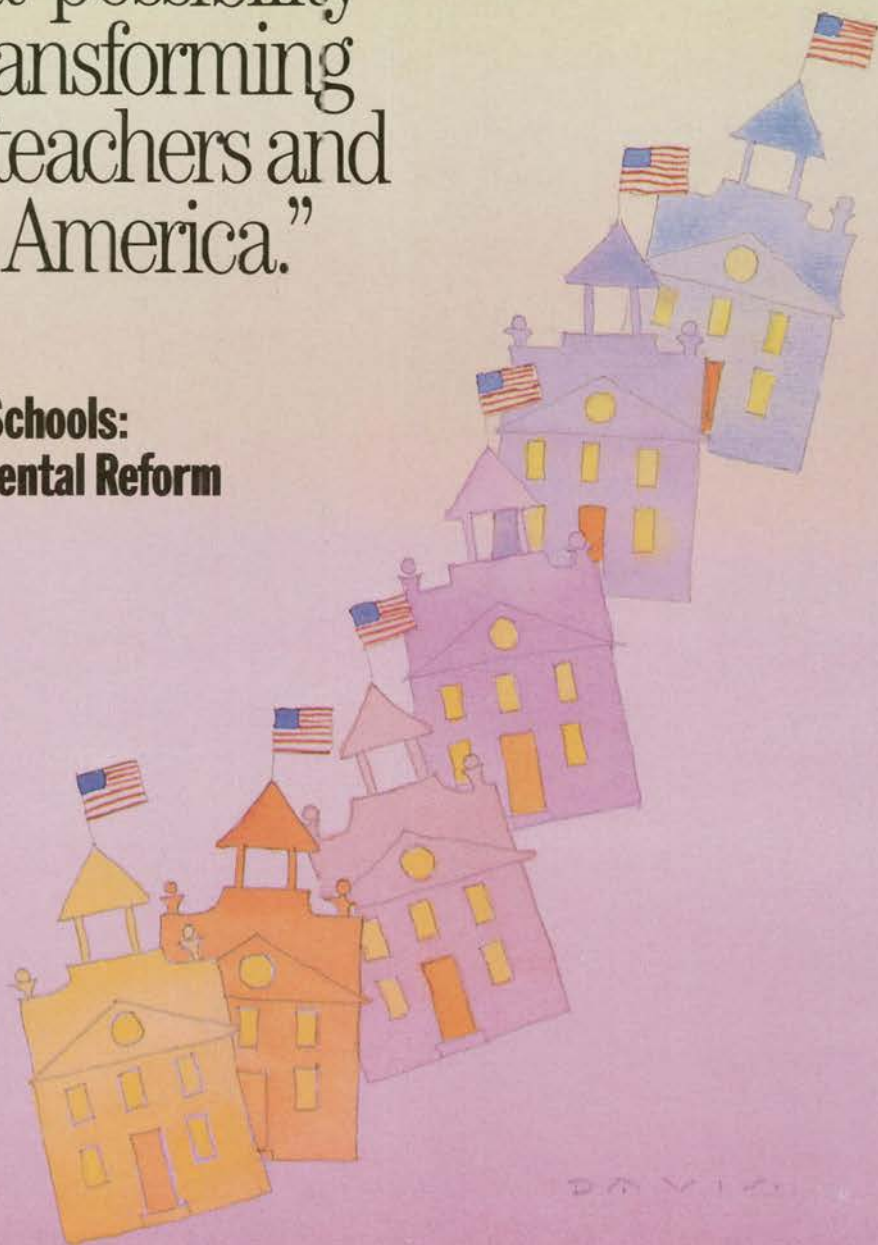


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FALL 1986

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By Albert Shanker



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IN FALL...

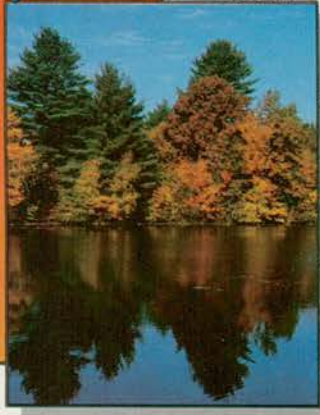
CHALK STENCILS



Materials:
heavy paper
black ink
chalk dust
brush
sponge
Dorland #2200000

Procedure:
1. Cut out the stencil from the heavy paper.
2. Dip the sponge into the ink and dab it onto the back of the stencil.
3. Press the sponge onto the board through the stencil.
4. Repeat steps 2 and 3 until the desired color is achieved.
5. Change the ink and sponge as needed.


FALL MURAL



Materials:
large sheets of brown mura paper or brown wrapping paper
12" x 18" green construction paper
sponge
brown, orange, red, and yellow paint
multicolored construction paper in a variety of sizes



Procedure:
1. Cover a large bulletin board or wall with brown paper.
2. Staple the green paper across the bottom of the board lengthwise. Fringe the top edge of the paper for grass.
3. Paint large tree trunks across the paper with brown paint.
4. Sponge paint leaves onto the trees and grass by dipping the sponge into the orange, red, and yellow paint, and pressing the sponge onto the mural paper.
5. Have students make fall cutouts from the construction paper and paste or staple them onto the mural.
6. If available, staple Indian corn and fall leaves around the bulletin board ends.

Suggestions:
1. For the winter make large tree trunks and bare branches with black paint. Sponge paint snow onto the mural, and add snowflakes, ice skaters, or the snowflakes on page 54.
2. In the spring make sponge-painted green leaves. Add flowers on pages 76, 89, 92-93, flying butterflies on page 90, or origami swans on page 82.



IN WINTER...


CHRISTMAS TREE

Materials:
newspaper
rollers (tooth, cane, cardboard tubes)
string, cardboard, yarn, ric-rack, etc.
construction paper (any size)
square aluminum pan

Procedure:
1. Cover your work area with sheets of newspaper.
2. Decorate the roller by cutting designs from cardboard and gluing them to the roller, or glue yarn, string, etc. around the roller.
3. Let the glue dry.
4. Pour a layer of paint in the square aluminum pan.
5. Place the construction paper on the newspaper.
6. Dip the roller in the paint and roll across the paper. Roll as frequently and in many directions as desired.

Suggestions:
1. Use holiday paint colors and cutouts to make printed cards and matching wrapping paper.
2. Store the rollers in a large carton for classmates to share.



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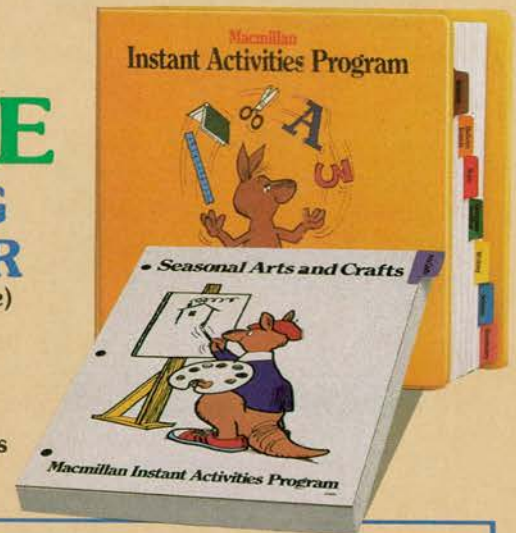
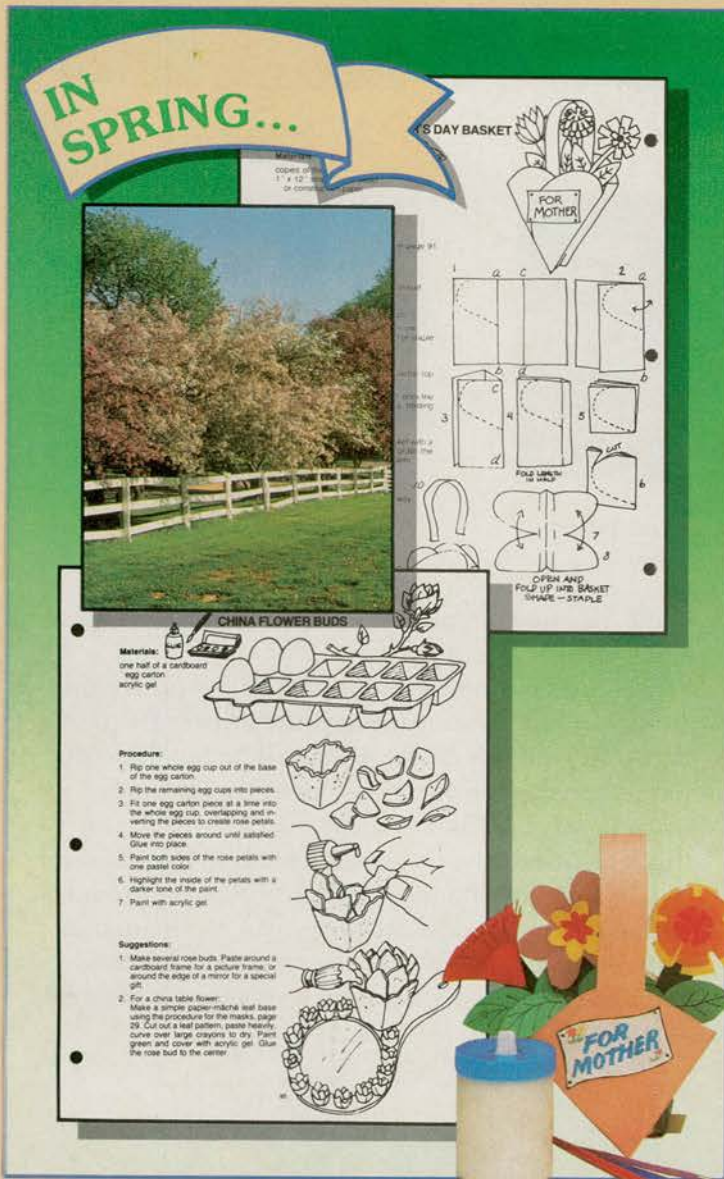
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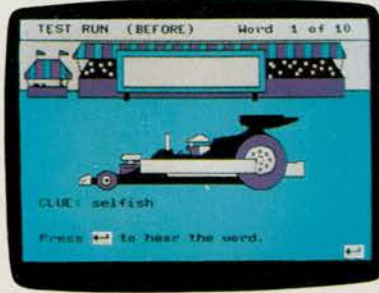
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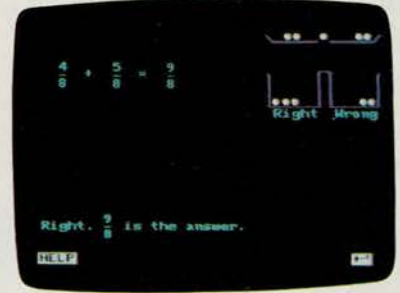
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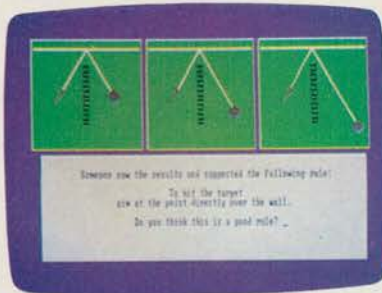
Grade 3
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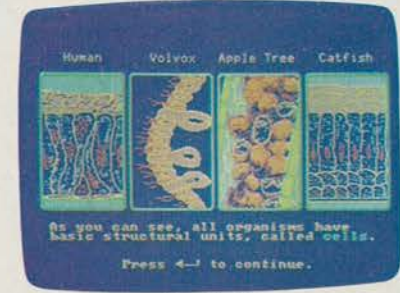
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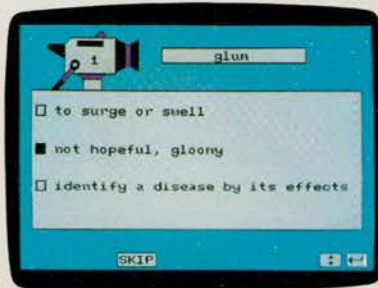
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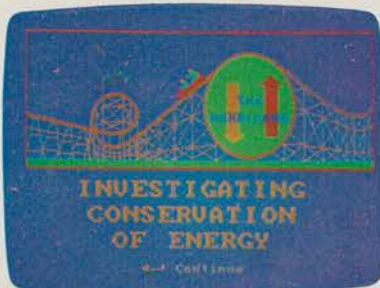
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Logo Learner
(Grades 3-8*)



