camps represent only the terminus of the system. Much closer (Continued on page 48)
I F YOU know anything about how Alcoholics Anonymous deals with problem drinking, you probably know more about the successful introduction of seminars in the classroom than you would ever learn from studying the literature of professional development. It will not be easy, and it cannot be done alone.

What I mean by this bald assertion is that most teachers need much the same sort of help to replace deeply ingrained bad habits of teaching as they would need to quit excessive drinking. After recognizing that the old ways are not working for them, after forming a firm commitment to change, the long hard work of actual change begins. Readers will recall that the recent Summer 1989 issue of American Educator presented an excellent case study of such change in an elementary school research project in Hawaii (“Rousing Schools to Life,” by Roland G. Tharp and Ronald Gallimore). Most of us teach pretty much the same way we were taught, so altering our style—or at least moving away from the totally didactic style that Tharp and Gallimore call “recitation”—can be arduous and wrenching.

But if students are going to have a chance of learning to think independently as part of schooling, shift we must, and in the direction of what Mortimer Adler calls Socratic seminars in his Paideia Proposal, (Macmillan, 1982). Adler argues that effective schooling should include seminars as one of three kinds of teaching and learning. The other two modes are didactic (commonly through lectures and textbooks), which has the impor...
tant goal of helping students acquire organized knowledge—cultural literacy, one might say—in the various academic subjects; and coaching in the all-important fundamental skills of academic learning (such as reading, writing, speaking, listening, and mathematical computation). These three modes of teaching and learning are interrelated, obviously, and are often integrated, even though a teacher should ordinarily have one as the controlling purpose of a given lesson.

**THE WHOLE** business of radical change might be much easier if all of us had previously experienced good seminars anywhere in our own education. Even though we may have enrolled in classes called “seminars” somewhere in our formal education, few of us have ever experienced the kind of learning that can occur in the seminars described here.

Seminars differ from typical classroom recitations, which are nothing more than thinly veiled question-and-answer sessions in which the teacher is desperately covering ground in the syllabus and trying to extract right answers from otherwise bored students who want mainly to pass tests. Seminars are a different ball game. The differences are several in number and great in significance.

The purpose of seminars is always to enlarge understanding of ideas, values, and issues through intensive conversation about selected texts. Adding to students' storehouses of information and organized knowledge is not the main purpose of seminars, although such by-products are certainly common. Nor is the purpose of seminars to add muscle to the skills of learning, although seminars do give strenuous practice in close reading, careful listening, clear speaking, and precise thinking. Understanding the intellectual complexities of important ideas demands ever-growing knowledge and skills, to be sure, but enlarged understanding remains the primary goal of seminars.

Seminars abandon coverage of a syllabus as either a
Seminars are not compelled to seek synthesis or closure, the relentless imperatives that drive didactic teaching.

Seminars require good texts. The word is texts, not textbooks. Textbooks, except for anthologies of primary materials, usually contain knowledge organized and presented for a didactic purpose. They are therefore not discussible, which is what seminar texts must be. Being discussible means being rich in ideas, values, and issues, in complexities and ambiguities, perhaps in contradictions or mysteries. Being discussible means being food for thought, not just grist for the memory mill.

Because of Mortimer Adler’s identification with the Great Books Program, many people believe that seminars require the reading of a certain canon of Great Books. That’s wrong. It is certainly true that many so-called Great Books meet the standard of being rich in important ideas and so are worthy of extended and intensive discussion. On the other hand, dozens of works have been discovered outside the traditional canon by teachers who want to use them for seminars: complete works and excerpts, old and new, well known and little known, mainstream and tributary, by women and men, by thinkers and creators in every culture, from all races and ethnic groups, and at various levels of difficulty.

A third-grade teacher in Washington, D.C., recently led a highly effective hour-long discussion of ideas in The Velveteen Rabbit. This wonderful children’s story about the interplay of imagination and reality probably is not on anyone’s list of Great Books, yet the level of conversation was quite sophisticated. This was so largely because the children rose to the challenge of talking about ideas that underlie the deceptively simple plot. The ultimate test of a seminar text is whether it leads to better understanding of ideas that are worth discussion.

Making the shift from lecturer-questioner to seminar leader exacts a considerable payment in time, money, discomfort, disappointment, and unflagging support from others. In the long run, of course, the price seems a bargain, because in seminars teachers reap gratifying rewards: students who learn to think, read, listen, speak, and write better; escape for teachers and students from dependence on the mindless recitation of information into the pleasures of genuine intellectual discourse about ideas; the satisfactions for teachers of deepening their own understanding of important ideas in our culture and of broadening the horizons of their own general education.

These are my conclusions after spending the last five years assisting schools in their efforts to introduce seminars of the kind advocated by Adler. For several years, Adler and his colleagues have been urging schools to commence a “Wednesday Revolution,” which means simply scheduling every school child to have one seminar a week (on Wednesday morning, according to Adler’s hypothetical illustration) with the objective of the discussion—propelled by a leader who is skilled in Socratic questioning—the students’ enlarged understanding of important ideas, values, and issues found in readings, art works, and scientific experiments chosen for their richness in these qualities. Any observer of trends in school reform will recognize how well Adler’s proposal fits with vogueish talk about restructuring schools and critical thinking and renewed emphasis on
Anita Lee teaches sixth grade at Shepherd Elementary School in Washington, D.C. A teacher for seventeen years and a member of the Washington Teachers' Union, she has been using the seminar approach in her classroom for two years. She was interviewed by Liz McPike, editor of American Educator.

Editor: Many people, I'm sure, feel they already conduct discussions in their classrooms, especially as part of social science or English classes. Wouldn't your English class, for example, read a short story and discuss it? What are the differences between that kind of discussion and a seminar discussion?

Anita Lee: First, let me say that the great majority of exchanges in a classroom are not anything like a discussion, but, rather, are question-and-answer sessions in which the teacher is checking to see whether the students have read an assigned text or listened to her lecture. But, yes, there are occasions when, as you say, an English class might read and discuss a short story. It could be the same short story I would choose for a seminar, but in a typical classroom discussion I think the teacher's questions would be much more based on what's happening in the story. What happened here? What's the plot? What's the theme? These are the types of questions we would be looking at in a regular reading or literature class, at least the ones that I have taught, and also the ones I attended when I was a student.

In a seminar, the questions are different because the goal is different. You are looking more for ideas. You're trying to get to the issues behind the story. What ideas do you see forming? What are the author's ideas? What are your ideas, and how are your ideas different from someone else's ideas?

In a traditional classroom discussion, there is usually a right and wrong answer. The teacher knows the right answer, and the child is trying to give the answer that the teacher is looking for. And the child is constantly trying to figure out, 'Am I pleasing the teacher because I'm saying the right answer?' In a seminar, there is none of that. There are no quick answers. For example, one of the readings I used for a seminar with my sixth-grade class was The 18th Emergency by Betsy Byars. My opening question to the children was, 'Which character in the story would you choose as your best friend?' Children chose various characters, and that got us into talking about what kind of a person you look for in a friend. What is a friend? Why do you choose friends? What do you do with a friend? What makes a friendship strong? Is friendship just for companionship? A lot of issues came out of that. The text was a means for displaying them.

Editor: But in a regular classroom discussion of this short story, might you not have raised a question about what constitutes friendship?

Lee: Probably not. I would have been so set on making sure the children understood the book, the plot, the qualities of each character in the story, and so on. The discussion would be much more cut and dry. Oh, we may have had time to spend a few minutes on something that's more of an "idea" question, but even that would be very teacher-centered and would lack the kind of sustained time, digging, and reflection that takes place in the seminar. It would not have gotten the children to think deep and long about these larger issues, the ones that I think of as the truths of our world, the ones a child will have to face anywhere he goes.

When we discussed Stephen Benet's Trials at Salem in seminar, the children grappled with questions like: Where does justice come from? What is its basis? Is there more wisdom in the majority? I choose texts that will raise important questions and that will also help the children find answers. But they have to think for themselves. They have to formulate their ideas, make them clear, and be accountable for them. In a traditional class, we don't give students the opportunity to really start thinking. We're so busy trying to develop skills and certain bits of knowledge, which we think we have to pour into children, instead of pulling out their ideas.

Editor: How do you stop the discussion from being dominated by some children? Is that a problem?

Lee: One technique I use is to sometimes ask the very verbal ones to be observers. I have about twenty-six children in my class. I might pull out four children to be observers. Their job is to really listen carefully. I have a form I give them on which they have to record their observations. What are the really important ideas? Did somebody say something that you have never thought of before? Is the opening question a good one? Would you have changed that opening question? Are there any children who you feel are dominating the discussion? If so, who are they? How did they dominate the discussion? What should they have done?
So at the end of the seminar—there are a few other questions on the form—the way we begin our critique period is for the observers to come forward, and that's the first time they may speak. The whole time they have not been able to speak, even though they prepared for this seminar just like everybody else. Now, remember, I'm often taking at least one of the most vocal people. They usually are dying to say something; they love to talk all the time anyway. But this person has sat there quietly for an hour or so, and this is the first time he or she gets to say something. This does a few different things. It enables children to recognize problems for themselves without me having to say, Johnny kept talking the whole time, or Susie is dominating, or Mary did not speak up. The children are able to say it to each other. And they can put themselves in the situation and understand why certain behavior is a problem.

The other way I handle behavior problems—let's say the children get too fidgety or are carrying on private conversations—also relies heavily on the children themselves enforcing our rules. My class now has enough experience with the seminar format—and cares enough about what happens—that they are able to look at each other and say, "You're ruining our seminar." They have grown to that extent.

Sometimes, too, I might stop a seminar. If no child has taken the initiative, I'll put my hand up in a time-out signal. Then we discuss the rules of the seminar, and they know the rules. Sometimes somebody has forgotten the rule or somebody just isn't following the rule. But after we go back over it, someone will say, "Oh yeah, we're supposed to be doing this, or we're not doing that." They know that the rules are necessary to make the seminar work, and they want it to work.

Editor: What do you do when it's clear that someone has not read the text?

Lee: Well, let me tell you, in the beginning that used to be a big problem. When I first started seminar, there were children who definitely didn't like to read, even though they could read. They told me that from the beginning, as soon as I said that our class this year is going to do something new, we are going to read these particular works, and we are going to have seminar. One little girl came to me and said, "I'll tell you right from the beginning, Mrs. Lee, I hate reading. I don't like reading and all these years I don't read. When they tell me to read books, I don't read them. I just don’t." There were other children who didn't do the reading beforehand. Unless I had something very short that we were going to read right there together, they were not prepared. For the first few seminars, I told them, that's okay, you are not in the seminar. If you haven't read it, you can't be in it. So the first few seminars there were some children who were on the outside of the seminar.

Editor: You mean you actually placed them on the outside of the circle?

Lee: That's right. I told them they had to sit over in certain corners of the room and watch. You can be an observer, but you cannot be a participant in this particular seminar. The seminar would go on, and these children would have the text in front of them because I didn't completely isolate them by saying now you can't have the text we're discussing. I let them have it. And what other children began noticing is that these children were reading along. Somebody would say, "Look on page ten and on page ten it tells us about..." and these children on the outside of the circle would look to see what was on page ten. They started getting interested, and they started preparing for the seminar so that they could take part.

Editor: Let's stick with the children for a minute. What do they think of the seminar approach?

Lee: We took a survey of all the children in our school last year, and we asked them that question. One child said, "I like the seminar because we don't have to raise hands and everyone can talk when they feel like it." And another child said, "I like seminar because I get to share my ideas and feelings." And another child said, "I like it because I can disagree and no one gets in an argument." What some children have said to me takes me back to that girl I mentioned before, who said she didn't want to read and she wouldn't read. By the end of this class year she was telling me, "Mrs. Lee, I really have liked reading in your class. I really just started reading." Now for a child like that, the seminar has opened up a door for her. It's a door that she is going to need for the rest of her life, and when she was turned off to reading, that door was closed for her.

Editor: Let's try to get to the bottom of that girl's turnabout. Why was she turned off before and why is she excited now?

Lee: In my opinion, I think it's partly because, in the seminar approach, everybody is accepted as equal. There is no one with all the right answers. Children are held accountable for their ideas and comments, yes, but that also means they are taken seriously. They are treated as people with valuable ideas worth listening to. Too often in school, I think, we listen only for what we want to hear. We aren't really listening to children and what they are actually saying, we are listening only to determine if they are saying what we want to hear. If they're not, we sometimes don't hear the rest, and we go on.

A seminar is an exercise in shared knowledge. That's a very different feeling from what usually prevails in the classroom. A reading becomes something that the children collectively confront and come to terms with. In some of our seminars, if we have a poem or other short reading, we might all read it together. And our understanding grows together.

Lastly, I would just say that ideas can be very exciting. There is an enthusiasm that arises from the issues that come up in seminar. Children don't want to be left out. They have ideas about an issue, and once it's framed in the right way, they are very interested in knowing what someone else has written about that particular issue and what their classmates have to say. All of a sudden, here is an avenue for my thinking to be in. The seminar ignites something, and the searching, the learning continue to take place long after the seminar has ended. The seminar is just the beginning.
writing in all subjects.

As much as school budget-minders would like to imagine a quick and easy path for making seminars a regular feature of instruction, they will not find one. To be frank, nobody can say for sure that any route guarantees reaching the desired destination, which Rexford Brown of the Higher Literacies Project at the Education Commission of the States calls simply "thoughtfulness" and Theodore Sizer of the Coalition of Essential Schools refers to as "students learning to use their minds well." Uncertainty about what works exists because the schools' experience with seminars is still young, because few schools regard thoughtfulness as more than an interesting experiment and an exclusive preserve for certain students and certain teachers, and because the institutional environment surrounding budding seminars stunts rather than nurtures their growth.

Fortunately, the prospect is far from hopeless. We have learned a great deal in five years, and it is possible to list and describe the essential ingredients of a seminar program that will have a high probability of sustained success.

To prepare, read any text as you would read a love letter.

I

MAGINE THAT you are a New Yorker who has never learned to drive a car and who at age thirty has moved to Los Angeles. Now driving becomes essential. How best to learn? Because you are a teacher, you look for a book, a self-help book, a compilation of the main things you must know in order to get from place to place. You recognize the importance of behind-the-wheel practice and the tutelage of a skillful coach, but the handbook is at least a starting place, and it has its own importance as a summary of accumulated experience by many other learners.

That is what we have here: an abbreviated guide for teachers who want to get started leading seminars as a regular feature of classroom instruction, even as they are also making arrangements to enroll in training and practice sessions conducted by a qualified coach. These are guidelines predicated on what teachers have said they find necessary to make seminars work in their classrooms, from kindergarten through high school.

Given the assumptions about the way seminars ought to be, teachers new to this kind of instruction have developed the following guidelines for themselves:

- Start gradually. Don't try for lengthy seminars at first—ten or fifteen minutes in the early elementary grades, with the duration lengthening toward thirty or forty minutes in the upper grades. Expect students eventually to be able to handle seminars at least twice as long. Initially, pick short works with accessible language, but works that will require students to confront important ideas and to stretch their thinking. To prepare, read any text as you would read a love letter. Read to formulate questions. Select short passages for special attention. Consider using two works that relate to each other in their treatment of a subject—the familiar compare and contrast.

- Develop an opening question that will give everyone a chance to think and answer without feeling vulnerable and threatened. Use a question that has several plausible, defensible answers, and the conversation will flow from the differing answers that students choose. Frame a question to which you don't know the answer, perhaps one arising out of your own curiosity or uncertainty.

- Be didactic only when supplying information necessary to advance the conversation. Be a co-learner and a discussion facilitator, not an authority on "correct" answers. Develop an opening question that will give everyone a chance to think and answer without feeling vulnerable and threatened. Use a question that has several plausible, defensible answers, and the conversation will flow from the differing answers that students choose. Frame a question to which you don't know the answer, perhaps one arising out of your own curiosity or uncertainty.

- Listen hard. Follow every answer with another question. Rephrase a question, if it's not understood. Permit students to "pass" if they are not prepared to speak. Insist that answers be clear. Allow a few seconds for students to think about their comments; take time to reflect. Stick with the subject at hand. Insist on using the text to support answers. Refuse to supply answers yourself; get the students to dig for their own, no matter how arduous the process seems. Neither praise nor put down their ideas and their reasons, but keep pressing them for clarification, amplification, explanation, and implications. Encourage discussion of differences.

- Take stands to provoke thoughtful disagreement but not merely to start arguments. Keep an open mind, especially when you sense it closing or when you know you have firm opinions already. Remember what was said of Senator Robert Taft: "He had the best mind in the Senate, until he made it up."

- Be didactic only when supplying information necessary to advance the conversation. Be a co-learner and a discussion facilitator, not an authority on "correct" thinking about the ideas in the text.

- Begin a seminar with enough introduction to set the stage—but no more. Get focused on the purpose of the seminar—enlarged understanding—and get on with the conversation.

- Don't expect to be a perfect leader. Don't even try. Be willing to appear awkward and uncertain; students know those feelings well. With experience will come skill and confidence in the natural course of doing many seminars, perhaps as many as ten or fifteen.

- Be a discussion facilitator, not an authority on "correct" answers. Develop an opening question that will give everyone a chance to think and answer without feeling vulnerable and threatened. Use a question that has several plausible, defensible answers, and the conversation will flow from the differing answers that students choose. Frame a question to which you don't know the answer, perhaps one arising out of your own curiosity or uncertainty.