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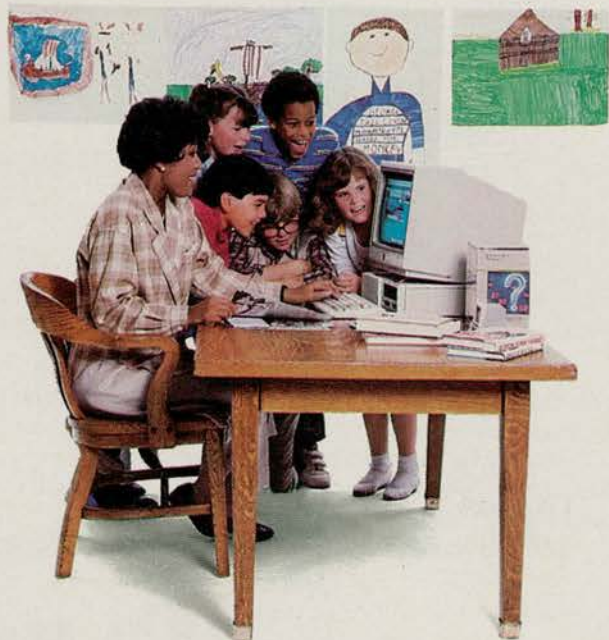
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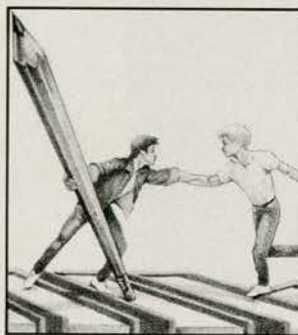
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PAGE 18



PAGE 22



PAGE 36

AMERICAN **Educator**

OUR PROFESSION, OUR SCHOOLS: THE CASE FOR FUNDAMENTAL REFORM 10

BY ALBERT SHANKER

The AFT vision of transforming teaching into a full profession, unimaginable just a few short years ago, is now at center stage of the national discussion about the direction of education reform. We have before us the possibility of creating a self-governing profession and of redesigning our schools so that teaching and learning can flourish.

TEACHING KNOWLEDGE: HOW DO WE TEST IT? 18

BY LINDA DARLING-HAMMOND

An analysis of the typical questions used in tests that are supposed to assess a teacher's professional knowledge reveals that less than 10 percent of the questions require a command of theory, research, or facts pertaining to teaching. What, then, do they measure?

DOCEMUR DOCENDO (HE WHO TEACHES, LEARNS) 22

BY MARSHA LEVINE

When one student tutors another, they both gain. The author describes how the ancient instructional technique of peer tutoring is being applied to computer education, hands-on science lessons, and basic skills instruction.

TEACHERS AT THE CENTER 26

BY SHERYL HOVEY

In-service education doesn't have to mean just a three-hour workshop on a Saturday morning. Pittsburgh's unique, new staff development program brings teachers together for eight full weeks of study and collegial interaction.

CERTIFIED PARTNERS: FOUR GOOD REASONS FOR CERTIFICATION OF PARAPROFESSIONALS 31

BY ANNA LOU PICKETT

As the education community begins to rethink how schools are structured and staffed, the time is ripe to push ahead with carefully constructed certification programs for paraprofessionals.

UNCAPPING THE RETIREMENT AGE: NO EXEMPTION OF TENURED FACULTY 36

BY LAWRENCE M. FRIEDMAN

Some states have totally uncapped the mandatory retirement age, making it illegal to dismiss a person solely on account of age. But, in a few of those states, tenured college faculty have been excluded from the law's protections. The arguments advanced for excluding them, says the author, are weak — morally and socially.



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Sixty computer programming students at Yuma High School in Yuma, Arizona, are making the most of their computer-programming class time by using a Tandy Network 4 system. Programming teacher Mrs. Cheryl Johnston finds that the Network 4 system saves valuable time for both student and teacher and helps to familiarize the student with professional data processing practices.

"One of the big benefits of the Network 4 to a teacher of programming," Mrs. Johnston says, "is that I can type a program with errors for the students, put it on the hard disk, and then each student can download it to study and correct it. In a lab of stand-alone computers, each student would have to type in the program, taking up valuable class time, or we would have to copy the program onto each student's disk. This way, we don't have to hand out disks and collect them all after class. It's a real advantage not to have to handle floppy disks."

The Yuma High School lab has 24 student station computers with a printer between each pair of computers. There is one host computer, one 15-megabyte hard disk, and one additional station for the teacher.

The Network 4 system saves on daily set-up time, Mrs. Johnston says. "Before the students come into class, all I have to do is turn on the host computer and hard disk. Each student comes in, turns on a student station and simply answers the on-screen prompts to get into the class's account. Each student has an individual sub-account where he or she can store programs."

Mrs. Johnston mentioned that the Network 4 System also helps teach some common data processing practices. "A major reason we went with the Network 4 system is that it follows many of the conventions of a mainframe computer, and it resembles a mainframe environment. The students follow a 'log-on' procedure in the same way a mainframe operator does."

Another feature that Mrs. Johnston likes is the ability to assign each student a certain amount of disk space. "First-year students get 20 tracks, the size of half of one floppy diskette. The advanced students get 40 tracks. This teaches them management because they have to decide how they will best use that space."

Mrs. Johnston uses the Network 4 system's MAIL4 program as an electronic bulletin board to send messages to individual students. She also uses the Network 4 system's MENU4 program. MENU4 allows teachers to create menus which offer students a selection of programs that the teacher wants them to work with.

"I really do like the system," she says. "I think it works very well."

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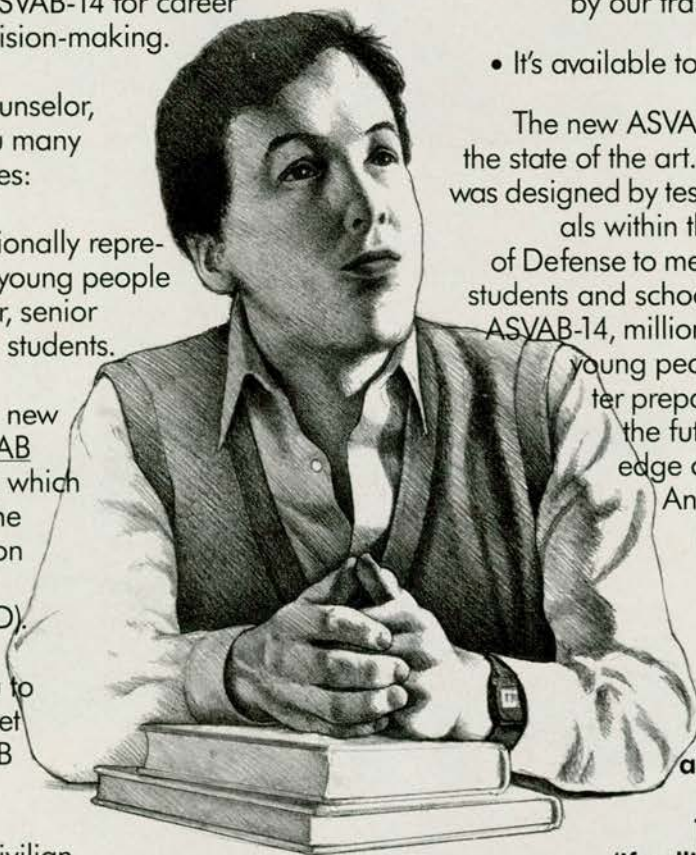
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OUR PROFESSION, OUR SCHOOLS: THE CASE FOR FUNDAMENTAL REFORM



BY ALBERT SHANKER

ONCE IN a great while, and usually spurred by crisis, a combination of forces and ideas come together in a way that makes real change possible. In the field of education and in the lives of teachers and students, I believe that now is such a time. I would like to recount for you some of the events of the past few years, and particularly of the last few months, that have brought us to this point of both crisis and opportunity.

This year marks the three-year anniversary of the beginning of the education reform movement in this country. In the spring of 1983, the National Commission on Excellence in Education released its report, *A Nation at Risk*, which was soon followed by well over a dozen others. This union supported the basic thrust of those reports even while we had serious disagreement with some of their specifics. We did that for two reasons. First, we saw that the reports did not represent an attack by the enemies of public education. These were friends and potential allies talking, and they were powerful ones. Not a single report recommended tuition tax credits or vouchers. On the contrary, they accepted public education as the delivery system and said that what is needed is not to provide an alternative or destroy what we have, but rather to make it a high quality institution.

Second, many of the criticisms in the reports were accurate. While the schools had made admirable progress in some areas — particularly in reaching out to new populations that had been previously ignored, such as the handicapped — the overall picture was not encouraging. Standards had fallen. SAT scores had declined rapidly over two decades. Although there were isolated gains, significant numbers of our children were

Albert Shanker is president of the American Federation of Teachers. This article is based on a series of speeches he has delivered over the last several months.

growing up without basic literacy and numeracy skills, and even larger numbers could not craft a well-structured sentence, explain basic concepts of science, or advance a logical argument. Discipline problems, particularly in urban settings, were draining and demoralizing teachers. High schools had too many electives, and too many of those were frivolous. In many places, student grades, promotions, and graduation certificates were becoming devalued currency.

The Gallup polls reflected the public's concern. Each year, a higher and higher percentage of the American people gave low or mediocre marks to the schools. Meanwhile, demographic changes — people having fewer kids, people living longer — meant that a smaller and smaller percentage of the adult population felt they had a direct stake in the public schools.

So, when the reform reports came, we welcomed them, both because we were deeply concerned about the problems they described and because they were authored by people who cared about public education and were in a position to do something about it. Throughout the period that followed, the AFT, its local affiliates, and its members engaged the debate fully. We led the fight for some of the changes that followed; we were strong supporters of others; equally important, we were able to beat back many of the dangerous and simple-minded proposals masquerading as education reform. Indeed, our receptivity to the reports enhanced our ability to be critical.

I don't think I have to tell all of you how successful our approach has been. Our open and welcome attitude toward school reform has evoked a tremendously positive response from governors, state legislatures, and the business community. People who once wanted to unilaterally impose their views on us now respect the positions that we have taken; generally, they no longer do what they once did as a matter of course, which is to



ILLUSTRATED BY SUSAN DAVIS

act without talking to us first.

More often than not, we are now called in at the very beginning, and we are told, "You people took a responsible and courageous position three years ago. Without you, this entire reform effort would have been destroyed or seriously hampered. From now on we don't want to make any moves without bringing you in as partners."

What we did over these three years has been a tremendous success, and I think we should enjoy a round of self-congratulations for a good strategy.

IN THESE first years of the reform movement, not only has the voice of teachers been firmly established, but also, progress has been made in the schools. Course requirements have been stiffened. Teacher salary has gone up, in some cases significantly. Education budgets have gotten healthy new infusions of money — in South Carolina a 32 percent increase in just one year, teacher pay up 33 percent in Texas in a year, education spending up 12 percent in California in a year. In addition, important new alliances have been cemented. The business community, keenly aware that its own competitiveness rests on an educated workforce, has moved beyond token gestures to serious, long-term support for public education.

Yet, while the early reform reports were needed to get things started, they didn't go far enough. Not by a long shot. Their recommendations were compromised by a central flaw: They told us where to go but not how to get there. It is fine to call for three years of math and science. We're for that. But simply sounding the alarm will not produce the thousands and thousands of math and science teachers without whom those classes can't be taught. We don't have nearly enough math and science teachers to teach the classes now required. The National Science Teachers Association estimates that 30 percent of the teachers now assigned to teach science are doing so without the appropriate academic background.

The recommendations of the early reform reports were compromised by a central flaw: They told us where to go but not how to get there.

The same is true of the other recommendations. The reports called for children to write more — a paragraph a day, a paper a week, two papers a week, three papers a week, more writing all across the curriculum. We're for that. We know that writing is important not only as the development of a craft in its own right, but also because it is probably the best way to teach children to think

clearly, cogently, critically. But for a teacher with five classes a day and thirty kids per class, where is the time going to come to really help a child learn to write? The marking and critiquing of a paper and the coaching of children — how to organize their thoughts, how to build an argument or create an image, how to know when to end — takes time. As Ted Sizer pointed out in his book *Horace's Compromise*, if a teacher with one hundred fifty students takes ten minutes for a marking and coaching session, each set of papers will take twenty-five hours to complete. Two sets would take fifty hours. Whom are we kidding? So we agreed with the reform reports on the necessity of more writing, but the much harder question of how to structure our schools to make that possible went unanswered, indeed, unasked.

Many of the other reform proposals were also only half-measures. They described the symptoms. They could even tell you what a healthy patient would look like: He would have so many years of English and math and science and history and foreign language. He would do his homework and listen attentively. His teachers would all be from the top of their class. They would engage him in Socratic discussion and he would develop his critical thinking abilities and be ready to take on the twenty-first century.

It is easy to agree on the final outcome. But how do we get there? How do we attract and retain the talented teachers? How do we create such a community of learning?

IF WE are serious about reform — and we are — we must be unmercifully honest about the problems we face. Otherwise, we are dealing only with slogans and wishes.

The first problem is that, given the way schools are currently organized, there is no conceivable way we can get the enormous numbers of talented teachers we need. The nation's talent pool isn't that big. There simply will not be enough high-caliber college graduates available to us. No single sector of the economy — not medicine, not industry, not transportation, not law and the judiciary, not the military — can successfully bid for 25 percent of the country's college graduates, which is what we need. The numbers just do not add up.

Secondly, even assuming we could capture one-quarter of the country's educated workforce, if we simply placed them into the existing structure of our schools and told them to do their best, their best would not be good enough. That structure, and the rigid, confining approach to teaching and learning that it imposes, never did work well for more than a minority of our students.

Let me first take up the problem of the limited talent pool.

The reality that casts its shadow over any discussion of education reform is the massive teacher shortage that we are now facing. I want you to walk through this with me, to add up the numbers, consider the alternatives, and grapple with the dilemma. After all, it is *our* profession; we are the ones who care most about what happens to it.

Over the next few years and at exactly the time that the public will be expecting results from the new

monies they have voted for education, we will lose one-half of all current teachers. Just think of it. Within the next six years, through normal retirement and attrition, over 50 percent of all of you and of all your colleagues will no longer be teaching.

Who will replace you? The prospects are not good. Let me rephrase that, for some of you may have read reports saying that there will be no shortage. The prospects are fine if we don't care about quality. One can always fill a shortage by lowering standards. Shortages are always relative to standards, and if you have no standards, there is never a shortage.

The reality that casts its shadow over any discussion of education reform is the massive teacher shortage that we are now facing.

Consider what happened last year in Baltimore, Maryland. The school district there instituted a new examination for all its prospective teachers. Although it was elementary, we should keep in mind that thousands of other districts don't even bother to test their applicants. The Baltimore exam was a simple writing test. But some of those who took it couldn't compose a simple note to a parent without making errors in grammar, spelling, and punctuation. Since they failed the test, they were not supposed to be hired. But on the opening day of school, they were given the jobs anyway because there were no better candidates available.

So that is one way to solve a shortage problem, but it spells disaster for our students, our profession, and the future of public education.

Teacher supply and demand are not within striking distance of each other because of an unfortunate confluence of demographics — a baby boomlet generation entering school while a baby bust generation graduates from college and an earlier baby boom generation retires from teaching. Let's look at the potential supply of teachers now moving through our colleges. Keep in mind that even with no reduction in class size or work load, we will need 1.1 million new teachers in the next seven years. That means 23 percent of each college graduating class must enter teaching if the demand is to be met — 23 percent this year, 23 percent next year, and so on into the 1990s. However, in 1983, only 4.5 percent of college students said they were planning to become teachers. Last year, things got a littler better, and now 6 percent say they will join our ranks. Even if more students eventually become teachers than say they will, the gap remains enormous. There will still be hundreds of thousands of missing teachers.

The gap becomes even more insurmountable if we want to recruit only from the top half of the college graduating class. Not an unreasonable standard, but it

means we would need to take 46 percent of that group. To add to the discouraging picture is the fact that — as we've all seen reported in the papers for a number of years now — a majority of those who say they are going into teaching are in the bottom quartile of all college students in the country.

There have been reports recently of former teachers re-entering the teaching force, but that surge is likely to be short-lived and certainly won't make much of a dent in the situation.

THE SECOND problem that any serious education reform effort must deal with is the limitations imposed by the current structure of our schools. Even at its best, that structure produces good schools for some of our children but not for all of them. It is hard to face up to this one, because it requires that we give up some of our nostalgia about the past. I know it took me awhile to do so.

Let's suppose that there were plenty of outstanding teachers available and that all of the commonly proposed reforms of the last few years were put into effect.

If this were the case, what would schools look like? Students would be required to learn reading, writing, and arithmetic in the early grades or they would not be promoted. Later they would learn science, math, literature, history. They would be tested on their knowledge before being passed on. Teachers would be tested in their subject areas before they were employed, and they would teach the mandated curriculum. There would be pressure on both students and teachers for greater achievement.

Does anyone recognize these schools? I do. They are very much like the schools I attended as a child in New York City, and I suspect, like many public schools across the country in the 1930s and 1940s. Is this what we want again? Weren't these schools good? They were certainly good for me and for many, many others. We were pushed and pressured; we were forced to learn things whether we liked them or not. There were many outstanding teachers. Some of them waited over five years to get their jobs during the Depression. The schools had their pick of the best and the brightest. And as students we did learn and later came to love and enjoy subjects that we hated at first.

Is this what the current reform movement is all about? Should we go back to the good old schools we used to have? That is exactly what we will do if we follow most of the reform reports. But, if we do, the results may be disastrous. According to statistics in the Spring 1986 issue of the *Teachers College Record*, in 1940 the high school dropout rate was 76 percent; it was not until the 1950s that the dropout rate fell below 50 percent! A traditional, tough academic program, even with outstanding teachers, did not benefit the majority of students. Therefore, if we simply return to the schools we once had, we can expect a huge dropout rate in the 1980s and 1990s, particularly among disadvantaged students, at a time when students will not have the benefit of the same family support system they had in 1940.

Furthermore, a dropout in 1986 is considerably worse off than he would have been forty years ago. In earlier periods, it was much more possible than it is

today for a person to succeed on the basis of hard work even if he was not well educated. In contrast, our high-tech society will continue to demand an extremely sophisticated labor force; a person without basic skills will be defeated before he has begun.

These two problems — the demographic wall that we have now bumped up against and the limitations of the current structure even under the best of circumstances — must serve as the take-off point for any consideration of education reform proposals. If we don't come to grips with these problems or if we just make incremental change, we had better be prepared for the issuance of hundreds of thousands of emergency credentials to people who are not qualified to enter our profession. We will also have to live with the tragedy of millions of children ill equipped to take up a full life. We can't just sit this period out. If we do, we not only place in jeopardy an entire generation, but, in my opinion, we will irrevocably undermine the public's faith in our schools. This system that has played such a unique and noble role in this nation of immigrants could disappear or become unrecognizable.

WHAT DO we do? For over a year now, two groups of people have been grappling with that question. AFT leaders from around the country spent long days gathering the statistics, taking testimony from the experts, and, most importantly, reflecting upon the problems our members face in the classroom. Simultaneously, another group was taking up approximately the same agenda. This one was convened by the Carnegie Forum on Education and the Economy and was composed of governors, corporate executives, state legislative and university leaders, myself, and Mary Futrell, president of the NEA.

Late this spring, the Carnegie report, *A Nation Prepared: Teachers for the 21st Century*, was issued; in July, AFT delegates meeting in convention in Chicago endorsed the basic thrust of the Carnegie report and adopted one of their own: *The Revolution that Is Overdue: A Report of the AFT Task Force on the Future of Education*.

While the reports differ in some respects, they are kindred spirits. They both say that the time is past for marginal reforms that uphold the status quo. They both refuse to accept defeat, and they both dare to think of new ways of doing things. At their core are two ideas: First, we must seek the full professionalization of teaching. Second, and interwoven with the first, we must redesign our schools and rethink the way we approach teaching and learning. It is to these two interlocking ideas that I would now like to turn.

Professionalizing teaching means all the things this union has long stood for and worked for: higher salaries; smaller class size, a manageable work load, and relief from nonteaching chores. It means working conditions that other professions so take for granted that they often go unmentioned: an office, a desk, a telephone, a quiet place. It means enough textbooks to go around, equipment that doesn't fall apart, school buildings that are clean and safe. It also means time for preparation and new learning and for discussion and work with one's colleagues.

But true professionalism requires an even more basic

If there is one principle on which all the studies of effective schools — and effective businesses — agree, it is this: Top-down management does not work.

prerogative than these, and it is the recognition of this that distinguishes the AFT report and the Carnegie report from those that preceded them. The central recommendation of the new reports is to **empower** teachers, to give teachers control over the standards of their profession and the conduct of their work.

IF THERE is one principle on which all the studies of effective schools — and effective businesses — agree, it is this: Top-down management does not work. Neither does top-down reform. We cannot help Johnny overcome his reading problem by turning to page 234 of a state regulation. The people who wrote those regulations are not qualified teachers, nor have they spent six months in the classroom observing Johnny and trying out and discarding four different approaches to solving his particular difficulty. The fifth approach — the one that may work — is not to be found in a state law or a school district's administrative directive. It can only come from the mind and hands of a creative and sensitive teacher.