- Listen hard. Follow every answer with another question. Rephrase a question, if it's not understood. Permit students to "pass" if they are not prepared to speak. Insist that answers be clear. Allow a few seconds for students to think about their comments; take time to reflect. Stick with the subject at hand. Insist on using the text to support answers. Refuse to supply answers yourself; get the students to dig for their own, no matter how arduous the process seems. Neither praise nor put down their ideas and their reasons, but keep pressing them for clarification, amplification, explanation, and implications. Encourage discussion of differences.

- Take stands to provoke thoughtful disagreement but not merely to start arguments. Keep an open mind, especially when you sense it closing or when you know you have firm opinions already. Remember what was said of Senator Robert Taft: "He had the best mind in the Senate, until he made it up."

- Be didactic only when supplying information necessary to advance the conversation. Be a co-learner and a discussion facilitator, not an authority on "correct" thinking about the ideas in the text.

- Be willing to coach students on seminar behavior, especially as you and they are learning how to conduct seminars: speaking, reading, listening, observing, taking notes, taking turns, citing evidence, defending positions, paraphrasing passages, repeating another student's statement, pronouncing and using words correctly, and so on. Take time for the class to critique every seminar.
- Handle chronically silent students outside the seminar, but not until they have been noncontributors for three to five seminars. Even so, recognize that active listening is a legitimate form of participation.
- Do not permit unprepared students to participate. Seat them separately in the seminar room. Make it clear that the conversation is for those who have read the text.

What an observer sees when teachers become skillful and confident in using all these techniques is revealing for anyone wondering how seminars will work and trying to predict whether they can produce change for the better in the reality of today’s schools. In good seminars, one sees: students learning the protocol of intellectual conversation; willing and easy reference to the text to support arguments or comments; effective exchanges with other students, including courteous questioning and growing respect for other students’ ideas when they are well defended; keen interest in keeping facts straight while wrestling with “why” questions; reduced reliance on the teacher and correspondence greater self-reliance.

Most teachers need fifty to sixty hours of intensive participation in seminars to be properly prepared to lead seminars with their students and with other teachers. Such preparation might begin with observing an experienced leader in action with students or other teachers, but the would-be leader should soon plunge into full participation. A four-day workshop for twenty-five participants constitutes a sound beginning, provided it entails at least one full-blown seminar daily; ample time for reflection and critique, and intensive exercises designed to cultivate the skills of close reading, concentrated listening, and Socratic questioning. Consecutive days produce better results than scattered days. With emphasis on active engagement of the participants in whole group and small-group activities, the workshop should be demanding—a full schedule, tough readings for seminar discussion, and the expectation that no one will hold back. Good seminars and workshops are best thought of as “Outward Bound for the Mind.”

Some of Adler’s Paideia Associates, people who conduct the kinds of workshops I am describing, would argue for a Rule of Fives: watch five seminars, participate in five, lead five; then you will be ready for students. These fifteen preparatory seminars need not—indeed, should not—be arranged in separate blocks. That is, it would be wrong to think that all the observation should come first, then the participation, then the leading. Rather, these three kinds of activity are dissimilar in

**Keeping the Seminar from Becoming a ‘Bull Session’**

**Editor:** In many group discussions that I’ve witnessed, once they move beyond narrowly conceived questions and answers, there is a hesitation to apply intellectual standards or to make any judgments about the quality of the comments or opinions put forth. “Well, that’s your opinion, that’s valid for you, maybe another idea is valid for someone else” is often the operational tone. Opinion is treated as by its nature rather untouchable, like a preference for blue ties or a taste for strawberry ice cream. If that is the operating tone, what are children learning other than each other’s often rather unfounded ideas and a misguided notion of tolerance?

**Dennis Gray replies:** That would be a terrible misuse, a terrible abuse of the seminar. I certainly don’t believe that all ideas or opinions are equally cogent, insightful, interesting, or wise, and I don’t believe we do children any good by letting them think otherwise. In fact, the seminar is the perfect setting for teaching children that their opinions—and other people’s opinions—should not be given a free ride; ideas and opinions are to be valued according to the cogency of the supporting arguments and evidence brought to bear on their behalf. The seminar is an opportunity for teaching children the responsibilities that go along with thinking.

But you’re absolutely right, the notion that tolerance requires us to affirm all ideas or that opinions about ideas fall into the same category as statements of personal taste, those notions have taken hold. As a result, kids have gotten a lot of practice, which has been validated by schools, in this kind of “bull session” business. It takes some time to root it out. I see it primarily at the beginning, when seminars are first introduced. But it changes.

A good seminar leader can insist upon standards of intellectual rigor in a way that is nonthreatening and that doesn’t constitute put downs and hurt feelings and all of that. For example, what I might do, if someone makes a less-than-cogent comment, first of all, I notice whether other people are picking up on it. If they’re not, I usually direct them to it. I would say, “Well, Frank, did you hear what Mary just said? Would you repeat it in your own words?” Suppose Frank can’t repeat it, I’d say, “Could you repeat it if Mary says it again?” Then Mary says it again. “Now, Frank, can you put this in your own words? Okay, now, how do you think that sounds? Does that seem like a good understanding of the part of the text that Mary is pointing to?” Then I’ll call in a third party and I’ll say, “James, what do you think of this exchange between the two of them? Do you think Frank did justice to Mary’s idea? Do you think Mary could have said her idea better?” And so on, along those lines. It takes a semester and sometimes a year’s worth of seminars before kids get the hang of it. They start challenging the text and each other. They start finding foolish statements and contradictory statements and so forth. It takes awhile, but with a good leader, it happens. The free ride for sloppy thinking is over.
What teachers know, from bitter experience, is the futility of halfbaked, underfunded, feebly tended forays into school improvement.

Their demands and effects, so mixing up the sequence is a decided benefit. Teachers gain much more from observing, for example, after first participating in one or two seminars. Whatever the pattern, it is not the typical wham-bam-Is-that-all-there-is? style of "inservicing" that characterizes Jiffy Lube and all too much professional development for teachers.

After a solid start in a four-day workshop, teachers should set up a schedule of, say, monthly practice seminars for themselves, still using texts for discussion that have been selected to stretch their minds and advance their general education. The aim is to become comfortable with the challenge of confronting new sources of ideas—new texts to the participants, that is. So they should avoid readings that are familiar from college days or that are found in the syllabus they use for their teaching. Again, every practice seminar should be followed by a thorough critique of the leader and the participants. Video recordings of seminars can be used to good advantage for analysis and self-correction.

LIKE ANY other innovation in education, and especially in instruction, seminars will falter and fade quickly without proper institutional support. Old habits die hard; new ones feel uncomfortable. Imagine trying to switch from playing tennis right-handed to left-handed and you will have an approximation of the time, practice, and coaching needed to complete the task of teaching your didactic recitations with authentic Socratic instruction in which the students are the principal workers and thinkers.

Unless teachers receive help in the following areas, progress in the introduction of seminars is likely to be fitful at best:

- Released time and substitutes to permit taking the workshop and participating in practice seminars.
- Opportunities for observation and constructive criticism from trainers and other teachers. Access to video-recording equipment for this purpose.
- A suitable room for seminars, preferably one with a large hollow square of tables with seating for twenty-five participants and some added seating for observers. A chalkboard is good to have, too.

- Changes in the schedule, starting in the upper elementary grades, to permit seminars to run from one hour up to two hours. The longer durations are not advisable or necessary in the early going, when leaders and participants are still finding their way, so the upheaval of a major shift in schedule can be held off until the second year of implementation.
- Suggestions, sources, and funding for obtaining copies and building a library of readings and art works suitable for seminar discussion.
- The appointment of a teacher or administrator (or volunteer) as seminar coordinator for each school, particularly for the first few years of a new program, to facilitate all the support called for here and to maintain a support network with other seminar coordinators. Released time for the coordinator to do the job.
- Authority and time to think and plan on critical issues: how to integrate seminars with the remainder of the curriculum; how to deal with opposition and skepticism; how to provide seminars for poor readers and other students who might mistakenly be judged poor risks for effective participation; how to handle the matters of grading and testing in connection with seminars; how to arrange for training of other teachers; how to connect seminars with writing so that more thoughtful writing flows from better critical thinking in seminar discussions; how to use clever scheduling, cooperation among seminar leaders, and extra leaders to reduce the size of seminar groups to twenty-five or fewer (especially important in the early seminars, when skills are still shaky).
- The participation of key administrators in seminar workshops, even to the extent that they qualify for leading occasional seminars for students or teachers: the superintendent and the senior staff; curriculum specialists, principals and vice principals. Principals are particularly critical to the start-up phase.
- An extensive public information campaign to inform parents, employers, and the rest of the community about the seminar program, its rationale, and its anticipated benefits.
- Clear signals to everyone concerned that ideas are the property of all human beings, and therefore all students and teachers; in other words, seminar discussions are appropriate for everyone and need not—must not—be restricted to some elite subgroup of teachers and students.

Without doubt, what is called for in the way of individual commitment to change, adequate investment in professional development, and unequivocal institutional support is a high aspiration. What teachers know, however, from bitter experience, is the futility of halfbaked, underfunded, feebly tended forays into school improvement. Inevitably, they fail and leave a sour aftertaste of frustration and cynicism. Perhaps now, with a nation thought to be at risk because of deficiencies in public education, perhaps now is the proper time to undertake a reform that is not done on the cheap. If employers, college officials, parents, and a self-styled "Education President of the United States" genuinely want high school graduates who can think, read, write, and continue to learn, no time could possibly be more propitious for rousing the schools from their intellectual coma through the introduction of seminars.
A MUSEUM IS SOMETHING YOU DO

Science museums help teachers bring hands-on approach to class.

BY KARIN CHENOWETH

With every new study documenting the lack of scientific knowledge among American students comes a call to teach more science and math, particularly in the elementary grades. But elementary school teachers often feel uncomfortable with scientific subjects and are, therefore, reluctant to teach them.

To overcome that reluctance, thousands of teachers are turning to their local science museums where they are learning both more science and new ways to teach it. Such museums have "the style, the level, and the content that is close to what you want to do in the classroom," says George W. Tressel, a leader in the development of informal science education and a senior staff member at the National Science Foundation.

To show how a science museum and a university course approach the teaching of science differently, Tressel tells how each might teach about electricity. A teacher in a museum course might be handed "a battery and a wire and a couple of bolts and a light bulb and be told to make a flashlight." In a university course about electricity, the same student would "open a textbook showing diagrams and talking about currents."

To Tressel there is no question that the more informal, "hands-on" approach of the science museum leads to more learning. And teachers attending a workshop at Philadelphia's science museum, the Franklin Institute, agreed.

Museum courses "relate more to the classroom" than do university courses, said Ernestine Bonnett, a fourth-grade teacher at Daroff Elementary School in Philadelphia. The workshop Bonnett attended, like many sponsored by science museums, trains teachers to feel comfortable teaching hands-on science. Advocates of hands-on science are fond of repeating the Chinese proverb, "I hear and I forget. I see and I remember. I do and I understand." They argue that students need to manipulate objects and personally observe phenomena in order to become truly interested in science.

And that goes for adults as well as for children. The workshop participants were not lectured at. They conducted experiments that were designed for them by museum staff and by each other. In one experiment, workshop participant Valarie Richardson poured hot water into bottles and had group members put ice-covered cloths over each bottle's opening. The rising hot air clashed with the falling cold air and made clouds, at least most of the time. Those who failed to form clouds pondered what had gone wrong—had they not covered the bottle top quickly enough? Had they not used enough ice or hot water? Had they provided too little heat to generate clouds? That kind of inquiry, the teachers were assured by the museum staff, was just as much part of the scientific method as performing successful experiments.

By organizing the workshop of thirty or so teachers into small groups, providing them with simple materials, and having everyone participate in the experiments, the teachers were "being taught the way they want us to teach," Linda Weiss, a kindergarten teacher in Sharswood Elementary School in Philadelphia, said.

Karin Chenoweth is a Washington D.C.-area freelance writer.
Linda Weiss's jar of food coloring-tinted liquid illustrates for her colleagues how fluids flow through the root systems of trees.

Tressel, the creator of 3-2-1 Contact, the children's TV science show, believes that "Science is the humanities of our time... Everybody needs a baseline knowledge of math and science." Unfortunately, Tressel says, studies show that elementary school teachers spend virtually no time at all on science, and what time they do spend rarely permits students to manipulate objects or otherwise participate. "For all practical purposes, we wait until you're in high school and then ask, 'Would you like to take chemistry or physics or botany?' My kid said yes because he had a microscope and a chemistry set and a father who took him to the museums. He's all set. For most of these kids who haven't had that, if they say yes there's a good chance they're going to fail."

Tressel and others in the science museum field evince a sense of mission and purpose. They have found that people learn about the functioning of the heart after walking through a model of one; about aerodynamics by designing airplane wings; about color by experimenting with lights; and about astral distances by looking through telescopes. They have found that the difference between performing an experiment and watching one being performed is so profound that it can make the difference between an interested student and a bored one, a student who learns and a student who doesn't.

Their expertise in finding ways to make science fun and interesting, they feel, makes science museums an invaluable resource for teachers looking to improve their science curriculum. This is one reason why the National Science Foundation has given about $60 million a year in grants to science museums around the country to develop teacher training programs.

Bonnie VanDorn, the executive director of the Association of Science-Technology Centers, says teacher training is a relatively new role for science museums. When she began in 1971, whatever teacher training museums did "was usually an ad-hoc outgrowth of the old-fashioned class trip." After the trip to the museum, a few teachers would be inspired to conduct hands-on experiments in their classrooms. They might then call on the expertise of the museum staff to develop programs, but, says VanDorn, "not many teachers were involved."

The number of science museums is increasing all of
EACH SCIENCE museum has a different method for training teachers. Philadelphia's Franklin Institute, for example, holds camp-ins for teachers one night a year, conducting demonstrations and hands-on experiments all night. It had held several camp-ins for children—copying an idea originated in Ohio—but, says Jacqui Walsh of the Institute, "We weren't sure any grown-ups would want to stay up late and sleep on marble floors." As it turned out, hundreds did, and the program has been growing every year. The teachers, Walsh says, have welcomed the opportunity to really study the exhibits without the distraction of chaperoning thirty or more kids on a class trip.

The Franklin Institute, one of the oldest science museums in the country, has hundreds of exhibits that permit the viewer to personally manipulate objects and then observe the results. One can mix colored lights to see how different colors are formed. One can see the effect of blasts of air on a ball or design an aerodynamically sound airplane wing. One can see a real human heart and how an electromagnet works.

**Scientist-by-Mail**

A mutual interest in science led Senta Burton and Gerhard Heinrich to begin their correspondence. When the two discovered that they shared a talent for playing the violin, Gerhard proposed that they exchange ideas on how to design the instrument so that it could be played on a spaceship in zero gravity.

The two worked on plans for their "space violin" during nine months as pen pals. Nine-year-old Senta, a fourth grader at the Pierce School in Newton, Mass., hoped then to meet her pen pal. But when the appointed day came, Dr. Gerhard Heinrich broke the date. He had to complete his work on a $1.5 million grant proposal to continue his research on Alzheimer's disease at Boston's University Hospital.

Senta and Dr. Heinrich may seem like an unlikely pair of pen pals. But their relationship is typical of the pairings made through the Science-by-Mail program at the Boston Museum of Science.

The program, launched in 1988, is designed to increase the knowledge of fourth to ninth graders interested in science by having them correspond with professional scientists. The basis for the correspondence—which can then take unexpected forms, as did that between Senta and Gerhard Heinrich—is the resolution of a series of scientific problems devised by museum staffers. When the youngsters have solved the problems, they are sent to and critiqued by the scientists, with the museum serving as the go-between.

The students and scientists involved in this year's program tackled three problems:

- In one, students learned about the scientific principles underlying such circus tricks as bubble making and were then challenged to put together their own circus activities.
- In another, amateur sleuths got a chance to sharpen their skills. Students collected and read fingerprints, studied tracks, collected fibers and identified teeth marks. (The Boston Police Department Crime Lab assisted in the preparation of this problem.) Having learned some techniques for detective work, students were asked to set up a mystery at home (for example, who removed an object from a room, bit into an apple, or drank from a glass?) and to solve it.
- In a third, students were asked to investigate how waste is disposed of on Earth, particularly in their own communities, and to apply what they had learned about earthly trash disposal to the design of a waste-management system for a space station. (When Senta suggested in her waste-management project that astronauts might wear disposable paper underwear, Dr. Heinrich calculated how much paper that would require and suggested to Senta that the idea was impractical.

He encouraged her to come up with another idea. She did. She designed a solar-powered machine that could wash clothes in space.)

Science-by-Mail packets include various items to get the young scientists started. The waste-management kit contained a packet of yeast for an experiment on decomposition. The detective package contained a packet of "special police fingerprint powder" and a detective's notebook.

At the end of the year, the Museum of Science hosts Science-by-Mail Day at which time the youngsters and scientists get to meet, exchange ideas, and work together, carrying on in person the process they began through the mail. At last October's Science-by-Mail Day, two hundred students, fifty scientists, thirty-three staffers and four hundred visitors, including parents, participated.

**AND WHAT** of the space violin? Dr. Heinrich suggested that if he and Senta turned a violin upside down they could simulate the effect of playing the violin in space where there is no gravity.

Senta countered by suggesting that an elastic with one end tied to the bow and the other end tied to the violin could serve as a spring and would bring the bow back to the strings, simulating the effect that gravity has on the bow on Earth. "A good solution," says Dr. Heinrich.

For information on how your students can participate in Science-by-Mail, see Museum-to-Go, p. 28.
In addition to the standing exhibits that were accessible to the teachers all night, last year the museum arranged a special event: The six hundred attending teachers were confronted with a mock robbery. They were expected to detect who had stolen gold from a special gold exhibit. To aid their search for the culprit, the teachers were taught how to perform hair analysis, skin analysis, and other forensic tests. And, they learned how to reproduce the whole activity in their classrooms.

The Franklin Institute, with a grant from the National Science Foundation, has also developed a series of self-contained kits that teachers can use to teach hands-on science in each of the elementary grades. Each of their more than twenty kits contains activity suggestions for the teacher and enough materials—usually simple, everyday objects such as tennis balls, paper clips, and horseshoe magnets—for thirty kids to work in groups of three.

One of the more sophisticated kits includes a large tank, a small terrarium that fits inside of it, algae, elodea (a green plant), bugs like isopods and crickets, and snails, among other things. With these materials, students construct their own ecosystem, the lifecycle of which they can then examine and features of which they can graph and chart. They can study the interaction of the ecosystem's various elements, seeing, for example, that plants can't live without light and water; that when crickets die, other creatures eat them; and that when the crickets themselves are hungry, they eat each other. They also see the effect of a burning candle—pollution—on the ecosystem.

Under an arrangement with the Philadelphia school system, by next year all elementary school teachers in the city will receive four such kits per year, each one specifically designed to fit the curriculum. If teachers want help in learning how to use the kits, they can attend workshops like the one cited above. But each one nevertheless comes with a suggested lesson plan. (For information on how teachers outside of Philadelphia can order similar kits, see sidebar page 28.)

The kits are important because they eliminate one of the problems inherent in teaching hands-on science. "The biggest deterrent I hear from teachers are the materials," says Ilma Levine, one of the founders of the storefront Science Center of Tompkins County in Ithaca, New York. "You have to run around for hours assembling the materials. Teachers just can't do that. So if they get the kits, they will do the projects."

A

OTHER SCIENCE museum that offers kits to teachers is Fernbank, in Atlanta. Fernbank is unusual in that it is wholly owned and operated by the county school system. Begun with federal money that was available after Sputnik, it has the third-largest planetarium in the country and leases a sixty-five-acre forest next door. Each school in the school system is permitted to take as many as six classes to the museum each quarter or request a museum instructor to come to the classroom as many as four times a quarter. Instructors arrive with telescopes to see sunspots or king snakes for biology lessons.

On field trips to the museum, students study botany and ecology in the forest, astronomy in the planetarium,
meteorology at the weather station (which includes a seismometer and satellite telemetry from the National Weather Service) and microbiology in the electron microscopy laboratory.

Fernbank offers special internships to students, permitting tenth, eleventh, and twelfth graders the opportunity to pursue individual research projects two afternoons a week. Such projects might be, for example, collecting plant and animal specimens and then examining their cell structure; or designing their own project using the scanning or transmission electron microscopes. In addition, sixty ninth graders each quarter spend every day at the museum, studying geology by participating in field and laboratory investigations in mineralogy, petrology and mapping; electron microscopy by preparing and photographing specimens; and the tools and techniques of other areas of science by actual participation. Fernbank also conducts twenty-five

**MUSEUM-TO-GO**

A number of science museums are now offering products and services that will make it easier for you to pursue hands-on science teaching;

**Self-Contained Classroom Kits**
- More than twenty of the Franklin Institute kits are now being marketed by Science Kit and can be ordered by schools and districts throughout the country. For a brochure, call 1-800-828-7777 or write to Science Kit, Inc., 777 East Park Drive, Tonawanda, New York 14150-6781. Prices range from $100 to $200 for a kit equipped with supplies for a class of thirty. To re-use the kit with a subsequent class, you will have to replace the consumable items; that cost should run about one-third the cost of the initial kit.
- Ohio's Center of Science and Industry (COSI) distributes its kits through Fun-in-Science. Sample kit activities include dissecting an owl pellet, raising a caterpillar, and examining the waterproof qualities of a duck's feather. When ordering thirty or more kits, the per-kit cost of the initial kit.
- The Lawrence Hall of Science, University of California, Berkeley, CA 94720.

**Science-by-Mail**
- Students from anywhere in the country may participate in the Boston Museum of Science's Science-by-Mail program (described in sidebar on page 26) For further information, call 1-800-729-3300. The cost for a group of four students to participate is $40. Other museums around the country are also beginning their own Science-by-Mail programs, so check with your local museum as well.

**Aerospace Hotline**
- The Alamogordo Space Center in New Mexico provides a toll-free phone number to teachers and students who need information on aerospace topics. Students and teachers involved in science fair projects are particularly encouraged to call. Experts will help you identify needed materials and may even Xerox and send needed information to you. One student counseled by the Center won national recognition for his science fair project on producing oxygen for use in a space station. In New Mexico, call 800-634-6438. Elsewhere, dial 800-545-4021. Or write, P.O. Box 533, Alamogordo, New Mexico 88311-0533.

**SCIENCE SHOWS**
- Many museums, including the Franklin Institute, The Lawrence Hall of Science, and the Boston Museum of Science, will bring a flashy two-to-three-hour science show to schools in their own and neighboring states. The cost is usually around $300 for an assembly-sized group of students. A typical show might feature a laser light show, a demonstration of liquid nitrogen's incredible cooling power, or an exhibition of robotics. Contact your local science museum or the ASTC (see below) for information on shows that tour your area.

**The Exploratorium Quarterly**
- San Francisco's Exploratorium museum publishes a quarterly magazine packed with ideas for classroom experiments and with articles that give the experiments much more meaning. Each issue concentrates on one topic—amusement parks, ice, and dirt have been some of the recent topics—and explores it from various angles. In the "Dirt" issue, readers learned about the microorganisms that live in bed room dust, the composition of moon dust and Martian soil, and the origins of backyard dirt. In the "Ice" issue, articles examined icebergs, ice crystals, the making of ice cream, and the mating habits of the Arctic's Emperor Penguins. (The penguins trek seventy miles inland to where there are few predators—and little food. The female lays an egg, the male warms it on his feet, the female begins her trek back to the coast—and food. When the female returns, the male, having lost half his body weight, will take his trip.) Individual subscriptions are $15/year. Write Exploratorium Quarterly, 3601 Lyon Street, San Francisco, CA 94123.

**The Association of ScienceTechnology Centers**
- For information on the science museums in your area, write to ASTC, 1413 K St., N.W., Tenth Floor, Washington, D.C. 20005.
courses for teachers—one-third of all the teacher training in the county—in how to teach science.

OTHER SCIENCE museums do even more in the way of teacher training. The Pacific Science Center in Seattle has, in addition to workshops that trained twenty-five hundred teachers last year, a program to train what they call a cadre of science leaders. Each year, between four and eight teachers are hired by the museum to explain exhibits to the public, run the large auditorium shows (this year on lasers, last year on chemistry), and take hands-on science programs to classrooms around the state. They also develop science curricula, and at the end of the year they return to their schools.

“We want people who leave here to go back and become leaders in their schools,” Andrea Marett, manager of the program, says. One graduate of this program is now the president of the Washington State Science Teachers Association, and another has gone on to receive a doctorate in science education. Graduates train fellow teachers and act generally as missionaries for the philosophy of hands-on science.

The Exploratorium in San Francisco, one of the country's best-known science centers, holds an annual summer institute for twenty-four highly motivated elementary school teachers. Not only do the teachers take ninety hours of classes, but afterwards a museum staffer will come to the teachers' schools for a total of twenty hours to help apply in the classroom the lessons learned at the institute.

Sending someone into the classroom with the newly trained teacher "gives a chance to discuss ideas with a colleague, to brainstorm," says Lynn Rankin, who heads the program at the Exploratorium. "It's one thing to come to the museum when you're all enthusiastic and you're engaged and excited, and then you return to the classroom to thirty students at different levels, and you're not really familiar with the materials until you've used them once. It's very difficult to do something new in isolation."

The Association of Science/Technology Centers' VanDorn argues that this kind of support is one of the reasons that science museums can be effective at training teachers. "Everybody knows the old saw about taking a two-week institute. No support, no materials, no follow-up." Science museums and centers, with their buildings and permanent staffs, are always available for extra help. "You can call and ask what it was you fed the mealworms."

Most important, however, is that the museums are nonthreatening. Because their main job is to teach science to the general public, they assume very little prior knowledge and encourage curiosity and inquisitiveness. They do not, as many university science courses do, act as screens to filter out those least likely to pursue science as a career.

This is especially important, science museum advocates say, in training elementary school teachers to teach science. "When you think of all the people who became elementary school teachers because they didn't like science," VanDorn says, "it seems silly to think of sending them back to the same place for more training."
Join Susan Stamberg, nationally renowned broadcast journalist, for exciting, fast-paced discussions on the American Federation of Teachers’ television program “Focus on Education.” Focus’s new season begins this September and airs on more than 100 public television stations coast to coast, as well as on The Learning Channel cable network and its 935 cable affiliates. Check local listings for details.

Stamberg, former co-host of National Public Radio’s award-winning magazine “All Things Considered,” was the first woman to anchor a national nightly radio news program in the United States. She is also the current host of NPR’s “Sunday Weekend Edition.”
Good Teaching: Do You Know It When You See It?

Asked to name the single most important factor contributing to the quality of schools, many people will respond “good teachers.” The way to improve our schools seems simple enough—identify, encourage, and reward good teachers. Yet attempts by states and districts to institute career ladders, merit pay, and mentor or master teacher policies have frequently met with organized resistance from teachers themselves. “Who will judge our competence,” teachers ask pointedly, “and by what criteria?”

Such skepticism is not surprising. In many districts, evaluation is a hoop teachers must jump through for tenure, which then becomes simply another yearly ritual of school life. Too often, neither teachers nor administrators see the process as contributing to professional growth or school improvement. Some teachers even identify the evaluation procedures as demeaning and a cause of plummeting morale.

Principals and other administrators assess teachers’ performance on the basis of short, infrequent visits to classrooms. Receiving little if any training for this role, they often rely on a rating system geared to a standardized checklist of teacher behaviors and skills. Furthermore, evaluators do not necessarily have backgrounds in the grade level or subject area of the teacher being evaluated.

Clearly, local systems for evaluating teachers need an overhaul. But this is more than a matter of mechanics. To be effective, an evaluation system must embody a definition of good teaching that teachers, administrators, parents, and students see as valid.

Effective Teaching Revisited

Mrs. Jones is well organized as she begins her math lesson. Efficiently moving her fifth-grade students through an opening homework check and review, she determines who completed the homework and which aspects of the assignment gave students the most difficulty. She proceeds to address these difficulties in a brief presentation, after which she asks a series of simple and direct questions to check comprehension, then assigns several students who answered correctly to help her guide the class through a series of practice problems on the chalkboard.

In the last 15 years, researchers have established that certain practices and behaviors of teachers—like Mrs. Jones’s briskly paced homework review—are associated with student gains as measured on standardized achievement tests. Taken together, these studies (often referred to as the teacher effectiveness research) emphasize the importance of well-managed classrooms where teachers spend most of their time actively instructing students and guiding their learning (see “Evaluating the Effective Teaching Research,” HEL, November 1985).

Findings from these studies can be very helpful, points out Jere Brophy of Michigan State University, especially to beginning teachers and to veterans who have not enjoyed much success in boosting their students’ achievement. But Brophy, a researcher who has helped generate, codify, and disseminate data on teacher effects, is very concerned about the misuses and abuses of
these data. The findings, he warns, should not be translated directly into rigid prescriptions for practice.

Most of the data relate the behavior of teachers to gains on achievement tests. We cannot assume that these same behaviors awaken curiosity, foster students' interest in the subject matter, or help them develop problem-solving and reasoning skills—important educational outcomes not generally measured on such tests. Brophy also emphasizes that while studies identify key differences between poor teachers and adequate ones, they provide little information on differences between average and outstanding teachers.

**The Subject Matters**

How can we develop a more complete portrait of the expertise involved in good teaching? One step, suggests Susan Stodolsky of the University of Chicago, is to expand the focus of classroom observation beyond teacher-led lessons and interactions and beyond the basic skill areas of math and reading.

**When they shifted what they were teaching, they also changed the way they taught.**

Hypothesizing that teachers would approach an enrichment subject such as social studies differently from a basic skills subject, Stodolsky conducted a two-year study of math and social studies lessons in 39 fifth-grade classrooms. While one set of observers recorded detailed information regarding instructional goals, content, materials, pacing, and format (for example, teacher presentation, seatwork, recitation), others closely watched a sample of children, noting their behavior and task involvement.

Stodolsky’s major finding is expressed in the title of the book describing her research: *The Subject Matters*. Fifteen of the teachers observed taught both math and social studies to the same children in the same physical settings. When they shifted what they were teaching, they also changed the way they taught.

Instruction, notes Stodolsky, is not as uniform as earlier studies suggested. She identified a variety of “activity segments” during the school day. These segments differed not only in goals, format, and content but also in who determined the pace of activity (teacher, student, or students collectively) and in the intellectual level of the work.

Specifically, the research team found more varied instructional arrangements in social studies than in math. In math lessons, teachers explained skills, algorithms, and occasionally concepts to the whole class, then assigned students to practice skills at their seats or at the board. In social studies, although teachers frequently led recitations based on the textbook, many also engaged students in research activities using reference sources, and some introduced cooperative activities or projects as well.

Looking carefully at student responses to differing activity segments, Stodolsky questioned the widely held assumption that in the classrooms of certain “good” teachers, students are always engaged. Rather, she found that certain kinds of activities, regardless of which teacher initiated them, elicited high levels of attentiveness. Students became more attentive and engaged when the intellectual challenges were greatest and when they collectively determined the pace of activity—conditions most likely to be met during the cooperative activities or projects in social studies classes.

Stodolsky’s comparison of math and social studies is intriguing in light of recent assessments pointing to serious deficiencies in the math achievement of American children. Students tend to view math as more difficult than social studies. Yet the researchers found math activities to be less, not more, intellectually demanding.

Part of the problem, suggests Stodolsky, is that teachers rely mainly on presentation, practice, and review to teach math. Students learn to apply algorithms, but they do not learn how to think about or pursue the subject on their own. When they have difficulty with math their tendency is thus to give up, to decide they’re simply “not good” at it (see “Taking More Math but Enjoying It Less,” *HEL*, January 1986).

Ultimately, concludes Stodolsky, effective teaching may consist less in a generic set of skills or behaviors than in the ability to make considered choices among pedagogical practices and classroom activities. These choices can affect not only students’ engagement in learning and the intellectual level of their efforts, but also what they come to understand about how to learn and their own capacity as learners.

**From Novice to Expert**

Like Stodolsky, Lee Shulman of Stanford University finds fault with the tendency in the research to focus on generic teaching skills and “to wall off the pedagogy from the content.” A teacher not only must be a good classroom manager and have a firm grasp of the subject matter, states Shulman, but also must develop “pedagogical content knowledge”—an ability to select topics and ideas that are central to the content area, and to present them in ways that are comprehensible and interesting to students.

What fosters this ability? Certainly a deep knowledge of the
subject matter is important. In developing case studies of new teachers, Shulman found differences in the ways they taught subjects they had studied intensively and those with which they were less familiar. For example, Cathy, an anthropology major with an interest in archaeology, made creative use of maps and demographic information in her ninth-grade social studies course to emphasize how features of the land affect the development of the people and culture. When she had to teach the history of a country, however, she relied strictly on the textbook.

As teachers like Cathy gain classroom experience, they become more adept at combining content and pedagogy with a third component of their professional knowledge—an understanding of how students learn. Good teaching practice, argues Shulman, involves making use of recent research on learning. Expert teachers understand what makes specific topics easy or difficult to learn, and anticipate preconceptions that students of different ages and backgrounds may bring with them to the learning of these topics.

Lessons for Local Evaluation

Translating these complex views of good teaching into instruments and procedures for assessing teachers’ performance will not be an easy task. Shulman points out that any

A License to Teach in Connecticut

Can the certification of teachers become less of a bureaucratic process and more of an educational one? In most states, a teaching certificate is based on an exam score and a transcript showing that the candidate completed the right number and type of college courses. In September 1989 the state of Connecticut will institute a very different approach.

All new teachers in Connecticut will participate in the Beginning Educator Support and Training (BEST) Program. Not until the end of their first year, after six independent evaluations by trained assessors, will teachers be eligible for provisional certification. The support component of the program will be provided by specially trained mentors—experienced teachers in the same school as the new teacher and, whenever possible, in the same subject area and grade level. Beginning teachers will have opportunities to observe their mentors in the classroom and to be observed by their mentors (who will receive release time for this purpose).

Assessors will use indicators, drawn from studies of effective teaching, to measure the teacher’s ability to manage the classroom, present lessons, and interact with students. After every two visits, the teacher will receive a written profile of strengths and weaknesses, which he can then share with his mentor and principal to identify areas in which he needs additional support.

Educators in Connecticut have tried to design an assessment instrument that does not prescribe “one best way” to teach, but that does give assessors reliable guidelines for evaluating teaching. Thus the instrument itself does not contain checklists; assessors are expected to think about and interpret what they see.