Teaching, like medicine, cannot operate by remote control. There is no formula that fits all children. The only treatment that works is one that is constantly adjusted and fitted and fine-tuned by the people on the scene. Intelligent change has its best hope in teachers because nobody knows better than teachers what is going on in schools.

This concept is not only honored in all the other professions, it is increasingly becoming the operating principle in blue-collar industries.

I had the privilege a couple of months ago of being at a conference where a group of labor leaders met with a group of university presidents under the sponsorship of the Labor/Higher Education Council. I was especially pleased to be present when the international secretary of the United Steelworkers of America, Edgar L. Ball, described some of the new work arrangements that are being tried in the steel industry. His remarks have now been published, and I would like to read one section from them, because it will show how far behind public education is compared to the innovations in private industry with blue-collar workers.

Earlier this year we finished a two-year plan to redesign labor/management relationships in an ALCOA plant in Arkansas. For forty-five years, a very strong, militant, adversarial relationship existed. The union faced the problem of changing the adversarial relationship and redesigning jobs and methods of doing work.

After two years, autonomous work crews went into effect in every department, almost eliminating the need for the shop floor management in the plant. Instead of eighteen job classifications, there are no more than three in any department. The crew in every department designed its own jobs based on what they felt would work and what they were willing to try to make work. The craftsmen also agreed to do away with pure crafts and go to multicrafts. They decided what the groupings would be and what the new jobs would be.

I talked to a group of employees in the first department that tried the new system. The first three months the plan was in effect, down-time was reduced by half, and within the next three months decreased by half again. I asked them, "Why? How did you do it?" and this is what they said: "What we used to do was come to work, punch time cards, go to our work station, and stand there until the foreman came by and told us what to do. If he didn't tell us to do something that needed to be done, we didn't do it. If he wasn't there enough, that was his fault, he was the boss. If he told us to do it wrong, we did it wrong even if we knew it was wrong, because we were subject to discharge if we didn't do what he told us to do.

"If something went wrong, after we knew it was going wrong with the equipment or process, we didn't say anything to anyone about it. If the foreman happened to come by and catch it, fine. If he didn't, we let it go. If equipment broke down, we shut the power off. We didn't call anybody. We stood there until someone from management came by and looked at it, and they had to decide to call maintenance. When maintenance got there, we didn't tell them what was going wrong with it and we didn't help them. If they knew how to fix it, fine, and if they fixed it wrong, too bad, that wasn't our concern. We weren't being paid to do those things. We were being paid to do the few little things that were in our job description and that's all we did."

I asked, "What are you doing now?" Their reply: "We know how to run the plant. We come to work; we start operating it. We are running maintenance even though it's not in our job description. We help each other. If one is having trouble, we help. If we think something is going to go wrong, we plan around that and we alert maintenance in advance and we have them there and we tell them what's wrong, and we show them and we help them fix it."

I have heard similar descriptions of auto plants, steel plants, and other companies all across the country that are starting to turn decisions over to the people who are closest to the work. These are companies that were going to close down or decide to take their operations overseas.

I would like to know why, if blue-collar workers can

Would anyone even consider issuing emergency or temporary medical credentials to ill-prepared "doctors"? Or accepting to the bar candidates who had flunked their law exams?

be trusted to run their own plants and organize their own jobs, why can't teachers be trusted to do exactly the same thing?

PUTTING TEACHERS in charge of instructional decisions will lead to experimentation with new kinds of management in schools. Different models will emerge, but they will all be marked by a movement away from authoritarian, hierarchical structures. School management may look more like the professional partnerships of law firms. In some cases, teachers will want to hire administrators to carry out many of the non-instructional chores now assumed by the principal, much as a hospital hires a business manager. Whatever the particulars, the relationship between administrative functions and professional functions will be different from what it is now. Those not expert in the teaching field will not oversee those who are.

In discussing the empowerment of teachers, I want to be very clear on two points: First, we do not suggest that teachers should be the instructional leaders because we are a well-organized, powerful group that can commandeer that position. We are that, but that is not where the legitimacy for teacher authority lies. Doctors, too, are well organized and powerful, but their authority lies elsewhere: in their knowledge and expertise. It was not always so. Not until medicine had a substantial knowledge and clinical base underlying it, not until medical education was transformed from its once-scandalous state into a rigorous program, and not until the profession acted to establish high entry standards did authority, autonomy, and respect follow. And so it must be with our profession. The call for teachers to be the instructional leaders must rest on the demonstration of our expertise.

It must also rest upon our professional integrity. Let me return for a moment to the situation I described earlier where the school district in Baltimore, Maryland, hired clearly unqualified teacher applicants because, according to school officials, there were no better candidates available. The message that such a decision sends is that the school's custodial role takes precedence over its intellectual mission. If teachers were in charge of professional standards and instructional issues, we could not allow such a decision. We would have to make some hard choices and fashion some creative solutions. In doing so, we would make it clear that the overriding consideration is the protection of our professional standards and the safeguarding of the education of the children who are placed in our care.

Other professions frequently have shortages, but they find ways to serve their clients without sacrificing their standards. There often aren't enough doctors in rural areas or in certain specialties. Would anyone even consider issuing emergency or temporary medical credentials to ill-prepared "doctors"? Or accepting to the bar candidates who had flunked their law exams? To do so would be a betrayal of those professions, and to do so in our schools is a betrayal of the meaning of education.

As a profession, we would have to grapple with alternative solutions, none of them easy. For example, in the Baltimore situation, qualified teachers might be asked to volunteer to teach an additional period after school for extra pay, just as some now volunteer to coach. This

The assessment process developed by the national board of teaching standards will stand in sharp contrast to the trivial, paper-and-pencil, multiple-choice, context-free questions that are all too typical of existing teacher tests.

would permit class-size limits to be maintained, but students would be divided in classes over a longer day. Or, teachers might be asked whether they would agree to an increase in class size for the year by one student per teacher, with the money saved on the salaries given to the teachers now in the system. Increasing class size or lengthening the school day are certainly not good, but is it more desirable to risk the education of hundreds of students? Spending a year with an unqualified teacher is not just a question of losing that year, as serious as that is. It could also permanently damage a child's desire to learn, undermining his confidence in himself and discoloring his whole outlook on school.

Another way to avoid hiring unqualified teachers would be to try to entice back former teachers who left the system five, seven, or ten years ago for jobs in industry by offering to place them at a step on the salary schedule that would give them credit for their outside experience. Likewise, appeals could be made to the thousands of people in the vicinity who were once licensed and qualified teachers in other states, offering to give them full salary credit for their work elsewhere.

None of these solutions is perfect, but they are better than letting our professional standards erode or jeopardizing a child's future. Making these difficult choices — some of which would involve real sacrifice on the part of teachers — would make it clear that our professional code of ethics has as its center a concern for what is best for our students. Once the resolve is made never to lower our standards, the discussion can then turn to how we can best deal with dilemmas like the one in Baltimore and the many others that we face on a daily basis.

What I'm saying, in effect, is that we cannot assume the prerogatives of a profession without also assuming the responsibilities. This brings me to one of the key recommendations of both the AFT and Carnegie reports: the creation of a national board of professional teaching standards. This will be a national, non-governmental board composed of a majority of outstanding teachers. It will set standards for what teachers ought to know and be able to do. Based on those, it will develop and administer a national certifying examination for teachers comparable to the bar and other professional exams.

The assessment process developed by the national board of teaching standards will stand in sharp contrast to the trivial, paper-and-pencil, multiple-choice, context-free questions that are all too typical of existing teacher tests.

The exam for basic certification would consist of three parts. First, there would be a stringent test of subject matter knowledge. The second part of the exam, which probably would be given on a different day, would test knowledge of pedagogy, educational issues, and the ability to apply educational principles to many different student needs and learning styles. Video presentations of actual classroom problems might be used, much as the medical boards are now utilizing computer simulations of real-life medical problems. Whatever the format, the tests would not be looking for a single "right" answer (there usually isn't one) so much as they would be assessing the candidate's thought processes and decision-making skills, based on known principles of effective practice. Finally, the third part of the assessment would be a clinical induction program of from one to three years in which teachers would be evaluated on the basis of how well they work with students and their colleagues. Rather than a sink-or-swim approach, staged induction would give novice teachers the time and opportunity to learn from and reflect on their practice with experienced teachers.

THE CERTIFICATION process will be a voluntary one. In addition to basic certification, those teachers who choose to do so will also have the option of pursuing advanced board certification, much as a doctor can become board certified in his specialty. Advanced certification will be a mark of superior quality. It will mean that teachers will finally have available to them a way of advancing in their profession without leaving it. No more phony merit pay schemes. No arbitrary limits on the number of teachers allowed to prove themselves. The standards will be visible and verifiable. Anyone who examines them will agree that anyone who meets them is an exemplar of the profession's highest reach.

A national board certification process would be a major leap toward the professional standards and status teachers have sought. Indeed, if the history of other professions, such as medicine and law, is a guide, such certification is one of the prerequisites of professionalization. Its potential is also great for breaking the grip of the present array of low-quality, low-cost, ill-conceived teacher tests and securing for teachers more rigorous and helpful training. Moreover, a fair assessment that candidates could prepare for and that minimizes the importance of test-taking skills would remove some of the obstacles that now stand in the way of our ability to replenish the ranks of minority teachers and thereby perpetuate their tradition of service to the nation's schools. As a powerful quality-assurance signal to the public, professional board certification also could spell an end to demeaning and bogus schemes to "improve" the teaching force.

The creation of such a national board would put teaching standards in the hands of the profession. After all, isn't that where they belong? Should commercial testing services — the developers of current teacher

tests — determine our standards? Are state legislators or district administrators the appropriate people to say who is fit to enter and advance in our profession? The lay members of school boards? Do they know the research and practice base that underlies good teaching? Shouldn't it be to the best of our own ranks that we look? We will set our standards. They will be high ones and they will be fair ones.

MONUMENTAL AS these proposed changes are, they will not be enough unless they go hand in hand with a rethinking of the way we now approach teaching and learning. I go back to the basic dilemmas I raised before — the limited talent pool available to us and the need to design an approach to teaching and learning that can do a better job of reaching all our students.

Suppose medical care were structured so that everyone involved in patient testing, diagnosis, treatment, and care had to be a doctor? No nurses, no nurses' aides, no lab technicians, no operating room assistants, no pharmacists, no interns, no residents. What if everyone who operated a CAT scan, drew blood, took temperatures, handed out medication, made the early morning and middle of the night rounds, bathed patients, and kept their charts — that is, everyone who had anything to do with patient evaluation and care, from the most basic maintenance to the most sophisticated diagnosis — had to be a doctor? If that were the case, instead of having 520,000 doctors, as we now do, we would need 4.8 million.

They, of course, wouldn't be "doctors" as we now understand that term. If medicine were structured like education, with undifferentiated staffing — and it is hard to even imagine — each "doctor" would be assigned the near-total care of a certain number of patients.

Suppose medical care were structured so that everyone involved in patient testing, diagnosis, treatment, and care had to be a doctor?