But because licensing decisions are so important, steps have been taken to ensure that assessors will apply consistent standards in judging teachers’ performance. To become an assessor, teachers and administrators must attend a 50-hour training program, where they view videotapes of beginning teachers and discuss how they would evaluate each teacher’s performance on each of the indicators. By the end of the course they must
one method will, of necessity, be inadequate. He proposes instead a "union of insufficiencies."

A number of current efforts bear watching. The Educational Testing Service has announced plans to replace the widely used National Teacher Examinations with a "radically different" series of tests. Connecticut is about to implement a new "technically different" series of tests. Con-
necticut is about to implement a new...
Teacher Portfolios Inform Assessment
By Jay Sugarman

The Teacher Assessment Project (TAP) at Stanford University is investigating alternative ways of assessing the skills and knowledge of teachers. An intended audience for this research is the recently formed National Board for Professional Teaching Standards, which plans to initiate a voluntary certification process for teachers, similar to the process of professional certification in other fields like medicine. In the following report, Jay Sugarman, a fourth-grade teacher from Brookline, Massachusetts, who was named a Christa McAuliffe fellow in 1988 and took a leave from teaching to work with the TAP, describes the project’s field research on teacher portfolios.

At the end of the school day, Jane Martin looks over the fables her fourth graders have written and places these in folders with other, earlier samples of their work. She attaches brief notes to several students’ fables, commenting on what each piece of work indicates about the child’s literacy growth. Next, she looks over her plan for that day’s reading groups and writes a brief account of what actually happened in the groups and what type of follow-up would be appropriate. Finally, she labels a videotape, taken that day, of her working with the whole class on making their fables into children’s books.

This year, as part of the Teacher Assessment Project (TAP), approximately 40 teachers from the San Francisco Bay area are constructing portfolios of their work. Like Jane Martin, they draw mostly on documents they and their students produce as part of the normal activities of the school day, attaching to these documents explanatory comments that range from short captions to extended essays.

The goal of this year-long effort is to explore whether teacher portfolios can contribute to a richer, more contextual assessment of teaching. To get a sense of the range of situations in which portfolios might be appropriate, the project includes two very different groups of participants. A group of high school biology teachers are documenting their teaching in an introductory-level course. The second group—third- and fourth-grade teachers—are focusing on literacy instruction, and especially their use of children’s literature in teaching comprehension and composition skills.

Each group of teachers receives a portfolio development handbook, which provides guidelines and suggestions about what to include. While every teacher’s portfolio will be different, within each group portfolio entries will contain a similar range and number of documents. This structured approach sets this project apart from previous experiments with self-documentation. Furthermore, unlike most forms of assessment, portfolio development can be collaborative. In fact, teachers are encouraged to consult with peers in their schools, as well as with project staff, as they document and reflect on their practice.

Assessment Center Review

In June, the portfolios these teachers have developed will become the basis for their participation in special assessment-center activities. During the first phase of field research (1986–87), the Stanford team experimented with center-based assessment. Several dozen elementary mathematics and high school history teachers volunteered to come to the center for a week to participate in a series of exercises, which required them to demonstrate their skills in a number of typical situations—from teaching a sample lesson to analyzing the strengths and weaknesses of a particular textbook’s presentation of content.

While the participating teachers felt that the exercises successfully simulated teaching situations, by the end of the field-test period both the teachers and the researchers agreed that on-site forms of documentation were also important. This led to the present research question: to what extent can documentation in portfolios provide evidence of a teacher’s knowledge, skills, and dispositions?

When this year’s groups of teachers enter the assessment center, examiners already will have reviewed their portfolios and designed interviews and exercises based on the teachers’ own documentation of their work. In addition, the teachers will participate in simulation exercises designed to assess both their knowledge of the specific domains of elementary literacy or high school biology and their ability to translate that knowledge into successful classroom practice.

Much More Professional

To quote one fourth-grade teacher: “I’ve learned more about the things I do and also about where I’d like to improve. You know these things, but when you write them down, it helps.”

While it’s still too early to know what role portfolios will play in the proposed National Board certification process or in state or district assessment programs, the teachers I have worked with this year have been very positive about the experience. Their comments indicate a number of immediate and practical uses for teacher portfolios:

• Students benefit greatly when we do a consistent and thorough job of documenting their growth and development. As one teacher put it, “This is making me look at my students more critically, and helping me look at what they individually need.” In addition, this documentation can help us in describing students’ progress to parents or other school personnel.

• Teachers spend a great deal of time developing materials and even inventing curricula. But many of these efforts are as transitory as the words on our chalkboards. By constructing portfolios, we can ensure that our efforts are recorded for our own future use or for adaptation by others. Some teachers have already discovered how useful a portfolio can be in applying for another teaching or administrative position. Port-
folios could also be used in local evaluation, enabling teachers to share specific examples of their work and accomplishments with principals and supervisors.

- A number of teachers participating in the field test have recognized the value of portfolio development for their professional growth. As one teacher said: “It made me feel professional, much more professional.” Having several teachers at a school or in a system meet and discuss their portfolios on a regular basis would be a wonderful way of sharing what they do in their classrooms. Such a process would promote both staff development and collegial relations.

- As I look forward to returning to my own fourth-grade classroom next September, I anticipate using a portfolio in my work with student teachers. My portfolio will become a basis for explaining how I go about teaching, why I do what I do, and what I hope the students' finished work will look like at the end of a unit. I also plan to encourage the student teachers to develop their own portfolios, both as a learning tool and as a format for demonstrating knowledge and abilities to prospective principals.

For Further Information
Jay Sugarman or Phyllis Robinson, Teacher Assessment Project, CERAS 507, Stanford University, Palo Alto, CA 94305-3084.
National Board for Professional Teaching Standards, 333 West Fort St., Suite 2070, Detroit, MI 48226.

Welcoming Minority Teachers

For people from working-class and ethnic-minority backgrounds, teaching has long been a stepping-stone profession promising entry into the middle class. Yet black and Hispanic teachers make up only 11 percent of the current teaching force, and according to recent projections may account for fewer than 5 percent of all teachers by the year 2000.

The disappearance of minority teachers—at a time when the proportion of minority students continues to grow—is a cause for alarm. Some school-district hiring committees travel as far as Puerto Rico and even Spain to hire teachers, and engage in frantic competition for students coming out of traditionally black colleges. Even the most aggressive recruitment campaign will not result in a more diverse teaching force, however, if minority teachers continue to leave the profession as quickly as new candidates enter. And this, indeed, appears to be happening.

A recent Louis Harris Poll reveals the magnitude of the problem. The sixth in a series of surveys conducted for the Metropolitan Life Insurance Company, this poll focused on minority teachers. Of the black and Hispanic teachers surveyed, 41 percent, as compared to 25 percent of their white colleagues, said they would probably leave teaching in the next five years. That 41 percent included more than half the black and Hispanic teachers with less than five years of experience. Among the comparable group of recent white entrants into the profession, slightly over one-third said they would probably leave.

School systems tend to blame such high turnover on the availability of new and more lucrative opportunities for minorities. One Harris finding—that even 21 percent of the minority teachers who report being “very satisfied” expect to leave the profession within five years—appears to support that contention. But several other recent studies indicate that the problem may be less the pull to other careers than working conditions that push people out of teaching.

For example, a report recently by the Institute for Educational Leadership documents the difficult and sometimes deplorable conditions in many urban schools, where minority teachers are most likely to work. Focusing on 31 schools in 5 urban school districts, the report faults a lack of repairs and preventive maintenance (caused by a shortage of funds and a plethora of red tape) for deteriorating and dirty buildings. Furthermore, many urban teachers lack even the most basic resources needed for teaching—a classroom of their own, sufficient storage space, textbooks, access to copying machines or computers.

While this report does not analyze the data according to a teacher's race or number of years in teaching, it is easy to see how such conditions could disproportionately affect newer teachers, including recent minority recruits. These teachers are most likely to be assigned to the least desirable buildings with the highest staff turnover, and least likely to be able to negotiate for classrooms of their own or more textbooks or other supplies. Added to the other difficulties of the first few years of teaching, the lack of basic resources may play an important role in convincing minority teachers that they have chosen an impossible profession.

Acknowledging such problems as time, space, supplies, and salary, a recent report by the Carnegie Foundation for the Advancement of Teaching emphasizes the debilitating effect on teachers' morale of the lack of meaningful involvement in important decisions. This too is likely to have a disproportionate effect on new and minority teachers, who, of all the teachers in a school, probably feel the most removed from either formal or informal centers of power.

One implication of these reports is that a commitment to a culturally diverse teaching staff must extend beyond the hiring process. At the very least, school districts should be addressing the following kinds of questions:

- Are we giving minority teachers—particularly those who are new to teaching and those in urban schools—the opportunity to succeed? Specifically, how can we provide them with the basic physical conditions and resources they need?
• Are we doing enough to welcome new minority teachers and to introduce them to the school's expectations and culture? How can we provide both formal and informal networks of support to help them through the first few years of teaching?

• In discussions of the less tangible "working conditions" of schools—such as collegiality and teachers' input into decisionmaking—are we making every effort to include the views and concerns of minority teachers?

For Further Information

What Students Expect

"You have Mr. Brown? He makes you work hard, but he really knows his stuff!" Teachers worry about the first impression they make on a new group of students. In fact, experienced teachers continue to offer novices advice like "Don't smile until Christmas." But what students expect from teachers may not be entirely in the teachers' control. Students absorb information about their teachers from many sources—peers, parents, and even other teachers and administrators in the school.

Recently researchers have raised the intriguing possibility that such information—and the expectations it creates in students—may have an important effect on students' behavior, and ultimately on their academic performance. In a twist on the classic Pygmalion experiment, in which teachers were told that certain students had tested very high on an IQ test that predicted they would be "late bloomers," David Jamieson and his colleagues at the University of Waterloo created the expectation among certain 11th-grade students that their new English teacher would be especially competent and motivated.

The arrival of a new teacher in midyear created an opportunity to manipulate her students' expectations. The researchers created a pretext for telling two of the new teacher's classes that their peers, the research team, and the teacher herself all saw her as highly capable and motivated to teach the next three-week English unit. Students in her other two classes did not receive this information.

Students' behavior in class, and their grades on tests and on the unit as a whole, differed significantly between the groups. In the classes with high expectations of the teacher, students paid more attention, talked out of turn less, and spent a higher percentage of their time on task than did those in the other classes. Furthermore, students in the high-expectation classes received better grades on objective tests and assignments and higher final marks for the unit (which included class participation as well).

The researchers suggest two dynamics that might have operated individually or in combination to create this effect. In the classes with high expectations, the teacher, in turn, might have begun to expect more of the students and changed her behavior accordingly. Secondly, students' beliefs may have directly affected their own motivation and conduct. Students who believed they were to be taught by a highly competent teacher may have perceived a greater potential for learning and set higher standards for their own achievement.

In either case, the group consensus of competence created in the two high-expectation classes may explain the differences. When the majority of students in a class share high expectations of the teacher, this in itself may be a powerful influence on the teacher's and/or the group's behavior. The researchers point out that although their creation of this shared expectancy was artificial, it resembles the real-life situation in schools, where teachers often have well-developed reputations that precede them.


Picking Up the Pace

Whenever teachers fight for higher salaries, some politicians and citizens argue that teachers have it easy. Their job is not physically demanding or dangerous like construction work; nor is teaching a high-pressure profession like law or business. And they have shorter workdays and workyears than any other group. What, these critics ask, are teachers complaining about?

In an attempt to answer this question, Louise McDaniel-Hine, an administrator in a Pennsylvania district, and Donald Willower of Pennsylvania State University observed five elementary teachers, each from a different school district, for five consecutive days. Documenting both in-class and out-of-class time, they noted each time a teacher switched to a new activity, the duration of each activity, and any interruptions that occurred.

It is important to note that the researchers defined "activity" narrowly. If a teacher explained an assignment, asked or answered a question, and then walked over to a student to offer individual help, this would count as three activities. If on her way over to the student she stopped to answer another student's question, this too would be recorded.
as an interruption.

By the end of the fifth day, McDaniel-Hine and Willower had counted a total of 9,266 in-class activities (or 371 per teacher per day), 2,042 interruptions of activities, and 6,344 out-of-class activities. The pace of work for these second-, third-, and fourth-grade teachers, they concluded, is frenetic. On average, the teachers undertook a new activity every 77 seconds. If in-class exchanges with students were counted, the average was every 37 seconds.

Not all of these activities were sequential; sometimes teachers managed to do two or more things at once. Thus a teacher might nod okay to one student’s request to go to the bathroom, while gesturing to another to sit down, while talking with a third about his paperwork. These observations conjure up some of the metaphors long associated with teaching: the legendary Mrs. Jones with “eyes in the back of her head,” or Mr. Smith with more arms than an octopus.

As to the length of the workweek, the teachers in this study averaged 37.5 hours in the school building and put in 6.6 hours after school, preparing lessons and checking students’ work. This puts them just over the 43-hour average workweek for Americans reported in recent surveys.

This fall your group can easily — EARN $140.00 to $2,100.00 or more selling Fuller’s CHRISTMAS GIFT WRAP

Every Christmas, everyone needs gift wrap. That’s for sure. So what better Fall fund raising product than Fuller’s CHRISTMAS GIFT WRAP. Prepared especially for groups like yours, each GIFT WRAP package contains 12 big 20 x 26 sheets featuring 6 sparkling, colorful contemporary designs — truly the most beautiful wrapping paper ever offered for fund raising!

BIG PROFITS — INSTANT SELLER — Since your prospects already need GIFT WRAP, your profit potential is greater with Fuller’s CHRISTMAS WRAP. You sell each package for $3.00. You earn a big $28.00 on each case you sell (24 packages per case). What an easy way to add to your group’s treasury!

Over 350,000 satisfied customers have experienced more than 28 years of success with Fuller Fund Raising Products!

FULLER’S FAST PROFIT CHART

Order To Meet Your Profit Goal

<table>
<thead>
<tr>
<th>Order</th>
<th>You Make</th>
<th>Order</th>
<th>You Make</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 cases</td>
<td>$140.00</td>
<td>30 cases</td>
<td>$840.00</td>
</tr>
<tr>
<td>10 cases</td>
<td>$280.00</td>
<td>50 cases</td>
<td>$1,400.00</td>
</tr>
<tr>
<td>15 cases</td>
<td>$420.00</td>
<td>75 cases</td>
<td>$2,100.00</td>
</tr>
<tr>
<td>20 cases</td>
<td>$560.00</td>
<td>100 cases</td>
<td>$2,800.00</td>
</tr>
</tbody>
</table>

Call TOLL FREE 1-800-633-5732 to place your order.

Fuller Fund Raising Company
P.O. Box 4957
Montgomery, AL 36103-4957
A GIRL AND HER BOOKS

Pulitzer prize-winning author
recalls how her childhood love affair with books
opened up the world to her.

BY ANNIE DILLARD

I BEGAN reading books, reading books to delirium. I began by vanishing from the known world into the passive abyss of reading but soon found myself engaged with surprising vigor because the things in the books, or even the things surrounding the books, roused me from my stupor. From the nearest library I learned every sort of surprising thing—some of it, though not much of it, from the books themselves.

The Homewood branch of Pittsburgh's Carnegie Library system was in a Negro section of town—Homewood. This branch was our nearest library; Mother drove me to it every two weeks for many years, until I could drive myself. I only very rarely saw other white people there.

I understood that our maid, Margaret Butler, had friends in Homewood. I never saw her there, but I did see Henry Watson.

I was getting out of Mother's car in front of the library when Henry appeared on the sidewalk; he was walking with some other old men. I had never before seen him at large; it must have been his day off. He had gold-rimmed glasses, a gold front tooth, and a frank, open expression. It would embarrass him, I thought, if I said hello to him in front of his friends. I was wrong. He spied me, picked me up—books and all—swung me as he always did, and introduced Mother and me to his friends. Later, as we were climbing the long stone steps to the library's door, Mother said, "That's what I mean by good manners."

The Homewood Library had graven across its enormous stone facade: FREE TO THE PEOPLE. In the evenings, neighborhood people—the men and women of Homewood—browsed in the library and brought their children. By day, the two vaulted rooms, the adults' and children's sections, were almost empty. The kind Homewood librarians, after a trial period, had given me a card to the adult section. This was an enormous silent room with marble floors. Nonfiction was on the left.

Beside the farthest wall, and under leaded windows set ten feet from the floor, so that no human being could ever see anything from them—next to the wall, and at the farthest remove from the idle librarians at their curved wooden counter, and from the oak bench where my mother waited in her camel's-hair coat chatting with the librarians or reading—stood the last and darkest and most obscure of the tall nonfiction stacks: NEGRO HISTORY AND NATURAL HISTORY. It was in Natural History, in the cool darkness of a bottom shelf, that I found The Field Book of Ponds and Streams.

The Field Book of Ponds and Streams was a small, blue-bound book printed in fine type on thin paper, like The Book of Common Prayer. Its third chapter explained how to make sweep nets, plankton nets, glass-bottomed buckets, and killing jars. It specified how to mount slides, how to label insects on their pins, and how to set up a freshwater aquarium.

One was to go into "the field" wearing hip boots and perhaps a head net for mosquitoes. One carried in a "ruck-sack" half a dozen corked test tubes, a smattering of screwtop baby-food jars, a white enamel tray, assorted pipettes and eyedroppers, an artillery of cheesecloth nets, a notebook, a hand lens, perhaps a map, and The Field Book of Ponds and Streams. This field—unlike the fields I had seen, such as the field where Walter Milligan played football—was evidently very well watered, for there one could find, and distinguish among, daphniae, planaria, water pennies, stonefly larvae, dragonfly nymphs, salamander larvae, tadpoles, snakes, and turtles, all of which one could carry home.

That anyone had lived the fine life described in Chapter 3 astonished me. Although the title page indicated quite plainly that one Ann Haven Morgan had written The Field Book of Ponds and Streams, I nevertheless imagined, perhaps from the authority and freedom of it, that its author was a man. It would be good to write him...
and assure him that someone had found his book, in the
dark near the marble floor at the Homewood Library. I
would, in the same letter or in a subsequent one, ask him
a question outside the scope of his book, which was
where I personally might find a pond, or a stream. But I
did not know how to address such a letter, of course, or
how to learn if he was still alive.

I was afraid, too, that my letter would disappoint him
by betraying my ignorance, which was just beginning to
attract my own notice. What, for example, was this
noisome-sounding substance called cheesecloth, and
what do scientists do with it? What, when you really got
down to it, was enamel? If candy could, notoriously, "eat
through enamel," why would anyone make trays out of
it? Where—short of robbing a museum—might a fifth-
grade student at the Ellis School on Fifth Avenue obtain
such a legendary item as a wooden bucket?

The Field Book of Ponds and Streams was a shocker
from beginning to end. The greatest shock came at the
end.

When you checked out a book from the Homewood
Library, the librarian wrote your number on the book's
card and stamped the due date on a sheet glued to the
book's last page. When I checked out The Field Book of
Ponds and Streams for the second time, I noticed the
book's card. It was almost full. There were numbers on
both sides. My hearty author and I were not alone in the
world, after all. With us, and sharing our enthusiasm for
dragonfly larvae and single-celled plants, were, appar-
etly, many Negro adults.

Who were these people? Had they, in Pittsburgh's
Homewood section, found ponds? Had they found
streams? At home, I read the book again; I studied the
drawings; I reread Chapter 3; then I settled in to study
the due-date slip. People read this book in every season.
Seven or eight people were reading this book every year,
even during the war.

Every year, I read again The Field Book of Ponds and
Streams. Often, when I was in the library, I simply
visited it. I sat on the marble floor and studied the book's
card. There we all were. There was my number. There
was the number of someone else who had checked it
out more than once. Might I contact this person and
cheer him up? For I assumed that, like me, he had found
out more than once. Might I contact this person and
assure him that someone had found his book, in the
Ponds and Streams for the second time, I noticed the
what do scientists do with it? What, when you really got
by betraying my ignorance, which was just beginning to
noisome-sounding substance called cheesecloth, and
what do scientists do with it? What, when you really got
down to it, was enamel? If candy could, notoriously, "eat
through enamel," why would anyone make trays out of
it? Where—short of robbing a museum—might a fifth-
grade student at the Ellis School on Fifth Avenue obtain
such a legendary item as a wooden bucket?

The Field Book of Ponds and Streams was a shocker
from beginning to end. The greatest shock came at the
end.

When you checked out a book from the Homewood
Library, the librarian wrote your number on the book's
card and stamped the due date on a sheet glued to the
book's last page. When I checked out The Field Book of
Ponds and Streams for the second time, I noticed the
book's card. It was almost full. There were numbers on
both sides. My hearty author and I were not alone in the
world, after all. With us, and sharing our enthusiasm for
dragonfly larvae and single-celled plants, were, appar-
etly, many Negro adults.

Who were these people? Had they, in Pittsburgh's
Homewood section, found ponds? Had they found
streams? At home, I read the book again; I studied the
drawings; I reread Chapter 3; then I settled in to study
the due-date slip. People read this book in every season.
Seven or eight people were reading this book every year,
even during the war.

Every year, I read again The Field Book of Ponds and
Streams. Often, when I was in the library, I simply
visited it. I sat on the marble floor and studied the book's
card. There we all were. There was my number. There
was the number of someone else who had checked it
out more than once. Might I contact this person and
cheer him up? For I assumed that, like me, he had found
pickings pretty slim in Pittsburgh.

The people of Homewood, some of whom lived in
visible poverty, on crowded streets among burned-out
houses—they dreamed of ponds and streams. They
were saving to buy microscopes. In their bedrooms they
fashioned plankton nets. But their hopes were even
more vain than mine, for I was a child, and anything
might happen; they were adults, living in Homewood.
There was neither pond nor stream on the streetcar
routes. The Homewood residents whom I knew had
little money and little free time. The marble floor was
beginning to chill me. It was not fair.

I had been driven into nonfiction against my wishes. I
wanted to read fiction, but I had learned to be cautious
about it.

"When you open a book," the sentimental library
posters said, "anything can happen." This was so. A book
of fiction was a bomb. It was a land mine you wanted to
go off. You wanted it to blow your whole day. Unfor-
tunately, hundreds of thousands of books were duds.
They had been rusting out of everyone's way for so long
that they no longer worked. There was no way to dis-
tinguish the duds from the live mines except to throw
yourself at them headlong, one by one.

The suggestions of adults were uncertain and
incoherent. They gave you Nancy Drew with one hand
and Little Women with the other. They mixed good and
bad books together because they could not distinguish
between them. Any book that contained children, or
short adults, or animals, was felt to be a children's book.
So also was any book about the sea—as though danger
or even fresh air were a child's prerogative—or any book
by Charles Dickens or Mark Twain. Virtually all British
books, actually, were children's books; no one under-
stood children like the British. Suited to female children
were love stories set in any century but this one. Con-
sequently one had read, exasperated often to fury, Pick-
wick Papers, Desirée, Wuthering Heights, Lad, a Dog,
Gulliver's Travels, Gone With the Wind, Robinson
Crusoe, Nordhoff and Hall's Bounty trilogy, Moby-
Dick, The Five Little Peppers, Innocents Abroad, Lord
Jim, Old Yeller.

The fiction stacks at the Homewood Library, their
volumes alphabetized by author, baffled me. How could
I learn to choose a novel? That I could not easily reach
the top two shelves helped limit choices a little. Still, on
the lower shelves I saw too many books: Mary Johnson,
Sweet Rocket; Samuel Johnson, Rasselas; James Jones,
From Here to Eternity. I checked out the last because I
had heard of it; it was good. I decided to check out
books I had heard of. I had heard of The Mill on the
Floss. I read it, and it was good. On its binding was
printed a figure, a man dancing or running. I had noticed
this figure before. Like so many children before and after
me, I learned to seek out this logo, the Modern Library
colophon.

The going was always rocky. I couldn't count on
Modern Library the way I could count on, say, Mad
magazine, which never failed to slay me. Native Son
was good, Walden was pretty good, The Interpretation
of Dreams was okay, and The Education of Henry Adams
was awful. Ulysses, a very famous book, was also awful.
Confessions by Augustine, whose title promised so
much, was a bust. Confessions by Jean-Jacques
Rousseau was much better, though it fell apart halfway
through.

In fact, it was a plain truth that most books fell apart
halfway through. They fell apart as their protagonists
quit, without any apparent reluctance, like idiots diving
voluntarily into buckets, the most interesting part of
their lives, and entered upon decades of unrelieved
tedium. I was forewarned, and would not so bobble my
heartsick loyalty to the protagonists of the early chap-
ters, to the eager children they had been, kept me
reading chronological narratives to their bitter ends.

Perhaps later, when I had become an architect, I would enjoy the latter halves of books more.

This was the most private and obscure part of life, this Homewood Library: a vaulted marble edifice in a mostly decent Negro neighborhood, the silent stacks of which I plundered in deep concentration for many years. There seemed then, happily, to be an infinitude of books.

I no more expected anyone else on earth to have read a book I had read than I expected someone else to have twirled the same blade of grass. I would never meet those Homewood people who were borrowing The Field Book of Ponds and Streams; the people who read my favorite books were invisible or in hiding, underground. Father occasionally raised his big eyebrows at the title of some volume I was hurrying off with, quite as if he knew what it contained—but I thought he must know of it by hearsay, for none of it seemed to make much difference to him. Books swept me away, one after the other, this way and that; I made endless vows according to their lights, for I believed them.

* * *

AFTER I read The Field Book of Ponds and Streams several times, I longed for a microscope. Everybody needed a microscope. Detectives used microscopes, both for the FBI and at Scotland Yard. Although usually I had to save my tiny allowance for things I wanted, that year for Christmas my parents gave me a microscope kit.

In a dark basement corner, on a white enamel table, I set up the microscope kit. I supplied a chair, a lamp, a batch of jars, a candle, and a pile of library books. The microscope kit supplied a blunt black three-speed microscope, a booklet, a scalpel, a dropper, an ingenious device for cutting thin segments of fragile tissue, a pile of clean slides and cover slips, and a dandy array of corked test tubes.

One of the test tubes contained “hay infusion.” Hay infusion was a wee brown chip of grass blade. You added water to it, and after a week it became a jungle in a drop, full of one-celled animals. This did not work for me. All I saw in the microscope after a week was a wet chip of dried grass, much enlarged.

Another test tube contained “diatomaceous earth.” This was, I believed, an actual pinch of the white cliffs of Dover. On my palm it was an airy, friable chalk. The booklet said it was composed of the silicaceous bodies of diatoms—one-celled creatures that lived in, as it were, small glass jewelry boxes with fitted lids. Diatoms, I read, come in a variety of transparent geometrical shapes. Broken and dead and dug out of geological deposits, they made chalk, and a fine abrasive used in silver polish and toothpaste. What I saw in the microscope must have been the fine abrasive—grit enlarged. It was years before I saw a recognizable, whole diatom.

The kit’s diatomaceous earth was a bust.

All that winter I played with the microscope. I prepared slides from things at hand, as the books suggested. I looked at the transparent membrane inside an onion’s skin and saw the cells. I looked at a section of cork and saw the cells, and at scrapings from the inside of my cheek, ditto. I looked at my blood and saw not much; I looked at my urine and saw long iridescent crystals, for the drop had dried.

All this was very well, but I wanted to see the wildlife I
had read about. I wanted especially to see the famous amoeba, who had eluded me. He was supposed to live in the hay infusion, but I hadn’t found him there. He lived outside in warm ponds and streams, too, but I lived in Pittsburgh, and it had been a cold winter.

Finally late that spring I saw an amoeba. The week before, I had gathered puddle water from Frick Park; it had been festering in a jar in the basement. This June night after dinner I figured I had waited long enough. In the basement at my microscope table I spread a scummy drop of Frick Park puddle water on a slide, pecked in, and lo, there was the famous amoeba. He was as blobby and grainy as his picture; I would have known him anywhere.

Before I had watched him at all, I ran upstairs. My parents were still at the table, drinking coffee. They, too, could see the famous amoeba. I told them, bursting, that he was all set up, that they should hurry before his water dried. It was the chance of a lifetime.

Father had stretched out his long legs and was tilting back in his chair. Mother sat with her knees crossed, in blue slacks, smoking a Chesterfield. The dessert dishes were still on the table. My sisters were nowhere in evidence. It was a warm evening; the big dining-room windows gave onto blooming rhododendrons.

Mother regarded me warmly. She gave me to understand that she was glad I had found what I had been looking for, but that she and Father were happy to sit with their coffee, and would not be coming down.

She did not say, but I understood at once, that they had their pursuits (coffee?) and I had mine. She did not say, but I began to understand then, that you do what you do out of your private passion for the thing itself.

I had essentially been handed my own life. In subsequent years my parents would praise my drawings and poems, and supply me with books, art supplies, and sports equipment, and listen to my troubles and enthusiasms, and supervise my hours, and discuss and inform, but they would not get involved with my detective work, nor hear about my reading, nor inquire about my homework or term papers or exams, nor visit the salamanders I caught, nor listen to me play the piano, nor attend my field hockey games, nor fuss over my insect collection with me, or my poetry collection or stamp collection or rock collection. My days and nights were my own to plan and fill.

When I left the dining room that evening and started down the dark basement stairs, I had a life. I sat next to my wonderful amoeba, and there he was, rolling his grains more slowly now, extending an arc of his edge for a foot and drawing himself along by that foot, and absorbing it again and rolling on. I gave him some more pond water.

I had hit pay dirt. For all I knew, there were paramecia, too, in that pond water, or daphniae, or stentors, or any of the many other creatures I had read about and never seen: volvox, the spherical algal colony; euglena with its one red eye; the elusive, glassy diatom; hydra, rotifers, water bears, worms. Anything was possible. The sky was the limit.

Since we had moved, my reading had taken a new turn.
Books wandered in and out of my hands, as they had always done, but now most of them had a common theme. This new theme was the source of imagination at its most private—never mentioned, rarely even brought to consciousness. It was, essentially, a time, and a series of places, to which I returned nightly. So also must thousands, or millions, of us who grew up in the 1950s, reading what came to hand. What came to hand in those years were books about the past war: the war in England, France, Belgium, Norway, Italy, Greece; the war in Africa; the war in the Pacific, in Guam, New Guinea, the Philippines; the war, Adolf Hitler, and the camps.

We read Leon Uris' popular novels, *Exodus* and, better, *Mila 18*, about the Warsaw ghetto. We read Hersey's *The Wall*—again, the Warsaw ghetto. We read *Time* magazine, and *Life*, and *Look*. It was in the air, that there had been these things. We read, above all, and over and over, for we were young, Anne Frank's *The Diary of a Young Girl*. This was where we belonged; here we were at home.

I say "we," but in fact I did not know anyone else who read these things. Perhaps my parents did, for they brought the books home. What were my friends reading? We did not then talk about books; our reading was private, and constant, like the interior life itself. Still, I say, there must have been millions of us. The theaters of war—the lands, the multiple seas, the very corridors of air—and the death camps in Europe, with their lines of starved bald people...these, combined, were the settings in which our imaginations were first deeply stirred.

Earlier generations of children, European children, I inferred, had had on their minds heraldry and costumed adventure. They read *The Count of Monte Cristo* and *The Three Musketeers*. They read about King Arthur and Lancelot and Galahad; they read about Robin Hood. I inferred, had had on their minds heraldry and costumed adventure. They read this for the very first time. But it was too late, I say "we," but in fact I did not know anyone else who read these things. Perhaps my parents did, for they brought the books home. What were my friends reading? We did not then talk about books; our reading was private, and constant, like the interior life itself. Still, I say, there must have been millions of us. The theaters of war—the lands, the multiple seas, the very corridors of air—and the death camps in Europe, with their lines of starved bald people...these, combined, were the settings in which our imaginations were first deeply stirred.

But of what value was honor when, in book after book, the highest prize was a piece of bread? Of what use was a broadsword, or even a longbow, against Hitler's armies that occupied Europe, against Hitler's Luftwaffe, Hitler's Panzers, Hitler's U-boats, or against Hitler's S.S., who banged on the door and led Anne Frank and her family away? We closed our eyes and imagined how we would survive the death camps—maybe with honor and maybe not. We imagined how we would escape the death camps—maybe with honor and maybe not. We imagined how we would liberate the death camps. How? We fancied and schemed, but we had read too much, and knew there was no possible way. This was a novel concept: Can't do. We were in for the duration. We closed our eyes and waited for the Allies, but the Allies were detained.

Now and over the next few years, the books appeared and we read them. We read *The Bridge Over the River Kwai*, *The Young Lions*. In the background sang a chorus of smarmy librarians:

The world of books is a child's
Land of enchantment.

When you open a book and start reading
You enter another world—the world
Of make-believe—where anything can happen.

We read *Thirty Seconds Over Tokyo*, and *To Hell and Back*. We read *The Naked and the Dead*, *Run Silent*, *Run Deep*, and *Tales of the South Pacific*, in which American sailors saw native victims of elephantiasis pushing their own enlarged testicles before them in wheelbarrows. We read *The Caine Mutiny*, *Some Came Running*.

I was a skilled bombardier. I could run a submarine with one hand, and evade torpedoes, depth charges, and mines. I could disembowel a soldier with a bayonet, survive under a tarp in a lifeboat, and parachute behind enemy lines. I could contact the Resistance with my high-school French and eavesdrop on the Germans with my high-school German:

"Du! Kleines Mädchen! Bist du französisches Mädchen oder bist du Amerikanischer spy?"

"Je suis une jeune fille de la belle France, Herr S.S. Officer."

"Prove it!"

"Je suis, tu es, il est, nous sommes, vous êtes, ils sont."

"Very gut. Run along and play."

What were librarians reading these days? One librarian pressed me on a copy of *Look Homeward, Angel*. "How I envy you," she said, "having a chance to read this for the very first time." But it was too late, several years too late.

At last Hitler fell, and scientists working during the war came up with the atomic bomb. We read *On the Beach*, *A Canticle for Leibowitz*; we read *Hiroshima*. Reading about the bomb was a part of reading about the war: these were actual things and events, large in their effects on millions of people, vivid in their nearness to each man's or woman's death. It was a relief to turn from life to something important.

At school we had air-raid drills. We took the drills seriously; surely Pittsburgh, which had the nation's steel, coke, and aluminum, would be the enemy's first target.

I knew that during the war, our father, who was 4-F because of a collapsing lung, had "watched the skies." We all knew that people still watched the skies. But when the keen-eyed watcher spotted the enemy bomber over Pittsburgh, what, precisely, would be his moves? Surely he could only calculate, just as we in school did, what good it would do him to get under something.