In evaluating such a structure, one question outweighs all other considerations: Would medical care be improved? The answer is, it would be worse. Where would we find 4.8 million people capable of doing the broad range of work called for? Some patients would have very good "doctors," although they would be so busy running the X-ray machine and dispensing medication at the appropriate intervals, they would have very little time for what we now consider doctoring. Many of them would not want to stay in a "profession" where they were not able to make the best use of their talents

and where they were constantly frustrated by not having the support staff required to free them to concentrate their efforts on the more demanding aspects of their art and science.

The great majority of patients would not have "doctors" drawn from the top 10 percent or the top quartile or the top half of college graduates. Medicine would have to dip deeper and deeper into the talent pool. Salaries would be commensurately low, perhaps at about the average level of teacher salary, since the country — even one that values good medical care — could not afford to pay 4.8 million people \$100,000 each. There would be calls for closer supervision of the less capable people; state legislatures would adopt rules and regulations governing the treatment of each disease. Talented young people would not be drawn to such a restricted, nonprofessional field, thus the downward spiral would continue.

Well, there are of course differences, but there is much food for thought in this analogy. We can't get 46 percent of the talented college graduates; no other profession and indeed no single sector of the economy can either. But we can get our fair share. And we can begin to think of new ways of organizing the way education services are delivered. The Carnegie report calls for teaching to be structured closer to the way other professions are:

Professionals are a valuable resource in our society. It takes a lot of education and training to produce them and costs a lot of money to pay them. For that reason, most employers work hard at making the most of these professionals.

That is why professionals are typically supported by many other people who do the work they would otherwise have to do. The services of these other people come at lower cost, so it is more efficient to use them to perform such tasks than to have them performed by the professionals. For the same reasons, professionals also have available to them a host of machines and services that improve their efficiency in countless ways, from computers and copying machines to telephones and adequate work space. These services are not prerequisites for professionals. They are regarded by employers as necessary investments, enabling the professionals on their staffs to reach the highest possible levels of accomplishment.

Not only do professionals typically have a range of support staff and services available, but they are usually organized so that the most able among them influence in many ways the work that others do, from broad policy direction to the development of staff members who might some day take on major responsibilities. This, too, is a matter of simple efficiency, making sure that the experience and skill embodied in these valuable people makes itself felt throughout the enterprise. . . .

America's schools can, without doubt, greatly improve their performance. They will not do so unless they prove to be an attractive employment opportunity to some of the most able college graduates in the country. But the schools cannot realistically expect that all 2.3 million teachers will be the best and brightest the country has to offer. Education, like other professions, will have to structure itself so that it can make the very best use of a distribution of talent. That means reorganization, because the current "eggcrate" organization does not permit efficient shared use of highly skilled people, support services, and equipment.

The Carnegie Task Force points out in its report that teacher salaries are not only extremely low but also
(Continued on page 44)

TEACHING KNOWLEDGE: HOW DO WE TEST IT?

*Not with Simplistic,
Multiple-Choice, Context-Free Exams*

BY LINDA DARLING-HAMMOND

TESTING TEACHERS for certification is now the law in forty-four states. By 1990, virtually every state will require tests of basic skills, subject matter knowledge, or professional knowledge before a teacher can receive a standard license to teach. Although the tests being used make entry into teaching more selective, they do not, contrary to much of the current rhetoric, do very much to turn teaching into a profession. The tests are not developed or controlled by the profession, nor do they adequately represent what a teacher should know and be able to do.

If teacher tests are to serve the goal of professionalizing teaching, they must reflect what members of the profession believe is the fundamental knowledge required by teachers, and they must be professionally controlled. Recent proposals by teacher organizations and the Carnegie Task Force on Teaching as a Profession would lead to board certification by a professional teaching standards board, analogous to the certification awarded by the medical profession and other professional bodies. The testing involved in such certification would be voluntary, would represent a high standard of professional knowledge, and would be distinct and separate from state licensing and school district employment decisions. Teachers who decided to pursue board certification would be recognized by a body of their peers as having mastered the subject matter and professional knowledge needed for making appropriate teaching decisions.

Although such professional certification could be dismissed as overkill, given the other tests now in place,

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there are important reasons why board certification would improve the status and substance of teaching. These reasons, and the limitations of current approaches to teacher testing, are explored herein.

THERE ARE two functions of professional tests. One is to sort and screen candidates. Many call this endeavor "raising standards." This function, which currently receives the most attention from test makers and test users, conjures up a vertical notion of standards. They go up or down; there are cut-off scores that may be raised or lowered to allow more or fewer people to pass. This function serves a symbolic purpose. It provides selectivity for entry, regardless of what the substance of the measure is. As long as a cut-off score is applied, some individuals will "pass" and others will not. The level of the standard can be changed simply by changing the pass rate on a test.

The second major function of testing — and the most important one for truly creating standards — is defining the professional knowledge base. Examinations are one means by which a profession makes an explicit statement about what is worth knowing and how it should be known and demonstrated. This statement can exert a powerful influence on training and practice independent from cut-off scores or pass rates.

When candidates prepare to take the bar examination, for example, they know they will have to study constitutional law, torts, contracts, tax law, criminal law, and so on. Regardless of the pass rate for that exam in a given year, candidates know that they will have to demonstrate their knowledge of those topics in particular ways. They will not only need to be able to identify facts about cases and legal rules, they will have to apply this knowledge in essays responding to case scenarios.



R. Berlin

The examination provides an explicit standard of knowledge that influences legal training and practice in important ways, regardless of the "vertical" standards used to determine who will be licensed.

CURRENT TEACHER tests basically define the knowledge needed for teaching as (1) the recognition of facts within subject areas, (2) knowledge of school law and bureaucratic procedures, and (3) recognition of the "correct" teaching behavior in a situation described in a short scenario. The tests currently used do not allow for demonstrations of teacher knowledge, judgment, and skill in the kinds of complex settings that characterize real teaching. Furthermore, they may discourage the use of such knowledge by positing a unidimensional philosophy of teaching that the test taker must consistently apply if he/she is to find the "best" answers to poorly defined questions.

Less than 10 percent of over one hundred questions required knowledge of theory, research, or facts pertaining to teaching and learning.

My own content analysis of a sample test for one of the most frequently used tests of professional knowledge* revealed that less than 10 percent of over one hundred questions required knowledge of theory, research, or facts pertaining to teaching and learning. And most of these required only the identification of a single fact, for example, "Which of the following, if given to high school students at the beginning of a new course, is an example of an advance organizer?"

The remaining questions required knowledge about testing and assessment (10 percent), knowledge about school law and administrative procedures (25 percent), careful reading or knowledge of simple word definitions (15 percent), agreement with the test's teaching philosophy (25 percent), or agreement with the test's definition of socially or bureaucratically acceptable behavior (15 percent). About 40 percent of the questions, by my reckoning, did not have a "right" answer, either because the question contained insufficient information to allow a complete evaluation of the situation or because alternative answers would be correct depending on what research one relied upon.

The questions that rely on a simplistic view of teach-

*The sample test used for this analysis is the National Teacher Examination's Professional Knowledge Test. (A Guide to the NTE Core Battery Tests. Educational Testing Service, 1984.) The items published in this sample test are quite similar to the sample questions published by other testing firms; however, no other test publisher to my knowledge publishes an entire sample test allowing a full examination of content coverage. This discussion, therefore, uses the NTE exam as an illustration of the typical range of questions used in such tests.

ing are not only inadequate to assess what skilled and knowledgeable teachers know, they encourage a soft-headed approach to the preparation of teachers. In the area of educational research, consider the following question:

In general, which of the following factors has been shown in several studies to have the strongest relationship to variation in student achievement?

- (a) Teacher experience;
- (b) School size;
- (c) Type of textbooks;
- (d) Student/teacher ratio; or
- (e) Community's average income.

Aside from the fact that many studies could be marshalled to support any one of the responses, the desired answer "e" is badly flawed, since most studies finding strong effects of income on achievement use measures of student family income, not general community income. Not surprisingly, only 19 percent of test takers chose the desired answer.

A question about statistical terms presents no right answer:

The mean, median, and mode may be best defined as:

- (a) ranges of scores for a test;
- (b) correlations of individual test questions with the total test;
- (c) points about which scores on a test tend to cluster;
- (d) minimal acceptable scores to be obtained on a test; or
- (e) deviations of test scores from an expected value.

The desired answer, "c," is technically incorrect, since scores need not cluster about the mean or median when a normal distribution of scores does not occur. A teacher with statistical knowledge would find this question difficult to answer honestly.

Here is an example of a question intended to assess instructional knowledge:

Use of which of the following is most important in the beginning instruction of the young, visually impaired child?

- (a) Machines with lighted screens to magnify print;
- (b) A variety of large-print books;
- (c) Extended periods of nondirected play;
- (d) Many tactile and oral activities; or
- (e) Large-print flash cards for learning sight vocabulary.

Since the question does not reveal how young the child is or how severe the visual impairment, the desired answer "d" is a safe guess, but it is not necessarily the course of action that would be appropriate for, say, teaching reading to a seven-year-old child who is at least partially sighted. Even a "correct" answer to the question does not reveal whether a teacher could design an appropriate learning experience for the child.

ALTHOUGH ONE might question why so large a portion (one-quarter) of a test of teaching knowledge is devoted to knowledge about school law and administrative procedures, these questions have the

virtue at least of being mostly unambiguous, e.g. "The United States Supreme Court decision against permitting prayer in the public schools was based on which of the following?" Unfortunately, knowing the answer to such questions indicates very little about whether a candidate is likely to be a good teacher.

Similarly, the most straightforward instructional questions generally require only the ability to match words with their definitions. For example:

Kinesthetic learners are likely to learn the letters of the alphabet best by doing which of the following?

- (a) Singing a song about the alphabet;
- (b) Playing an alphabet card game;
- (c) Manipulating large plastic letters;
- (d) Examining an alphabet book; or
- (e) Viewing "Sesame Street" regularly.

All one needs to know to answer the question correctly is that "kinesthetic" has something to do with physical, tactile activity. Knowing this definition does not reveal whether a candidate could identify different learning styles among children or develop suitable approaches for their classroom activities.

Some questions are designed to assess whether the teacher will embarrass school officials by handling sensitive situations in noninflammatory ways:

A representative of a special interest group meets a teacher out of school and indicates that the group objects to a particular textbook being used in the teacher's classroom. Of the following, which is the best response for the teacher to give the representative in order to handle the situation in a nonthreatening manner?

- (a) "Such a response by parents would be appropriate, but not by groups such as yours that have no close connection with public schools."
- (b) "Your group should write a letter to me and to the principal specifying the passages that the group objects to and why."
- (c) "The Constitution protects a teacher's right to use any textbook that is appropriate for the purpose."
- (d) "Is your interest group able to propose an appropriate but less controversial textbook?"
- (e) "Since the textbook was adopted by the school board, any comments about it should be directed to the board."

The desired answer "d" keeps the burden off the principal and the school board for handling the situation, but it places the teacher squarely on a prickly professional thorn. As one teacher remarked when seeing this question, "What would I be expected to do when the group proposed a textbook that could not achieve the educational goals for the class?" Protecting the curriculum or establishing academic freedom in the schools are clear-

The most straightforward instructional questions generally require only the ability to match words with their definitions.

ly not part of the concerns suggested by this test's conception of "professional" behavior. "Professionalism" is keeping the public quiet and avoiding conflict at all costs.

Other questions are designed to evaluate whether the teacher subscribes to the kind of liberal, highly individualized philosophy of teaching underlying the test. Even when one agrees with the answer, it is nearly always possible to cite research or conventional wisdom that support an opposing point of view. For example:

Research indicates that in classrooms where effective teaching and learning occur, the teacher is likely to be doing which of the following consistently?

- (a) Gearing instruction to the typical student at a given grade level;
- (b) Carefully grouping students at the beginning of the school year and making sure that these groups remain the same throughout the year;
- (c) Identifying the affective behaviors that students are likely to exhibit at a given level of development;
- (d) Working diligently with students to make sure that each learns all of the material planned for the class for the year; or
- (e) Pacing instruction so that students can move ahead when they are able to or receive extra help when they need it.

Although many teachers, like myself, would personally endorse the desired answer "e," there is a body of research (currently labelled as part of "teaching effectiveness" research) that suggests that whole-group instruction at a common pace is to be preferred to "individualized" instruction for increasing time on task and average achievement test scores. And there is a paradigm underlying most recent educational reforms that suggests that mastery of the year's material is the most important goal of classroom activities. So, selecting the right answer is more a matter of agreement with the test's philosophy of teaching than knowledge of the "research" that the question seeks to invoke.

The problem is not that the "right" answer is not right but that the question doesn't really allow for such a straightforward response. In fact, most of the knowledge and judgment involved in good teaching is not easily boiled down to a multiple-choice question with one simple answer.

IN THE FINAL analysis, the test defines the professional knowledge base for teaching primarily in terms of style and adherence to a particular approach to teaching. It quizzes knowledge of educational terms and laws. It does not encompass a rigorous and comprehensive understanding of educational theory and practice. It does not require much ability to apply knowledge and judgment in unique and complex situations.

Indeed, it is hard to argue that the knowledge required for scoring well on the test is of the sort that separates good teachers from teachers who are not as good. These questions are similar to those used on other tests of professional knowledge that publish sample questions. All of the tests I have seen are limited in their measurement by the scarcity of important teaching questions answerable in multiple-choice formats; the

(Continued on page 46)

DOCEMUR DOCENDO

(He Who Teaches, Learns)

BY MARSHA LEVINE

The last issue of AMERICAN EDUCATOR included an article about students learning with and from each other, about how the dynamics of peer relationships can be employed both to enhance learning and to promote more tolerant and cooperative social attitudes. The article focused primarily on cooperative learning groups; it touched only briefly on the other form of student-to-student learning, peer tutoring. Because of the interest expressed in both of these instructional methods, we are publishing this follow-up article on peer tutoring. It recounts the origins of the concept, summarizes the relevant research, and describes three quite different tutoring programs around the country.

We invite our readers to send us information on other successful peer and cross-age tutoring programs.

— EDITOR

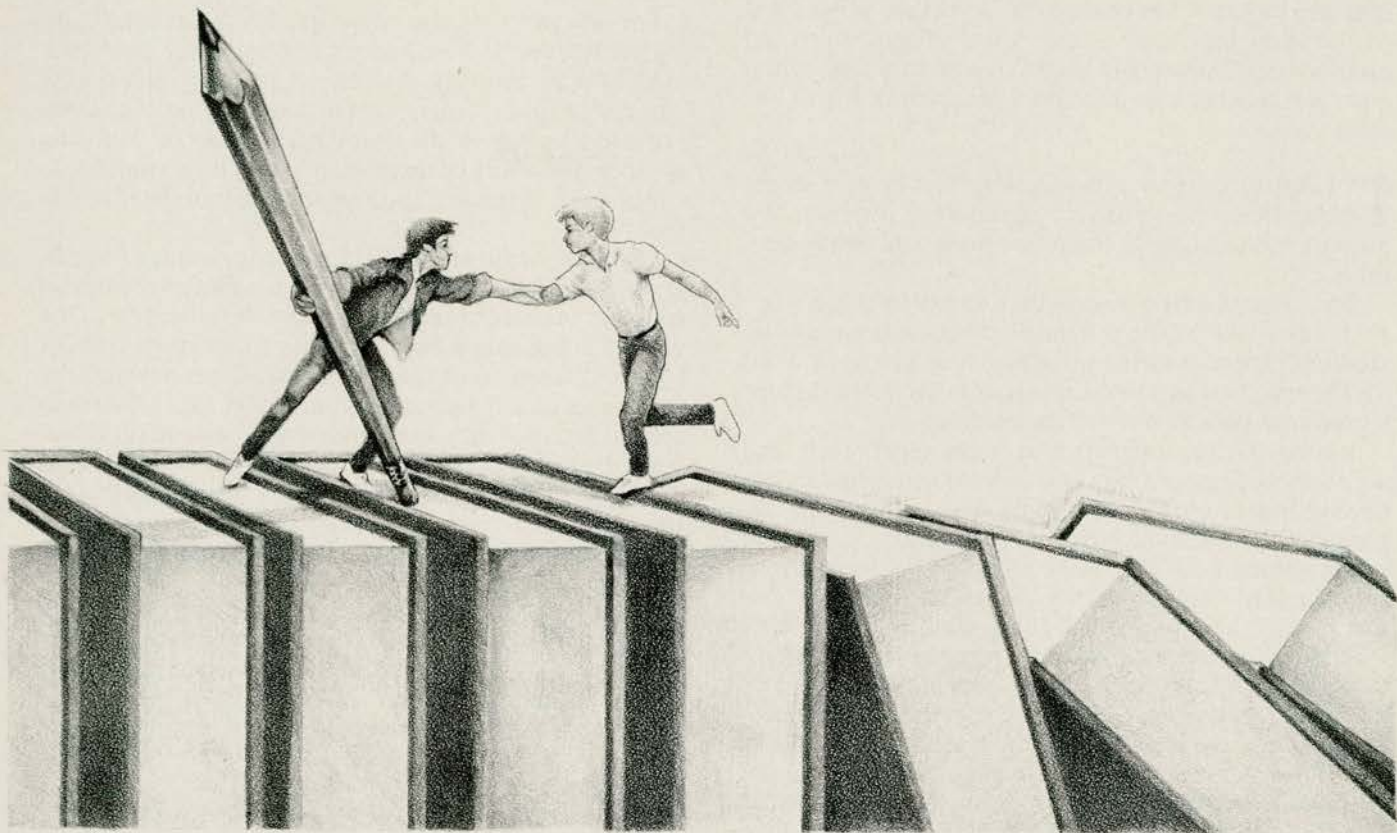
INVOLVING STUDENTS in teaching their peers or younger children is an instructional strategy that has been around for a long, long time. Jews, Hindus, and Christians alike have developed traditions of such teaching that stretch back in history for many centuries.

Marsha Levine is an associate director in the AFT Educational Issues Department. She came to AFT from the American Enterprise Institute where she was a visiting fellow in education policy studies. Some of the material in this piece was prepared under a contract with the Carnegie Forum on Education and the Economy. The author also wishes to acknowledge Diane Hedin at the University of Minnesota, whose work is cited within and provides the research base for this article.

Talmudic study has traditionally been done by pairing students and making them responsible for each other's learning. The Spanish Jesuits developed what was called the Decurion system at the College of Lisbon in the 1500s. Ten students were grouped together under the instruction of a student monitor. By 1591, this system had become a part of the formal code of Jesuit education. The Hindus' ancient tradition of peer tutoring was converted by the English in the eighteenth century into a monitorial system, and here it changed dramatically in its conception as well as in practice. In the ancient and religious traditions, peer tutoring was believed to be an important part of the learning process for tutor and tutee. But in the factory-model schools of the Industrial Revolution it became a monitorial practice designed to relieve the overburdened teacher and help keep order in the overpopulated classroom. It was used almost exclusively in the schools for the poor.¹

The concept of peer or cross-age tutoring did not revive again until the 1960s in the United States, and it was precipitated by an impending teacher shortage. It was at that time that educators began noting that peer tutoring might not only alleviate the overburdened classroom teacher but the experience might encourage students to want to become teachers themselves. It was also during the 1960s that emphasis was placed on the value of peer tutoring for disadvantaged students.

Numbers of new tutoring projects have sprung up recently. Some, like the San Antonio project described below, are the result of public/private partnerships in education. Others are grassroots efforts begun by teachers themselves. It would appear that we have come full circle in our view of peer tutoring. Once again we have



“rediscovered” the value of this ancient instructional method — not as a means of monitoring students but as an effective way of improving learning in our schools. In addition, we now have several decades of research that support its value both to the tutored and the tutors in terms of academic achievement, attitudes, and psychosocial development.

THERE ARE several categories of peer tutoring programs. In some programs, the tutors receive academic credit for their participation. Other programs are purely voluntary. Some tutorial efforts — such as the one in Atlanta, Georgia — serve to fulfill community service requirements for graduation. Some programs are approached from the perspective of what tutoring can do for the tutor; others are seen from the vantage point of meeting the needs of the tutees. Whatever the approach, research of the last two decades gives us strong empirical evidence of the benefits of peer tutoring. In her excellent review of the literature, Diane Hedin of the University of Minnesota summarizes those findings.² Academic achievement, she reports, increases for tutors and tutees. In addition, there is a strong positive shift in attitude in both tutored and tutor. For example, student tutors exhibit more self-confidence; anecdotal evidence is strong on this point.

Successful tutoring is associated with certain conditions. Structured programs in which the tutor follows carefully planned lessons and focuses on specified tasks are associated with more positive effects. Effectiveness is also related to the use of locally developed tests rather than standardized tests — in other words, where there is tight alignment between what is taught and what is

tested. Research suggests that there is no optimal length of program or individual session. Four-week programs are associated with high achievement gains,³ and much longer programs are successful as well.

The importance of training tutors is generally acknowledged, but there is not strong empirical evidence of its value. Those who work with tutors agree that training in how to provide positive feedback, give directions, and play a supportive teaching role are important. Hedin reports that supervision of tutors is associated with better educational outcomes for both tutors and tutees. Opportunities for tutors to discuss their activities with peers appears to improve their cognitive skills and their ability to solve problems and to increase their empathy for those they tutor.

Current interest in tutoring programs includes a recognition of the effects they can have on school climate, instructional patterns, and teachers' roles. The Carnegie Report, *A Nation Prepared: Teachers for the 21st Century*, has painted a vision of what students need to know in order to be well prepared for the future. The report gives a picture of what schools, teachers, and teaching will have to be like in order to make that learning possible. Learning for the future is an active engagement. Far beyond basic skills, it requires critical thinking abilities, a foundation of knowledge and a shared common culture, and attitudes that make the student a life-long learner. The school of the future must allow for individual instruction, for flexible time schedules that permit each student to learn what he needs to learn in the time it takes him to do it. Above all, it requires teachers who themselves are gifted learners and professional teachers.

Where does peer tutoring or cross-age tutoring fit into this vision? It fits potentially into every school and into every teacher's repertoire of instructional methods. It is universally available with little associated cost; any teacher can develop a program in his or her class.

IF PEER tutoring is so good, why isn't it used more? Diane Hedin poses this question in her review of the literature. She suggests the following possible explanations.

First, few teachers and school board members are probably aware of the powerful effects that are associated with these tutoring programs. It is not so unusual for there to be a gap between what is known and those who could benefit most from knowing it.