When the air-raid siren sounded, our teachers stopped talking and led us to the school basement. There the gym teachers lined us up against the cement walls and steel lockers, and showed us how to lean in and fold our arms over our heads. Our small school ran from kindergarten through twelfth grade. We had air-raid drills in small batches, four or five grades together, because there was no room for us all against the walls. The teachers had to stand in the middle of the basement rooms: those bright Pittsburgh women who taught Latin, science, and art, and those educated, beautifully mannered European
women who taught French, history, and German, who had landed in Pittsburgh at the end of their respective flights from Hitler, and who had baffled us by their common insistence on tidiness, above all, in our written work.

The teachers stood in the middle of the room, not talking to each other. We tucked against the walls and lockers: dozens of clean girls wearing green jumpers, green knee socks, and pink-soled white bucks. We folded our skinny arms over our heads, and raised to the enemy a clatter of gold scarab bracelets and gold bangle bracelets.

If the bomb actually came, should we not let the little kids—the kindergartners like Molly, and the first and second graders—go against the wall? We older ones would stand in the middle with the teachers. The European teachers were almost used to this sort of thing. We would help them keep spirits up; we would sing “Frère Jacques,” or play Buzz.

Our house was stone. In the basement was a room furnished with a long wooden bar, tables and chairs, a leather couch, a refrigerator, a sink, an ice maker, a fireplace, a piano, a record player, and a set of drums. After the bomb, we would live, in the manner of Anne Frank and her family, in this basement. It had also a larger set of underground rooms, which held a washer and dryer, a workbench, and, especially, food: shelves of canned fruits and vegetables, and a chest freezer. Our family could live in the basement for many years, until the radiation outside blew away. Amy and Molly would grow up there. I would teach them all I knew, and entertain them on the piano. Father would build a radiation barrier for the basement’s sunken windows. He would teach me to play the drums. Mother would feed us and tend to us. We would grow close.

I had spent the equivalent of years of my life, I thought, in concentration camps, in ghettos, in prison camps, and in lifeboats. I knew how to ration food and water. We would each have four ounces of food a day and eight ounces of water, or maybe only four ounces of water. I knew how to stretch my rations by hoarding food in my shirt, by chewing slowly, by sloshing water around in my mouth and wetting my tongue well before I swallowed. If the water gave out in the taps, we could drink club soda or tonic. We could live on the juice in canned food. I figured the five of us could live many years on the food in the basement—but I was not sure.

One day I asked Mother: How long could we last on the food in the basement? Did she not know what I had been reading. How could she have known?

“The food in the basement? In the freezer and on the shelves? Oh, about a week and a half. Two weeks.”

She knew, as I knew, that there were legs of lamb in the freezer, turkeys, chickens, pork roasts, shrimp, and steaks. There were pounds of frozen vegetables, quarts of ice cream, dozen of Popsicles. By her reckoning, that wasn’t many family dinners: a leg of lamb one night, rice, and vegetables; steak the next night, potatoes, and vegetables.

“Two weeks! We could live much longer than two weeks!”

“There’s really not very much food down there. About two weeks’ worth.”

I let it go. What did I know about feeding a family? On the other hand, I considered that if it came down to it, I would have to take charge.

It was clear that adults, including our parents, approved of children who read books, but it was not at all clear why this was so. Our reading was subversive, and we knew it. Did they think we read to improve our vocabularies? Did they want us to read and not pay the least bit of heed to what we read, as they wanted us to go to Sunday school and ignore what we heard?

I was now believing books more than I believed what I saw and heard. I was reading books about the actual, historical, moral world—in which somehow I felt I was not living.

The French and Indian War had been, for me, a purely literary event. Skilled men in books could survive it. Those who died, an arrow through the heart, thrilled me by their last words. This recent war’s survivors, some still shaking, some still in mourning, taught in our classrooms. “Wir waren ausgebommt,” one dear old white-haired Polish lady related in German class, her family was “bombed out,” and we laughed, we smart girls, because this was our slang for “drunk.” Those who died in this war’s books died whether they were skilled or not. Bombs fell on their cities or ships, or they starved in the camps or were gassed or shot, or they stepped on land mines and died surprised, trying to push their intestines back in their abdomens with their fingers and thumbs.

What I sought in books was imagination. It was depth, depth of thought and feeling; some sort of extreme of subject matter; some nearness to death; some call to courage. I myself was getting wild; I wanted wilderness, originality, genius, rapture, hope. I wanted strength, not tea parties. What I sought in books was a world whose surfaces, whose people and events and days lived, actually matched the exaltation of the interior life. There you could live.

Those of us who read carried around with us like martyrs a secret knowledge, a secret joy, and a secret hope: There is a life worth living where history is still taking place; there are ideas worth dying for, and circumstances where courage is still prized. This life could be found and joined, like the Resistance. I kept this exhilarating faith alive in myself, concealed under my uniform shirt like an oblate’s ribbon; I would not be parted from it.

We who had grown up in the Warsaw ghetto, who had seen all our families gassed in the death chambers, who had shipped before the mast, and hunted sperm whale in Antarctic seas; we who had marched from Moscow to Poland and lost our legs to the cold; we who knew by heart every snap and sandbar on the Mississippi River south of Cairo, and knew by heart Morse code, forty parables and psalms, and lots of Shakespeare; we who had battled Hitler and Hirohito in the North Atlantic, in North Africa, in New Guinea and Burma and Guam, in the air over London, in the Greek and Italian hills; we who had learned to man minesweepers before we learned to walk in high heels—were we going to marry Holden Caulfield’s roommate, and buy a house in Point Breeze, and send our children to dancing school?
We Don’t
Like Computers
Either.

Strong words from a company whose middle name is “computer,” but a fair representation of our point of view.

A point of view that we’ve translated into a library of hand-held electronic reference products that includes phonetic spelling correctors, thesauruses and full-fledged dictionaries.

Like you, we’ve seen too many computer companies promise the moon and deliver only moon dust when it came to practical, real-life educational advantages.

So our products focus on just one area—language skills. And they deliver on a number of important promises, including creating enthusiasm for spelling, vocabulary and writing, and as a result, increasing student performance in these subjects.

Like you, we’re wary of machines that are expensive, complex and—sales hype notwithstanding—not at all easy to use.

So our products are the essence of simplicity. They are hand-held. They have easy-to-use, familiar keyboards. With only a few minutes of “get acquainted” time, both students and teachers can command their full range of functions.

And they are priced more like books than computers. (Which is only fitting, since they’ve been called “books with batteries”)

Like you, we worry about the quality of information provided by electronic devices. So we found a solution by calling on America’s pre-eminent word authority, Merriam-Webster, to provide our products with correct spellings, synonyms and definitions.

Please write or call for a free brochure about the entire library of Franklin classroom products. We promise you, it will be a real education.
CHINA’S UNTOLD STORY

(Continued from page 15)

means for observing, shaping and controlling the lives of the people are provided by the work units and street committees.

As all urban Chinese know, the street committee is a funnel of information and control employed by the police. Nominally elected, members of street committees have their names put forward by the government’s neighborhood office, and the voting that follows is not secret. Everyone knows how he is expected to vote.

“Their most terrifying power is that they can search your house whenever they want,” confided one young couple, Hong and Weidong, to Fox Butterfield, the New York Times correspondent who wrote China: Alive in the Bitter Sea (Time Books 1982). “The police are supposed to have a warrant, but the street committee cadres can come in when they please.” Usually middle-aged women, they may barge into one’s apartment after midnight without knocking, to check on whether some relative from the countryside is sleeping over (not permitted) or to query guests invited to dinner or check on books or other articles one may own. “It’s very humiliating,” said Hong, the wife, regarding the chief committee woman’s arrogance and power. “If you don’t cooperate, she can call the police and they will come over and ask the same questions. . . . She even watches what time we go to bed,” Hong complained. “We are like caged animals.”

With the tough new birth-control policy, street committees even decide who may have a baby. “We assign a person to keep track of each woman’s menstrual cycle,” a street committee woman explained to Butterfield. “If someone misses her period and isn’t scheduled to have a baby, we tell her to have an abortion.”

As in most of the texts that even discuss the subject, The World Today (Heath Social Studies) describes the street committee in benign terms as persons who “put up posters to tell parents about shots that protect children from measles.” In Teaching about World Cultures (CTIR), this instrument of social control is celebrated. In one of its activities titled: “Grassroots Government: The Neighborhood Committee,” students are invited to solve problems the Chinese way. Nothing is said about the street committee’s surveillance or control function. Instead, students are told that the street committee is a replacement for the extended family and is compared to “similar institutions in American culture” such as “neighborhood groups, churches, etc.” So wonderful is the street committee that “other developing countries” with “similar social problems as a result of weakening family and tribal ties” ought to be encouraged, students are told, to follow the Chinese Communist way.

ONLY A handful of materials make any negative comment about the Communists’ attack on the traditionally honored Chinese family. Several make benign reference to the change. As one guide (All in the Family: China Old and New; SPICE) says, “the family’s functions have been reduced because of what the Communists felt to be an incompatibility between the building of a socialist industrial society and the traditional kinship orientation of the Chinese family.” This guide notes that Chinese parents have less authority than they once did and that the model Chinese child “serves the people’ and works for the betterment of the larger society.” It does not note that these model children have been encouraged to publicly denounce and cause the imprisonment or even execution of their parents.

Exploring World Cultures (Ginn and Co.) in a sidebar includes a “self-criticism” by a college student who showed hesitation in denouncing his father. The textbook then goes on to issue this singular judgment: “Several other changes made by the Communists also weakened the father’s authority. . . . Children were encouraged to report parental disloyalty to the new China. Women and youth gained the most from these changes.”

One of the most cruel assaults on family life—one that has continued under the rule of Deng Xiaoping—has been the government’s indifference to the ties of marriage. Husband and wife may be assigned jobs in different parts of the country. Fox Butterfield met a man who had fallen in love with another university student and married her. They had lived together all of one month when the state labor bureau assigned them jobs in different cities. Even the birth of a child would not make the authorities relent. Once a year the man is granted two weeks, which he combines with the six national holidays to see his wife and nine-year-old daughter. “My prime is passing me by,” he confided, “and I’m still separated. My daughter knows me only as the man who brings presents once a year. How many years does one have to live?” A left-wing magazine in Hong Kong once estimated that some 8 million spouses in China are compelled by the state to live apart, merely from a Communist belief that private life and happiness are irrelevant beside the needs of the state. No text discusses this fact of Chinese life, not even the two teaching units that are solely devoted to teaching about “families.”

With the tough new birth-control policy, street committees even decide who may have a baby.
“Equality” is often cited as a virtue that Mao’s policies helped institutionalize. *People and Nations: A World History* (Harcourt Brace Jovanovich) by Mazour, Peoples and Rabb, is typical. The student learns that the Chinese Communists “wanted to create a classless society in which people worked for common goals, not for their private gain.”

The truth of China’s class system is rather different and is one of the best-kept secrets in the materials under review.

Simon Leys, a scholar who has reported on the horrors inaugurated by the Chinese Communists, notes in *Chinese Shadows* (Viking 1977) that in the sixth century B.C.E. China’s social hierarchy, as described in the *Tso Chuan*, had only ten degrees. It now has twenty-four within the Communist Party alone, each with its special advantages and privileges as one goes up the ladder. The top rank gets ten times the salary of the bottom rank, but that is the least of it. As in other Communist countries, higher party officials have access to special stores for food, clothing, and appliances, stocked with items that ordinary Chinese only dream about. (One of the ways that the children of the party elite are identified by ordinary Chinese is that they are often taller than the average, thanks to the milk, meat, fruit, and vegetables their families have access to.) Special housing, sometimes on luxurious estates behind high walls, is provided the upper Communist crust. Cars are reserved exclusively for important persons and are used as a badge of privilege to enter places like the large hotels or special stores that are closed to ordinary Chinese.

This officially sanctioned inequality is exacerbated by the dismal output of China’s centrally planned economy, wracked as it is by awesome waste and inefficiency.* Goods and services are often accessible only through the “back door,” as the Chinese call it. The resulting resort to bribes has become a way of life, extending even to medicine, which is state controlled and supposed to be equally accessible to all. “Patients in my hospital have to line up for three times,” a physician told Butterfield. “You have to line up for him but just walk right into his room. He will give you better attention. Patients who have an even better medicine and the patients know it. So many of the patients use the back door. If you know a doctor, you don’t have to line up for him but just walk right into his room. He will give you better attention. Patients who have an even closer relationship with the doctor will go to see him at home, after hours. That’s where the best care is. Of course, in exchange, the patients must give presents to the doctors.

Many doctors are so busy they just make a casual examination of the patient and then scribble something out. It’s not good medicine and the patients know it. So many of the patients use the back door. If you know a doctor, you don’t have to line up for him but just walk right into his room. He will give you better attention. Patients who have an even closer relationship with the doctor will go to see him at home, after hours. That’s where the best care is. Of course, in exchange, the patients must give presents to the doctors.

Perhaps the most odious feature of China’s class system has been the “bloodline” principle, by which children were branded for life according to classifications given their parents. A “good” class background is having parents who were poor peasants, workers, or best of all, Communists before the revolution. A “bad” class background is having parents who studied abroad, were landlords, business people, or had anything to do with the Nationalist Kuomintang. One’s family background is traced for three generations (not unlike Nazi practice) and becomes part of a confidential dossier that the personnel section of every work unit maintains. Access to a university education, or to any of the better jobs, was long blocked by a “bad” class background. And yet some of the listings were absurd, with peasants who once owned a mere four acres and two pigs labelled “rich peasants” or even “landlords,” their children’s future thereby permanently damaged. Moreover, anonymous charges made for personal reasons can enter one’s dossier and never be removed. Under Deng Xiaoping, through most of the 1980s, class background was disregarded and the dossier system, while never abandoned, was less harshly employed. With the recent political clampdown, however, the dossier system is in place and the bloodline information available whenever the government might wish to use them.

In none of the textbooks or teacher’s guides are these forms of officially sanctioned inequality communicated to American students. Perhaps the textbook authors assume that the Chinese people, being “different” from ourselves, are not offended by such a range of institutionalized inequalities that border on a caste system. Yet at Fudan University in Shanghai, some brave journalism students locked the library and distributed questionnaires. To the question—“What is China’s worst problem?”—60 percent listed *te-quan*. Special privileges.

Most of the materials cite equality for women as a progressive feature of Communist rule. For example, *World History* (Prentice-Hall) states, “In 1950, the government adopted a new marriage law that guaranteed women full equality.” Even in the typical small village, one learns in *China* (Dushkin Group), “women no longer earn less than the men,” and “79 percent of the wives have become the leading persons in their families.”

The facts are somewhat at variance with this happy picture. It is true that backward conditions for women prevailed until 1950, when the new regime passed a liberal family law giving women freedom of choice in marriage, property rights, and the right to sue for divorce. Article 53 of the Constitution declares women equal to men in all respects. Most American textbooks suggest that this translates into genuine equality for women. Yet the Communist Party, which controls the entire society, had in 1981 a membership of three men equal to men in all respects. Most American textbooks suggest that this translates into genuine equality for women. Yet the Communist Party, which controls the entire society, had in 1981 a membership of three men for every woman, and the women are disproportionately at the bottom. Higher education is the only other ladder of meaningful social mobility; yet China’s own Ministry of Education in the early 1980s found that while girls made up 50 percent of the primary school population, that figure dropped to 40 percent in high school and 30 percent by college. In 1980, according to the official New China News Agency, only 23 percent of Beijing University’s incoming class was female.

The head of the All-China Women’s Federation once complained at a meeting that 80 percent of China’s illiterates were women, and that twice as many unemployed young women than men waiting for jobs were passed over.

Chinese women cannot choose to stay at home and

---

*Raising details about apartment complexes that are unusable and empty, about new factories that stand incomplete or do not operate or operate one or two days a week can be found in Fox Butterfield’s book on China.*
raise their children. By law they must work. Yet day care
is available only to a minority of parents. The law assures
equal pay for equal work. But on visits to a dozen
communes, Fox Butterfield found that men received
about ten work points per day for work that paid women
only seven or eight. Women are usually given the most
backbreaking jobs while men serve as cadres or run the
rare tractors. An American sociologist who lived on a
commune in Hebei province, Steven Butler, estimated
that women did 80 percent of the fieldwork.

To get married, a woman must first get approval from
her work unit, or danwei. (The groom must get permis-
sion from his unit as well.) This all-powerful work unit,
together with the street committee, is what gives the
government such control over everyone. The right to
live in a certain place or to travel or even to buy a
bicycle is determined by the leaders of one’s work unit,
with favoritism rife.

A

OTHER CRUCIAL instrument of social control is
China’s system of residence permits. Only two texts
inform students that freedom of movement is not
to extended to the people of China. The others wholly
ignore the issue, leaving students to assume (why
should they assume otherwise?) that their Chinese
counterparts enjoy this basic right.

The “Follow-up Activity” offered at the end of the
China section in Heath’s The World Today reveals the
ignorance or willful blindness of those who prepared it:
“Tell students to imagine that they are young Chinese
people about to finish high school. Ask them to write a
paragraph describing the kind of work they would like
to do and where they would like to live.” We take such
choices for granted. But in China, these rights do not
exist. Individuals cannot choose where to live. They
cannot even choose their work.