Second, Hedin suggests that many elementary and secondary educators may know about these studies but do not know how to organize or manage tutoring programs. They need information on how to recruit and select tutors, how to ensure high quality in performance, how to design tutoring lessons, how to supervise the activity, and so on. And third, Hedin suggests that teachers do not yet think of themselves in the role of organizing educational activities in which they are not the principal or only instructor. Before tutoring programs become a basic part of the instructional options in a school, teachers will have to develop a different self perception of what their role is, along with the skills and knowledge they will need to carry it out. They will have to see themselves as executives and managers of the educational process, with a wide variety of instructional arrangements available to them. The establishment of successful tutoring programs is one way in which teachers can begin to change their role and encourage more flexibility in organization and time. Finally, Hedin points out that teachers will have to be convinced that peer tutoring is productive, given the time and energy that goes into developing and implementing a program.

One final caution is offered by Hedin, and that is, for some individuals and for some subjects and situations, tutoring may not be the right strategy. A careful reading of the research is necessary to select those kinds of problems for which the choice is appropriate. When the problem is a lack of individualized, focused instruction, then peer tutoring is appropriate. Likewise, when the tutor can benefit from assuming the role of a teacher — and not all students can — peer tutoring is likely to be a powerful device.

The following examples are provided to illustrate a range of ways in which peer or cross-age tutoring can be used. The programs have different purposes, but in each case they are successful. In the Denver project, tutors and tutored are learning in a fast-track field — computer science — keeping up with new information and even doing staff development with the faculty. The San Antonio program has a double aim: to upgrade the basic skills of elementary students and to reduce the dropout rate of "at-risk" high school students. The Baltimore program is an illustration of the transferability of a peer tutoring program from a suburban setting to the inner city, with great success. (Sources to write for more information on each of these programs are given at the end of this article.)

TUTORING IN THE COMPUTER LAB

For several years, the computer lab at George Washington High School in Denver, Colorado, has been promoting peer tutoring as a means for developing new curriculum in the computer lab and for improving computer education in the elementary schools. Tutoring also permits a limited number of high school students to experience, first hand, the joys and frustrations of teaching.

Computer education is in a state of continual flux. To keep a curriculum current in such a fast-moving field requires constant reevaluation and development. One way of doing this is by assigning promising curricular topics to advanced students. The students develop the topic and then teach it to their peers in a classroom setting. Faculty members attend the presentation and learn the material along with the other class members. If the topic is of value, the material is incorporated into the existing curriculum. Faculty members provide continuity. It is their task to teach the topic once the student developer graduates.

This summer the magnet school received a Computer-Assisted Design/Computer-Assisted Manufacturing (CAD/CAM) system, a sophisticated computer that is frequently used in the design of mechanical equipment. When the system arrived — complete with screens, stations, computer, and software — no one knew how to use it. Three students, Janine Goldstein, Alex Kavatch, and Lee Jay Fingersh, took up the challenge, learned how to use the system, and are now working with sixteen faculty members across the disciplines to develop ways to integrate it into their instruction. One of the advantages of CAD/CAM is that it permits the user to draw in two or three dimensions with ease. A geometry teacher is using it to illustrate x, y, and z axes; a home economics teacher is putting sewing patterns onto the system for student access; a geography teacher is using it to illustrate the rotation and revolution of the earth.

Overall, this aspect of the program has been highly successful. It has not only kept the curriculum up to date but has also given students valuable insight into the teaching process.

Another program sends high school students into the elementary schools to act as teachers and resource persons for computer education. In some schools, they work with small groups of two to five students, providing specialized tutoring for especially interested or advanced pupils. In other schools, they teach whole classes or even several classes at once. Sometimes they are even asked to help develop an overall computer program for the entire elementary school.

Students have taken this teaching task very seriously. Often they ask for lesson plan books. "How can one teach without lesson plans?" Or they request computer

The tutors express amazement that the students are so respectful and attentive in the classes they teach.

manuals or textbooks. Things often taken for granted become important when students become the teachers.

The tutors express amazement that the students are so respectful and attentive in the classes they teach. More and more, the teacher's task becomes that of cheerleader and older colleague, dispensing hugs and encouragement and tips on how to help the "slow learner" in the back of the class. Discussions center on learning techniques and "tricks of the trade." "How do you teach someone that . . ." becomes a common tutor question. Teachers also monitor the progress of tutors to ensure that they are not overworked nor put in impossible situations by the elementary school. They handle the "political" problems associated with tutoring. Sometimes they have to remind the elementary school that these are high school students, not full-time teachers.

The elementary school tutoring program has become so popular that it has spawned still another program — the in-building tutoring program. The purpose of this program is to provide computer instruction to interested elementary school students who cannot be served in their own schools. Three mornings a week, at 7 A.M., parents bring their sixth-grade sons and daughters to the computer lab where they are taught Logo and Pascal by one of the seniors. Giving back what they receive, these sixth graders in turn become resource persons in their own elementary schools.

... 'SO THAT OTHERS MAY LEARN'

High absenteeism, underachievement in basic skills, poor school performance, and a deteriorating self image: These are familiar characteristics of the potential school dropout. However, they are also the criteria used for selecting students to tutor younger children in two San Antonio school districts. Students with this profile are identified to participate in this program precisely because they are high risk. And their new job as tutor seems to have a spill-over effect on their own performance as students. The program not only provides needed tutorial hours for the elementary students with whom they work, but according to evaluations, is associated with improved grades, better attendance, higher retention rates, and a reduction of disciplinary problems for the tutors themselves.

Motivated by a concern about the school performance level of Mexican American students, the project was initiated by Coca-Cola USA and designed with the Intercultural Development Research Associates (IDRA) and San Antonio Mayor Henry Cisneros. IDRA has been responsible for implementation and evaluation. The project is in its second year in the south San Antonio school district and the Edgewood independent school district. In its first year, only high school students served as tutors; in the second year, it has been extended to include the junior high school level. Fifty tutors are selected in each district from a pool of potential dropouts recommended by teachers and counselors. One teacher in each district is responsible for implementing the program. That teacher selects the tutors, works with them in small groups in a structured program that focuses on affective and cognitive goals, and also trains the teachers who will be working with these tutors in their elementary school classrooms.

Their new job as tutor seems to have a spill-over effect on their own performance as students.

The tutors work with the younger children four to five hours per week on basic math and reading skills, reinforcing their own skills. They are paid a minimum wage and also receive high school credit. In addition, tutors are recognized with an annual award ceremony, attractive jackets, and a V.I.P. tour of the Coca-Cola plant.

Coca-Cola has supported the project with a grant of \$100,000 and a renewable two-year commitment. The San Antonio project is one of five city projects targeted at Hispanic youth; other projects have been developed in Los Angeles, Chicago, Miami, and New York.

This "Valued Youth Project" is a source of improved self-esteem for these young people and an incentive for them "to learn so that others may learn."

CROSS-AGE SCIENCE TEACHING (C.A.S.T.)

C.A.S.T. is proving to be an effective way of improving elementary science education by getting hands-on activity into the classroom. Teachers, children, and their adolescent teachers who are volunteer tutors from middle and senior high school are all developing positive attitudes about "doing science." Other benefits include opportunities for cooperation between faculties at different schools of different levels; improved self-esteem among the young tutors; and new and positive role modeling for the children.

C.A.S.T. is a tutoring program that was spawned by a National Science Foundation project at the Smithsonian Institution in Washington, D.C., which demonstrated the effectiveness of hands-on activities in teaching and learning science. Begun first in Montgomery County, a suburban school district in Maryland, the program now is operating in inner-city Baltimore and rural Dorchester County on Maryland's eastern shore. It has been supported by the Maryland State Department of Education.

For the past two years, students from Baltimore City College High School, one of the nation's oldest public high schools (founded in 1839), have been teaching science to second, third and fifth graders at the Abbottston Elementary school "down the hill." The high school site coordinator is Mary Jane Baron, a thirty-year teaching veteran and chairperson of the science department. Baron was attracted to the idea when it was suggested by the district science directors because she had a positive experience working with Future Teachers of America clubs in the 1960s. As site coordinator, Baron has been responsible for recruiting students to be tutors, playing liaison between students and their teachers who must agree to their being absent from class, and keeping communications flowing among the high school, elementary school, and the state's coordinator, Barbara Steinberg.

(Continued on page 48)

TEACHERS AT THE CENTER

*Pittsburgh's Eight-Week In-Service Program
Has Teachers Working and Learning Together*

BY SHERYL HOVEY

SCHENLEY HIGH School is a monument to education. Built in 1916 for almost \$1.5 million, its 180-room capacity and then-modern facilities, including separate gyms for men and women, ranked it among the country's ten best. Over the years, while other schools may have given way to population redistribution and "urban renewal," Schenley has survived — and is once again becoming a showcase of education in the country. But it's not just the addition of up-to-date science laboratories and a physical education complex that are grabbing the headlines; the Pittsburgh high school is also undergoing some changes in the state of education within its walls. Today, Schenley has been transformed into a unique in-service training center for high school teachers that is truly changing Pittsburgh's educational landscape, not only rejuvenating teachers, but sprucing up their students' performance as well.

The success of the Schenley High School Teacher Center revolves around its eight weeks of training for all Pittsburgh high school teachers in a full-time program away from the worries and responsibilities of their regular classrooms. Opened in 1983, the center brings in approximately fifty teachers at a time for what some have termed a "mini-sabbatical." At this rate, all eight hundred teachers in Pittsburgh's twelve high schools will have completed the eight-week program by the end of 1987.

"Unlike most traditional in-service programs, this is not a one-shot, one-day deal," says Marilyn Rauth, head of AFT's educational issues department, of the unique program. "I don't know of any other school district that has made this kind of time commitment." Because of Schenley's success, the district instituted a similar program for kindergarten through grade six teachers at the Brookline Elementary School last year.

For many, the Schenley Center has meant a needed break from a regimented day of teaching. In a typical overcrowded day, not only is there no time to keep up with the latest research, there's often no time for lunch,

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PHOTOGRAPHS BY GREG BLACKMAN

Top right: After teaching a class at the Schenley Teacher Center, visiting teacher Pat DuVall, second from right, gets feedback on her techniques from colleagues, including resident teacher Virginia Norkus, right. Top left: DuVall explains her teaching strategies during the roundtable discussion. Above: Judy Johnston, director of the Schenley Center, teaches a seminar on adult developmental stages. Left: A premier school when it was built seventy years ago, Schenley is once again taking the educational spotlight thanks to its unique teacher training program.

says Ronald Bowes, a social studies teacher at Brashear High School, who completed the Schenley program last spring. "This is a breath of fresh air for teachers, especially those who have been teaching for fifteen to twenty years," he says. "It gives us the needed time to be professional, to upgrade our knowledge in our content area, and to brush up on teaching techniques. At the same time, it gives us the chance to converse with one another."

The training program came just in time for Carol Petett, a social studies teacher at Alderdice High School. "I felt things were getting out of control" before beginning the Schenley program, she says. "Every day brought a new and bigger problem." Through some of the classes on teaching strategies, she says she has come to better understand students' behavior and to lower their anxiety as well as her own. "Now I feel 100 percent better; I never would have believed it."

THE MOVE to establish an in-service teacher center in Pittsburgh came about as part of an effort to improve the quality of education in the city. "We felt that if we expected the district to become re-energized, we must re-energize the teachers," says Superintendent of Schools Dr. Richard Wallace.