CTIR’s Teaching about World Cultures concedes
these facts, then in its lyrically titled exercise “How Are
You Going To Keep Them Down on The Farm,” actually
supports the Chinese system. Noting that “massive
rural-urban migration” is observed in most developing
countries, students are presented with “a case study and
statistical data to make conclusions about the pull-push
factors for the migration of Chinese peasants to the
cities.” Several alternative programs are presented for
discouraging migration, and students are asked to
choose one program and defend it. None of the pro-
posed options respects the basic right of free move-
ment, and students are not encouraged to consider
options that do.

In short, students are asked to play the role of all-
powerful party officials in a totalitarian state. Cities in
the less-developed world are repeatedly cited as having
endless problems due to the influx of peasants—in Mex-
ico, India, Egypt, Brazil, Nigeria, and Japan—serving to
steer the student toward the “sensible” solution of resi-
dence permits. (Significantly, South Africa is not men-
tioned, having a system of residence permits not unlike
China’s, but lacking the same “good image.”) Students
are not reminded that the United Nations Universal
Declaration of Human Rights specifically states: “Every-
one has the right to freedom of movement and resi-
dence within the borders of each state.” Only after the
decision has been made, and as a sort of afterthought,
are the students asked whether a government is entitled
to prohibit movement in order to avoid “the problems
of a Calcutta or a Mexico City.”

(A question that might be asked, but never is, is: “Why
did the democracies not need totalitarian measures to
handle the urban influx, when a far greater shift from
rural to urban living took place in the process of mod-
ernization?”)

While the CTIR program represents an extreme, most
of the texts reveal a troubling spirit of indifference to
human rights in China. Few of their educated authors
(most of them are university professors) seem aware of
an organization called Amnesty International. The bul-
letsins of Amnesty International make clear that China to
this day has among the worst human rights abuses in the
world, that persons are routinely sent to labor camps
without trial, that execution often follows within days of
arrest (rendering appeals impossible), that the present
regime has sought to speed up the judicial process
(when it occurs at all), that labor camps routinely
“retain” a prisoner after the sentence is completed,
using the “released” inmate as forced labor to help
operate the camp. Not one of the twenty-eight texts
properly describes these realities. Only three so much as
glide over the subject.

Instead, several—including China Mosaic (East Asia
Resource Center, University of Washington)—urge chil-
dren to compare the American Bill of Rights with the
rights afforded the Chinese under their Constitution.
Since the latter includes (on paper, at any rate) “fre-
dom of speech, of the press, of association, of procession
and of demonstration” (Article 35), freedom of religion
(Article 36), freedom from arbitrary arrest or detention
(Article 37), and other basic rights, children are made to
believe that in the realm of rights, the two nations differ
little. Nothing is said regarding actual practice, except
in this paragraph for the teacher:

Guide the students to an understanding that the American
and Chinese Constitutions state ideals. Ask if they know of
situations where the ideals have not been put into practice.
An example would be the historic denial of voting rights to
black Americans.

A

FTER THE death of Mao Zedong in 1976, and with
the rise of the current leader, Deng Xiaoping,
aspects of the Cultural Revolution were denounced, the
cult-worship of Mao was ended, the “Gang of Four,”
allegedly responsible for the extremism of the Maoist
era, were tried as scapegoats, and class struggle was de-
emphasized. These events and the economic changes
inaugurated by Deng Xiaoping—greater scope for pri-
ivate initiative in small business and farming, a return to
formal schooling to educate doctors and engineers,
greater openness to the outside world in order to mod-
ernize Chinese industry—are reported in most texts as
sensible developments.

In addition, during much of the 1980s, there was a
relaxation of many government controls. The dossiers,
the neighborhood committees, self-criticisms, denun-
ciations, and other tools of coercion were less fre-
cently used. Policy toward the family was less hostile.
Some greater freedom of expression was allowed. But
the controls were never dismantled. When an invisible
line was overstepped, the government could, and did,
These ongoing features of political repression go unnoticed in most of the texts for the simple reason that the whole subject in most cases has been ignored.

The failure to ask questions about freedom, democracy, and human rights displayed by most materials is stunning and bewildering and constitutes very poor education. The indifference of the authors and publishers involved to matters of basic rights has caused them to miss one of the great stories of our time: the outbreak of the Democracy Movement in China.

On April 5, 1976, 100,000 people in Beijing's Square of the Gate of Heavenly Peace turned the commemoration of Zhou Enlai into a massive protest against the government.

On Dec. 5, 1978, Wei Jingsheng, then China's best-known dissident, posted a sensational document on the short-lived Democracy Wall in Beijing entitled "The Fifth Modernization: Democracy" (taking off on Deng's Four Modernizations). It said such things as:

"The people need democracy. When they demand democracy, they simply demand that which originally belonged to them.

Go and ask the workers: 'Apart from the wretched salary that you are given every month, just to prevent you from starving, what rights do you have? What power do you have? Whose masters are you? Alas, you can control nothing—not even your own marriage!'

The struggle of modern times is a struggle to achieve the maximum degree of freedom and democracy that mankind can contemplate.

Wei was given a one-day trial and disappeared into the Chinese gulag.

In the autumn of 1980, a brief political thaw occurred when it seemed that Deng would allow the people to have serious, contested elections at the local level. As with a comparable thaw under Mao (the brief One Hundred Flowers Period), repression followed soon afterward. But in the interval, telling incidents revealed the deeper aspirations of the Chinese. At Beijing University, a former Red Guard named Fang Zhiyuan held a campaign rally where 500 students packed a room intended for 200 and provoked applause by saying that he didn't think China was a socialist country. Public ownership of the means of production is not enough, said Fang. "To say something is truly publicly owned, we must see if the leaders represent the interests of the people. To have this, you need a system, and that system is democracy." The audience erupted in wild approval.

At the Hunan Normal College in Changsha, Liang Heng (who later with his American wife Judith Shapiro wrote a remarkable book, Son of the Revolution, Vintage 1984), publicly campaigned on statements that he no longer believed in Marxism. Seeing that he would win, the government tried to rig the election, which provoked a hunger strike of eighty students at the college with another 5,000 joining in a sit-in demonstration at the Changsha Party headquarters. They were protesting standard Party interference in the election of deputies at the college. Many of the protesters were shouting, "Down with bureaucracy, down with feudalism, long live democracy!"

In December 1986, thousands of students in Beijing, Shanghai, and other cities across China demonstrated in the streets calling for some measure of political democracy.

These events, whose historical importance is obvious, are referred to briefly in three books and are wholly absent from the other twenty-five. These protests, which began in 1976, make the recent demonstration of this spring in Tiananmen Square fully comprehensible. The original aim of the students is too easily forgotten: They wanted to celebrate the seventy-ninth anniversary of the Beijing student demonstration of May 4, 1919, calling for democracy and triggering similar student demonstrations all over China.
HOW COULD textbook authors miss this story? What inspires such an omission?

As noted earlier, the field of international/global education is animated by doctrines that denounce "ethnocentrism" and encourage students to lay aside their own values as they study other cultures. Typical is the grade-seven text World Cultures and Geography (The Center for Learning by Artis, Costello and Miltnner 1987), which tells teachers in the section titled "Ethnocentricity" that "it is helpful to assist students in emptying their minds of the cultural perspective that they bring to such a study." In Teaching about Cultural Awareness (CTIR), Gary Smith and George Otero underline that human diversity means "that we cannot simply develop a codebook for any culture's behavior," that "to assume that there is one proper way to behave toward all human beings is both naive and unworkable."

The Education Department of the State of New York published last year Social Studies 9-10: Global Studies, a preliminary syllabus for teachers, which includes in its directives the requirement that "each student will develop the ability to understand, respect and accept people of different...political, economic and social background, and their values, beliefs and attitudes" (emphasis added). Yet students are also required to learn the values "necessary to participate in democratic self-government." The authors, apparently, do not see the contradiction. The problem lies in the fact that most societies in this world are not democratic.

International education should be animated by the ideals of freedom and democracy on which our society rests and to which people everywhere aspire.

The San Diego school system also publishes guidelines for global education: "Students will demonstrate an understanding and appreciation for the fact that individual cultures and societies, past and present, have developed lifestyles and viewpoints that are appropriate to their particular needs, wants, and desires." Did the authors think of South Africa when they wrote that? Of Cambodia under the Khmer Rouge?

There is no doubt that children are prone to look askance at whatever they find strange, including cultural differences in dress, cooking, and accepted manners. For many reasons—not least those of ethnic and religious pluralism that define the United States as a culture—the cosmopolitan values of tolerance and appreciation of differences are plainly values that our schools should encourage. But there is a line that we draw when different "customs" and different cultural "tastes" pass over into barbarous practice. As former U.S. Ambassador Jeane Kirkpatrick has said, few will agree "that cannibalism is only a matter of taste, that Auschwitz reflects an alternative approach to race relations, that infanticide is a somewhat archaic but nonetheless effective mode of family planning, that slavery is an alternative view of how to get a society's work done."

Some educators make the argument that democratic rights are a luxury that poor nations cannot afford. But the evidence by now is overwhelming that this is an absurd dichotomy. Freedom and democracy do not cost a people food and clothing and prosperity; they generate the goods that constitute prosperity. Simon Leys has aptly put it in The Burning Forest: "Totalitarianism, far from being a drastic remedy that could be justified in a national emergency, appears on the contrary to be an extravagant luxury which no poor country can afford with impunity."

But NEITHER of these rationales fully explains the silence on human rights and the struggle for democracy in China that goes back at least to Sun Yat-sen. The very textbooks that say nothing about the absence of basic rights in China have no difficulty judging Nazi Germany or denouncing the absence of basic rights in South Africa today. People and Our World (Holt, Rinehart & Winston) accurately informs the student that "under apartheid, Blacks are not allowed to vote in elections or hold any important or high governmental or business positions," that in 1974 "the South African government had an estimated 800 political prisoners in its jails." Why, suddenly, is an exception made to the doctrine that nations have constructed systems "appropriate to their particular needs"? What about such matters as they apply to China? This double standard also obtains in People and Nations (Harcourt Brace Jovanovich) where, as in the Holt Rinehart textbook, Cuba is treated kindly—despite being a dictatorship with a deplorable human rights record—whereas Chile under Pinochet, like South Africa, is judged by democratic standards. Are tyrannies of the left—at least those still idealized by utopia-seekers—immune from standards applied to tyrannies of the right? So it seems.

Whatever their reasons, by suggesting that some people in other places are less desirous or deserving of democratic rights, these creators of global/international
education materials are, quite simply, repudiating the universal basis of human rights. They are repudiating the terms of the Declaration of Independence, which affirms that all men are created equal. They are repudiating France's Declaration of the Rights of Man, not to mention the United Nations Universal Declaration of Human Rights.

Oddly enough, there is something perversely ethnocentric in the idea that human rights are a peculiarity of Americans, British, French, and West Germans. As Simon Leys has put it, this "amounts to saying: 'Human rights are one of those luxuries that befit us wealthy and advanced Westerners; it is preposterous that mere natives of exotic countries could qualify for a similar privilege, or would even be interested in it.'" There is enormous condescension, bordering on racism, in the theory that people in other places do not have the same aspirations to speak their mind, travel, move, work at what they wish, marry, have children, be judged as individuals and not for the alleged crimes of their parents, and finally, to choose their leaders and the form of government under which they will live.

International education should be animated by the ideas of freedom and democracy on which our society rests and to which people everywhere aspire. These ideas and principles order our civic life, and yet they are not biologically innate. They are learned ideals. If governments by and for the people are to last, schools must teach successive generations what these principles mean. There is nothing uniquely "white" or "English" about them. They are universal in significance and are cherished by people of every color, faith, and background. To call them "ethnocentric" is an affront to our diverse population that came to these shores, often in flight from persecutions and pogroms, from every corner of the globe.

International education belongs in any meaningful curriculum. Surveys show that American students are lamentably ill-informed about the world. But if other areas of the world are as badly handled as China (and there is reason to fear they are), a wholesale review of the field's operating assumptions is very much overdue. * * *

In late 1978, Fox Butterfield entered China on a tourist visa, during the early stages of the Democracy Movement. On the People's Square in downtown Shanghai, a crowd of ten thousand people surged around three government buildings. The Internal Politics of China (SPICE 1982); Economic "The twenty-two books, arranged alphabetically by publisher, are: Changing China After Mao (SPICE 1986) by Michael Chang, Patricia Irle, Charles Lewis, Bing Shaw, and Helen Strange; Teaching About a Changing China (SPICE reprint of February 1986 edition of Social Education.) A Children's Palace (Center for Asian Studies, University of Illinois, Urbana 1986) by Michele Shoresman and Roberta Gumport; China Mosaic (University of Washington, East Asia Resource Center 1988) by Mary Bernson; Letters from Chengdu (University of Washington, East Asia Resource Center 1989) by Richard Moulden and Mary Bernson.

"We hold these Truths to be self-evident, that all Men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the Pursuit of Happiness..."

"In 1776 in the American Revolution," the poster went on, "the Declaration of Independence for the first time in the history of mankind spoke about people's right to live as human beings. We ought to have these rights too, not to be the emperor's slaves.

Do the Chinese have something to teach us? Yes, they do. They remind us that armed frontiers cannot stop the democratic ideal and that the desire for human rights is universal. This is a lesson plain from China to Poland to South Africa. When textbook authors and publishers learn it, our children will get the schoolbooks they deserve.

2China Mosaic and Letters from Chengdu, published by the University of Washington's East Asia Resource Center, and A Children's Palace published by the University of Illinois' Center for Asian Studies.

"Scholar Jürgen Domes in The Internal Politics of China 1949-1972 (Panzer 1973) states that "in the course of the land reform movement" allegations of mass executions are "cautious estimates put the dead at no less than 5 million."

5In January 1976, the Minister of Foreign Affairs, Ch'en Yi, in a "self-criticism" speech, said that in the summer and autumn of 1967 alone more than four thousand thousand members of "work teams" had been executed (Domes, The Internal Politics of China). Both Roger Garside in Coming Alive: China After Mao (McGraw-Hill 1981) and Fox Butterfield in China Alive in the Bitter Sea (Times Books 1982) cite an official government source reported by Agence France Presse in February 1979 as giving the figure of four hundred thousand deaths.

"Glocal Comparative Political and Economic Systems (San Diego City Schools 1986) by Robert Borntrager and Duane Shute.

AMERICAN FEDERATION OF TEACHERS 53
BUTTONS ARE GUARANTEED TO GET YOUR STUDENTS FIRED UP

Experts, classroom teachers like you AGREE!

$29.95 includes everything to get started.

Teachers are among the most creative users of buttons anywhere. According to many teachers, hardly a day goes by that a button wouldn't come in handy in a classroom situation. And since kids and buttons go hand in hand, teachers have to keep on their toes to come up with fresh ideas for using them.

Now you and your class can make these 2¼" pin-back buttons yourselves. Make as many or as few as you want using your own artwork, photos, or our pre-printed designs. We guarantee your 100% satisfaction or your money back. The Starter Kit includes our patented button-maker, parts and designs to make ten buttons, and easy-to-follow instructions. Additional button parts and accessory items can be purchased through our FREE 52-page catalog which is included in every order. Order now! Use the coupon below.

FRE CATALOG. SATISFACTION GUARANTEED.

Bravo for Bella Rosenberg ("Public School Choice: Can We Find the Right Balance," Summer 1989) for successfully tackling that difficult subject—choice—and zeroing in on the critical pros and cons. I'd like to amend one of her examples, and in doing so, make an additional point about why teachers will need to be advocates of choice, and therefore MUST play a role in shaping the manner in which it is implemented.

District 4's story—significant because it is one of the few large-scale inner-city efforts to engage in public schools of choice for all—needs to be told more fully and accurately than Rosenberg's story did. It has not been a story of perfect success, and there are aspects of what we did that were (in retrospect at least) unwise.

But our success is far less ambiguous than Bella Rosenberg suggests. The data on test scores (my least favorite kind of evidence) leaves no room for her suggestion that it might have been out-of-district students who upped our scores. In fact, we tested the data for this hypothesis years ago. If anything, we found that scores were slightly lower due to out-of-district enrollment. Middle-class white students did come into District 4, but of the out-of-district students who came, 80 percent or more were low-income African-American or Latino kids, many desperate for some alternatives. We took in a lot of kids, in short, who came to us because they were in trouble—some came on their own, others got referred by helping agencies. Our success with them showed up in lots of statistics—attendance and later high school records included.

Rosenberg is right that the most important thing about District 4's story is NOT choice for parents and kids. This was the inevitable and necessary consequence of the real innovation—that District 4 offered choices for professionals. Individuals or groups of teachers were able to organize schools and teaching according to their own favorite ideas. With active help from the administration, teachers found ways to create needed time, resources and flexibility so that something different could happen. After ten years, we now have fifty different schools, all operating within the same nineteen school buildings that we have always had.

The logic is simple: If teachers have a significant voice in what goes on in their own schools, then we're going to have to acknowledge diversity. And if we are to have diversity, then both teachers and parents need to be able to choose their schools. But, of course, as Bella Rosenberg says, such preferences also need monitoring and controls. There will be inequities, as there are now, but real equity requires more effective schooling for all. I believe this can only occur as schools begin to reflect the expertise of those who work in them. Thus a thoughtful system of choice is a necessary (however insufficient) ingredient if our goal is professionals with a legitimate role in shaping the life of their school.

—DEBORAH MEIER

CENTRAL PARK EAST SECONDARY SCHOOL

I have only three regrets about Bella Rosenberg's excellent article. The first is that I didn't write it myself! Nearly twenty years of seeking, as a state education official, to promote equity and its essential companion, excellence, in urban public schools have convinced me that increased parental choice is
How To Cut Your Grading Time By 63% This School Year!

Now grading really is as easy as ABC with the new and improved GradeMatic 200™ grading calculator for teachers — $39.95

Now you can cut the time you spend grading by 63% (or more!) with the amazing new GradeMatic 200 calculator for teachers.

That's right. At last there's a handheld calculator that lets you average grades with the touch of a few buttons.

What's more, the improved GradeMatic 200 is easier than ever with an expanded number-grade program and simpler, straightforward keyboard.

Letters & Numbers!

Whether you use letter grades, numerical scores, or a combination of both, you will save hours upon hours of time marking periods with the new GradeMatic 200.

■ For letter grades you enter directly on the patented letter-grade keyboard—just as you read them off a gradebook. Then simply press the Student Average key and instantly the GradeMatic gives you the final grade.

■ For numerical grades you set the high and low passing point totals—for a single assignment or for a whole semester's work—then enter the students' scores and again press the Student Average key to find the grade. It's quick, simple and accurate.

With either kind of grading, you can enter up to 99 grades per student and up to 99 students per class for the automatic Class Average program.

■ You can even time tests or activities with the GradeMatic's built-in Timer Alarm which counts up or down, and has a 3-second buzzer.

Order Today & Receive a FREE Gift!

If you order your GradeMatic 200 within the next 10 days, we'll include a custom fitted leather case, personalized with your initials. A $14.50 value—YOURS FREE— but only if you order now!

Plus, you risk nothing when you order the GradeMatic 200 because it comes with a 30-Day Money-Back Guarantee. To order, simply fill out and return the coupon below, or call Toll-Free anytime, 1-800-854-8075.

Order your GradeMatic 200 risk-free today, receive a FREE Gift, and cut your grading time by 63% this school year!

Read what these teachers said about our original grading calculator—before we improved it!

"I can't believe the time I save with this wonderful invention! It's so easy even my students can use it." Gary Grier, Santiago Elem., Santa Ana, California

"I moved from 30 hours per grading period to average grades to less than 10 using the GradeMatic." Sherry D. Mertz, Grandview Jr. High, Phoenix, Arizona

"Best teacher's aid yet! Makes grade averaging fun!" Virginia Mattingly, So. Spencer High School, Rockport, Indiana

Compact and Complete

What's more, the GradeMatic lets you grade where and when you want. It measures a mere 2 3/4 x 5 1/4 x 1/4", so it fits easily in your purse or pocket. And it also works as a regular math calculator with Percent, Memory and battery-saving Auto Shut-Off.

Best of all, the GradeMatic 200 comes with easy-to-follow instructions, 1-Year Warranty, replaceable batteries (avg. life over 2 years), and sturdy carrying case.

How To Cut Your Grading Time

— by 63% This School Year!

Now grading really is as easy as ABC with the new and improved

GradeMatic 200™ grading calculator for teachers — $39.95

N

O

100% 30-Day Money-Back Guarantee

If for any reason you are not 100% delighted, return your calculator within 30 days for a full, no-questions-asked refund. Your satisfaction is our #1 concern.

Call Toll-Free Anytime

1-800-854-8075


Call Toll-Free Anytime

1-800-854-8075

Order Today & Receive a FREE Gift!

If you order your GradeMatic 200 within the next 10 days, we'll include a custom fitted leather case, personalized with your initials. A $14.50 value—YOURS FREE—but only if you order now!

Plus, you risk nothing when you order the GradeMatic 200 because it comes with a 30-Day Money-Back Guarantee. To order, simply fill out and return the coupon below, or call Toll-Free anytime, 1-800-854-8075.

Order your GradeMatic 200 risk-free today, receive a FREE Gift, and cut your grading time by 63% this school year!

Read what these teachers said about our original grading calculator—before we improved it!

"I can't believe the time I save with this wonderful invention! It's so easy even my students can use it." Gary Grier, Santiago Elem., Santa Ana, California

"I moved from 30 hours per grading period (to average grades) to less than 10 using the GradeMatic." Sherry D. Mertz, Grandview Jr. High, Phoenix, Arizona

"Best teacher's aid yet! Makes grade averaging fun!" Virginia Mattingly, So. Spencer High School, Rockport, Indiana

Compact and Complete

What's more, the GradeMatic lets you grade where and when you want. It measures a mere 2 3/4 x 5 1/4 x 1/4", so it fits easily in your purse or pocket. And it also works as a regular math calculator with Percent, Memory and battery-saving Auto Shut-Off.

Best of all, the GradeMatic 200 comes with easy-to-follow instructions, 1-Year Warranty, replaceable batteries (avg. life over 2 years), and sturdy carrying case.
The world’s most interesting work can be yours!

Enter the exciting world of Intercultural Student Exchange. As a staff member you will work part time as a link between foreign students and host families. You will gain exposure to different cultures, while at the same time create an everlasting bond with your students and their families overseas.

For further information mail your resume to:

STUDENT TRAVEL SCHOOLS
23-10 45th Avenue • Long Island City, NY 11101
If there are any questions please feel free to call 718-766-8201

And sadly teach

Teacher Education and Professionalization in American Culture
by Jurgen Herbst

“...the refusal to educate, encourage, and value public school teachers as professionals and to grant them the independence of professional status in their classrooms is the chief and most persistent cause underlying the recurrent complaints about, and malaise of, American public education.” —Jurgen Herbst

Cost: $25.00

Wisconsin
University of Wisconsin Press
114 N. Murray St., Madison WI 53715
at your bookstore, or call (608) 262-4782 for ordering information

Nothing teaches critical thinking as well as philosophy for children

Who are Elifie, Pixie, Harry, Rio & Gus?

If you are investigating programs that will improve your students’ reasoning skills and judgment, you will know the answer right away. These are four early and middle elementary thinking skill programs, part of the Philosophy for Children curriculum (endorsed and disseminated by USDE’s National Diffusion Network). For a 56-page free catalog, write IAPC, Box 5, Montclair State College, Upper Montclair, NJ 07043.

Nothing teaches critical thinking as well as philosophy for children

essential to real reform. Justice demands, in addition, that the right that the middle class already enjoys, to choose a school through decisions about where to live or by paying tuition, be extended to those who cannot afford those alternatives. Rosenberg presents with admirable clarity the arguments for choice that I would have made myself, and I must accept the fairness of her reservations.

“Controlled choice,” which she discussed in generally positive terms, is a strategy that evolved out of our concern to move beyond magnet schools, with their implication of self-selection and thus of a dual educational system. Seven Massachusetts cities have universalized choice, challenging every school to be effective and responsive to the concerns of parents.

My second regret is that Rosenberg does not discuss at more length the need for effective counselling of parents about the options available. We have found in Massachusetts, where more than half of the low-income and minority pupils attend public “schools of choice,” that such counselling is essential—and pays major dividends in increased understanding of and participation in the subsequent educational process. At present, we provide state funding to support ten parent information/choice centers, an effort that we plan to expand as funds become available.

My third regret is that Rosenberg does not stress that, in a democracy, educational diversity may have merits that go beyond the opportunity to experiment with different pedagogical strategies until the best one has been identified. There is a good case to be made for schools that respond to different visions of what education is all about, so long as there is clarity about what skills and knowledge, what aspects of civic virtue, all pupils should acquire.

But like any strong medicine, choice must be used correctly with safeguards to protect equal access and integration. Without such safeguards, it will inevitably widen the gap that already exists between those well and those poorly served by public education.

—Charles Glenn

Executive Director
Office of Educational Equity
Massachusetts Department of Education
<table>
<thead>
<tr>
<th>Publication</th>
<th>Usual Price</th>
<th>Your Price</th>
<th>Publication</th>
<th>Usual Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field &amp; Stream</td>
<td>15.94</td>
<td>8.97</td>
<td>New Yorker 52 issues</td>
<td>32.00</td>
<td>20.00</td>
</tr>
<tr>
<td>Financial World</td>
<td>39.00</td>
<td>19.95</td>
<td>104 issues</td>
<td>64.00</td>
<td>40.00</td>
</tr>
<tr>
<td>Flying</td>
<td>20.98</td>
<td>16.97</td>
<td>Newsweek 52 issues</td>
<td>41.08</td>
<td>24.94</td>
</tr>
<tr>
<td>Food and Wine</td>
<td>22.00</td>
<td>17.00</td>
<td>2 years</td>
<td>82.16</td>
<td>49.92</td>
</tr>
<tr>
<td>Football Digest</td>
<td>14.95</td>
<td>11.97</td>
<td>Omni</td>
<td>34.00</td>
<td>15.96</td>
</tr>
<tr>
<td>Forbes 26 issues/ year</td>
<td>48.00</td>
<td>30.00</td>
<td>Organic Gardening</td>
<td>18.00</td>
<td>14.97</td>
</tr>
<tr>
<td>Fortune 27 issues/ year</td>
<td>47.97</td>
<td>23.99</td>
<td>Outside 10 issues</td>
<td>16.00</td>
<td>8.97</td>
</tr>
<tr>
<td>GQ</td>
<td>19.00</td>
<td>19.95</td>
<td>Parents</td>
<td>20.00</td>
<td>12.99</td>
</tr>
<tr>
<td>Golf Digest</td>
<td>11.95</td>
<td>11.97</td>
<td>PC Computing</td>
<td>19.94</td>
<td>14.97</td>
</tr>
<tr>
<td>Golf Illustrated</td>
<td>15.00</td>
<td>8.97</td>
<td>PC 32 issues</td>
<td>44.97</td>
<td>24.97</td>
</tr>
<tr>
<td>Gourmet</td>
<td>18.00</td>
<td>16.00</td>
<td>PC World</td>
<td>29.00</td>
<td>19.97</td>
</tr>
<tr>
<td>Harpers Magazine</td>
<td>18.00</td>
<td>11.97</td>
<td>Penthouse</td>
<td>36.00</td>
<td>30.00</td>
</tr>
<tr>
<td>High Technology</td>
<td>30.00</td>
<td>24.00</td>
<td>Personal Computing</td>
<td>18.00</td>
<td>9.97</td>
</tr>
<tr>
<td>Home Mechanixillus</td>
<td>13.97</td>
<td>9.99</td>
<td>Peterson's Photographic</td>
<td>17.94</td>
<td>8.97</td>
</tr>
<tr>
<td>Inc</td>
<td>24.00</td>
<td>12.00</td>
<td>Popular Electronics</td>
<td>21.95</td>
<td>18.95</td>
</tr>
<tr>
<td>Inside Sports</td>
<td>18.00</td>
<td>11.97</td>
<td>Popular Photography</td>
<td>11.97</td>
<td>7.99</td>
</tr>
<tr>
<td>Insight</td>
<td>17.00</td>
<td>12.75</td>
<td>Popular Science</td>
<td>13.94</td>
<td>8.97</td>
</tr>
<tr>
<td>Instructor</td>
<td>16.00</td>
<td>9.97</td>
<td>Practical Homemaker</td>
<td>12.97</td>
<td>9.97</td>
</tr>
<tr>
<td>Jet 52 issues</td>
<td>36.00</td>
<td>26.00</td>
<td>Premiere</td>
<td>18.00</td>
<td>11.97</td>
</tr>
<tr>
<td>Ladies Home Journal</td>
<td>19.95</td>
<td>12.97</td>
<td>Prevention</td>
<td>18.97</td>
<td>12.97</td>
</tr>
<tr>
<td>Learning '89</td>
<td>18.00</td>
<td>9.97</td>
<td>Radio Electronics</td>
<td>17.97</td>
<td>12.97</td>
</tr>
<tr>
<td>Life 13 issues</td>
<td>32.50</td>
<td>16.25</td>
<td>Brand &amp; Track</td>
<td>19.94</td>
<td>12.97</td>
</tr>
<tr>
<td>Magazine</td>
<td>33.95</td>
<td>16.99</td>
<td>Rolling Stone</td>
<td>25.95</td>
<td>19.97</td>
</tr>
<tr>
<td>McCalls</td>
<td>13.95</td>
<td>6.99</td>
<td>Runners World</td>
<td>21.75</td>
<td>17.97</td>
</tr>
<tr>
<td>McCormick</td>
<td>30.00</td>
<td>19.97</td>
<td>School</td>
<td>18.97</td>
<td>12.97</td>
</tr>
<tr>
<td>McWorld</td>
<td>18.00</td>
<td>11.97</td>
<td>Saturday Evening Post</td>
<td>12.97</td>
<td>8.97</td>
</tr>
<tr>
<td>Modernism</td>
<td>15.00</td>
<td>11.97</td>
<td>Science Digest 6 issue/ yr</td>
<td>12.95</td>
<td>9.99</td>
</tr>
<tr>
<td>Modern Electronics</td>
<td>16.97</td>
<td>12.97</td>
<td>Scientific American</td>
<td>24.00</td>
<td>19.97</td>
</tr>
<tr>
<td>Money</td>
<td>33.95</td>
<td>16.99</td>
<td>Seventeen</td>
<td>15.95</td>
<td>12.99</td>
</tr>
<tr>
<td>Mother Jones</td>
<td>34.00</td>
<td>16.00</td>
<td>Ski</td>
<td>0.07</td>
<td>9.99</td>
</tr>
<tr>
<td>Motor Trend</td>
<td>19.94</td>
<td>9.97</td>
<td>Skiing</td>
<td>11.94</td>
<td>9.97</td>
</tr>
<tr>
<td>Ms. Magazine</td>
<td>16.97</td>
<td>10.97</td>
<td>Sport</td>
<td>17.94</td>
<td>8.97</td>
</tr>
<tr>
<td>The Nation 24 issues</td>
<td>43.30</td>
<td>29.99</td>
<td>Stereo Review</td>
<td>13.94</td>
<td>8.97</td>
</tr>
<tr>
<td>New Choices (Fifty Plus)</td>
<td>15.00</td>
<td>11.97</td>
<td>Success</td>
<td>10.95</td>
<td>9.97</td>
</tr>
<tr>
<td>New Secular 52 issues</td>
<td>99.97</td>
<td>64.99</td>
<td>Teaching and Computers</td>
<td>10.95</td>
<td>9.97</td>
</tr>
<tr>
<td>New Woman</td>
<td>15.97</td>
<td>12.97</td>
<td>Teaching the Pre- K</td>
<td>15.95</td>
<td>12.99</td>
</tr>
<tr>
<td>New York 50 issues</td>
<td>37.00</td>
<td>22.50</td>
<td>Teen</td>
<td>15.95</td>
<td>12.99</td>
</tr>
<tr>
<td>N.Y. Review of Books</td>
<td>37.50</td>
<td>17.97</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**AFTSS HAS THE LOWEST PRICES**
- Up to 83% off cover prices.
- Up to 50% off usual subscription rates.

**AFTSS HAS THE BEST SELECTION**
Hundreds of choices in all from Audio to YM

**AFT IS YOUR UNION'S PROGRAM**
There's never a reason to buy anywhere else!

**Children's Magazines**
- Boys' Life
- Child Life ages 6-10
- Children's Digest ages 7-11
- Children's Parade
- Computer Digest ages 4-7
- Cricket
- & All Ages ages 4-7
- Esquire
- Odyssey ages 8-14, 15-19
- Parents
- Teen Beat

**American Federation of Teachers Subscription Services**
Box 258, 9 Northern Blvd., Greenvile, N.Y. 11548
(516) 671-7744

**Don't Delay - Order Today**

**Publication Name**

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

**Total**

- Check enclosed (made payable to AFTSS) or
- Visa or Mastercard Exp.
- M/C# Date

All subscriptions are for one year unless otherwise noted.
New orders: Publishers take 8 to 12 weeks to start subscription.
Renewals: Please send us the address label from your magazine at least 8 weeks before the expiration date.
MAKE THE WORLD YOUR CLASSROOM.

EF Introduces You to a World of Free Educational Travel. EF has been providing Educational Tours abroad for nearly 25 years. We are the world's largest and most experienced organization, with more than one million satisfied travelers. EF offers you and your students over 100 Educational Tours from 8 to 33 days. We can take you to Europe, the Soviet Union, the South Pacific, Mexico—and now Africa! We arrange tours for Languages, Arts and Sciences; for sports and musical groups. Let EF help you bring your classroom to the world!

When you enroll just six students, you travel for free as their chaperone. An additional six enrollments entitles you to bring a companion along for free. With EF, you are also rewarded for bringing each additional student along. And if you organize your tour before our deadline, you may even be eligible to attend an expense-paid EF Teacher Convention in Europe or the South Pacific!

Starting your EF Tour couldn't be easier. Just return the attached reply card, and we will send you a complete Classroom Presentation Pack and destination catalogue. Or give us a toll-free call at 1 800 637-8222, and we will be happy to send you all the information you need to become a free world traveler.

I am interested in finding out more about free Educational Travel with EF. Please send me a Classroom Presentation Pack right away.

Name: __________________________
Address: _________________________
Telephone: ________________________
Return to: EF
One Memorial Drive, Cambridge, MA 02142

American Federation of Teachers
555 New Jersey Ave., N.W.
Washington, DC 20001