Although Schenley was Wallace's brainchild, the project was truly created by the teachers it was intended to service. Roughly two hundred teachers spent two years carefully crafting the components of the center's program. Initially, these volunteers hammered out the basic parameters of the teacher center over more than six months. In July 1982, the Pittsburgh Board of Public Education unanimously adopted the bare-bones plan.

With the approval of the center and a \$120,000 grant from the Ford Foundation, teachers worked for a full year every day after school to create a comprehensive and stimulating learning environment for their colleagues and themselves. Their only guidelines were to develop a program that would be clinical, would update teachers in their content areas, and would help them to both reach adolescents and improve their learning. The program components were based on the results of a needs assessment of all secondary teachers in the district. Through this assessment, teachers indicated that

an in-service program should highlight instructional skills, content area, classroom and paperwork management, coping with job stress, and working with other teachers, administrators, and individual students — areas they felt needed the most attention.

The Pittsburgh Federation of Teachers was an important partner in the effort to establish the teacher center, agreeing to the brief closing of Schenley and relocation of a number of teachers so the program could be started. The PFT collective bargaining agreement with the Pittsburgh Board of Public Education made specific reference to Schenley with a memorandum of understanding that outlined agreements on teacher assignments, relocations, schedules, and seniority rights.

The union was also instrumental in dispelling doubts and fears about the training program. Says Superintendent Wallace of the union's involvement, "Teachers were hostile about the plan in the beginning, but [PFT President] Al Fondy really went to bat for us," explaining the intricacies of the program and encouraging teachers to participate. "When people found that the program was developed by their peers, they were very positive," Wallace adds.

"There was a lot of argument about the center at first," remembers Fondy. "Many suspected that it was designed by someone else before teachers got involved. The union supported it from the start and had a tremendous influence on its structure." Two PFT vice presidents — Rufus Jordan and Paul Francis — served on the project's steering committee.

John Tarka, a PaFT staff representative and English department chairman at Schenley when the program began, explains the thinking that went into the design of the center: "There was a real need for people to have the opportunity to look at themselves and their colleagues and to think in terms of what they were doing right and what areas they needed to strengthen. Without the chance for interchange with colleagues, teaching can be isolating," says Tarka. Fondy agrees. Staff development is as essential in teaching as in any other profession, but to have any real impact, the district must make it a priority, he says. "You don't do that by having a three-hour workshop on Saturday morning." And you don't do it without a serious financial commitment: The Pittsburgh Board of Education has allocated \$2.5 million each year for the past three years to keep the program going.

BEFORE THE teacher center was conceived, the district seriously considered closing the aging high school, whose quality of education measured in terms of student achievement had slipped to disturbing levels. By 1980, Schenley came in dead last among Pittsburgh's twelve high schools in student achievement, and the dropout rate stood at 35 percent. Today, with the undeniable benefit of the teacher center, the secondary school has climbed to sixth place, and some predict it will rival the two highest-achieving high schools in the district by 1990. The three-year-old in-service program also has helped to trim the dropout rate at Schenley to 21 percent.

The teacher center plan zeroed in on Schenley because of its convenient inner-city location within walking distance of the board of education and the city's major universities. At the time, Schenley was 87 percent

black and under a court order to desegregate. With the institution of the teacher center and a number of magnet programs, such as international studies, Schenley has attracted more whites and desegregation has become voluntary.

THE IN-SERVICE training program begins well before teachers set foot inside Schenley. Prior to their arrival, they meet individually with their principals and identify areas they would like to concentrate on during the structured program. One teacher wanted to learn new ways to motivate her students to participate in classroom discussions and projects. Another was looking for fresh approaches to designing lessons to give more variety to his classes. After returning to their high schools, teachers again meet with their principals to discuss their experiences at Schenley and how they have progressed toward their goals.

Teachers who come to Schenley for the eight-week program are called visiting teachers. Each is assigned to a clinical resident teacher who serves as a mentor. A resident teacher at Schenley has a reduced teaching load, which allows time to lead seminars, serve as a teaching model for visiting teachers, conduct both group clinics and individual conferences where visiting instructors' teaching is discussed, and oversee other aspects of the center's programs.

During the first two weeks of the program, the visiting teachers study research-based models of instruction. This gives them a common language to understand and discuss various teaching methods and techniques. During the rest of the program, they try out their new instructional strategies by teaching one class each day during three alternating weeks. In addition, they review and update their knowledge in their content area and take seminars on such subjects as computer literacy, stress management, and adolescent learning and development. Visiting teachers also can arrange "externships" — visits to businesses, industry, colleges or universities, or other schools — to gather information and skills for use in the classroom. Visiting teachers keep logs on their externships, which are filed by the center for use by other visiting teachers. Sites for externships are limited only by a teacher's imagination. They have ranged from a visit to a computer specialist to learn how to computerize a gradebook to a trip by a music teacher to Manchester, England, to study brass band arrangements. One group of science teachers learned about animal science by helping out in a veterinary hospital.

ALTHOUGH THERE are many avenues for growth at Schenley, the opportunity to practice teaching techniques and to be observed and critiqued by colleagues is the core of this in-service program. Once a day during selected weeks each visiting teacher gets the chance to try out some of his new-found — or tried and true — teaching skills on the class of a resident teacher. But unlike the typical teaching experience, this time it's not just the students who are watching. Following the class, the resident teacher leads a small roundtable discussion, called a clinic, with other resident teachers and visiting teachers who have observed the class, providing a session for positive feedback on the teacher's



Brashear High School teachers Wolfgang Weigner, above, and Chapman Bouldin, right, remember the Schenley experience as a time for learning and renewal. Says Weigner, "I would go back today if I had the chance."



techniques and success in reaching students. In turn, these visiting teachers watch and help evaluate their classmates, so that the sharing of ideas and discoveries about effective teaching techniques becomes cyclical.

Pat DuVall, a visiting teacher, remembers a math class she taught during her eight weeks at Schenley. To help in her lesson on identifying various polynomial graphs, she designed and made each student a set of six color-coded cards with the names of the graphs she was

teaching. She also drew a number of graphs on the inside of file folders that she could hold up for students to see. "In the past," says DuVall, "I would have used an overhead with only two or three transparencies to check understanding."

In planning her lesson, DuVall concentrated on two teaching objectives: working on her questioning techniques and getting students more involved. In the clinic that followed the class, observing teachers felt she had done well at both. "Pat started with basic questions, then gradually added more difficult concepts, so students could stay with her," said one teacher in the clinic. "I liked the way she kept all students involved," said another. "When one student was at the blackboard, she asked those at their seats questions about what he was doing."

At the end of the clinic, after briefly summarizing her teaching methods and objectives, DuVall said she had learned how valuable teaching aids can be. "By holding up the graphs I made and having students identify them by holding up their flash cards, I could easily check for understanding and make sure students were really participating in class," she says. The cards turned out to be such a big hit, says DuVall, that many students asked to keep them.

BESIDES GETTING feedback on teaching techniques in a clinic, visiting teachers can also meet one on one with their resident teacher in what is called a refinement conference. During a refinement conference, a visiting teacher may bring up an aspect of his teaching that he feels needs attention. "This can mean anything from fine tuning to 'Oh, my God!'" says Charles Granigan, a resident teacher. The conference begins with the resident teacher reinforcing a teaching technique the visiting teacher has used. The resident teacher then asks what could have been done better. "We want the impetus for this to come from the visiting teacher," says Granigan. "We try to take a neutral stance because of the importance of protecting the collegial relationship between the visiting and resident teacher."

Resident teachers, who were often department chairs in their high schools, are chosen through application to Schenley. Much of their training involves learning how to conduct clinics and refinement conferences and to build the trust of visiting teachers. When Schenley was opened and there was a lot of uncertainty about the program, resident teachers were also unsure of their own roles. Acting as both colleague and role model caused concern for everyone at first, says Granigan: "People were watching me to see how I would act. It took a while for our credibility to be established — with ourselves as well as with others."

Working as a resident teacher has given him a greater flexibility to try out new teaching methods, says Granigan. Everyone has a different teaching style, he adds. "You can't rely on using the same old teaching tricks to have people copy."

While visiting teachers are away from their classrooms, other teachers, called replacement teachers, take over their classes for the eight-week period so that students experience as little disruption as possible.

The replacement teachers were one of the first groups to undergo training at Schenley. Their jobs re-

quire quick adjustment, since they will have four different teaching assignments at various schools around the district during the academic year. Many have problems at the beginning of each new assignment because students tend to treat them as if they were only subbing for a day or two.

One week before the replacement teacher takes over the class, he meets with the regular teacher to go over the curriculum, observe classes, and discuss the particular features of that classroom situation. Except for two visits from the regular classroom teacher during the eight weeks, the replacement teacher is basically on his own. One replacement teacher noted that the preparatory training she received at Schenley helped her immensely by improving her management and organizational skills. It also taught her how to defuse tense students before confrontation occurred. But, despite the preparation, many agree that working as a replacement teacher is a tough assignment.

THE AVERAGE teaching career of Pittsburgh secondary school instructors spans fifteen to twenty years. For them, the teacher center provides exposure not only to new material and teaching techniques but reinforcement from colleagues that various teaching methods they have used over the years are effective. Chapman Bouldin, a social studies teacher and department chairman at the district's Brashear High School, has twenty-three years of teaching to his credit. He remembers the program as a reaffirmation of his teaching: "The center makes you aware of what you are doing that's right."

"After eighteen years of teaching you tire," says Wolfgang Weigner, an English and German teacher at Brashear High School. So when the opportunity to "take a break" at the teacher center materialized, he was ready. "The things they were going to do sounded so wonderful," says Weigner. "I thought it would fine tune what I knew." He was not disappointed.

"A shot in the arm," is the way he described the experience. "I was so enthused; I would go back today if I had the chance." Teaching one class each day with lots of time to prepare for it was a luxury, says Weigner. "Being able to experience and sit in on other classes and then discuss what had happened with no time restrictions is unheard of in the everyday world of teaching," he says.

After the program, Weigner eagerly tried out the techniques he had learned. "Some of them worked; some of them didn't," he recalls. Initially, Weigner was frustrated when students didn't respond according to program theory. "I felt awful," he remembers, "until I realized that I had to strike a balance." Weigner did learn from the program that he needn't perform for forty-five minutes but could have students work individually at their desks—a teaching method called guided practice. Weigner also learned to be more aware of his class planning, to concentrate on one objective each period so he would not try to cover too much material.

AFTER THE eight-week program is over and visiting teachers return to their classrooms, the follow-through phase begins. Activities are planned to reinforce what was learned at Schenley. In her follow

through, Brashear High School teacher Gail Wilson observed four other teachers during the academic year and later met with them to discuss their teaching techniques. She arranges for a fellow teacher to fill in for her during the fifteen- to twenty-minute time slots she spends observing. She, in turn, has been observed and evaluated by fellow teachers.

During follow through, teachers also conduct and attend one seminar a year. In partnership with another teacher, Wilson taught a seminar on the novel *Great Expectations*, explaining how to teach the book and motivate students. She, in turn, attended a colleague's seminar on how to mark compositions, where she picked up at least one good idea: circling errors instead of correcting them. Wilson says she has incorporated the advice in her own teaching, finding that students learn more when they have to correct their own mistakes.

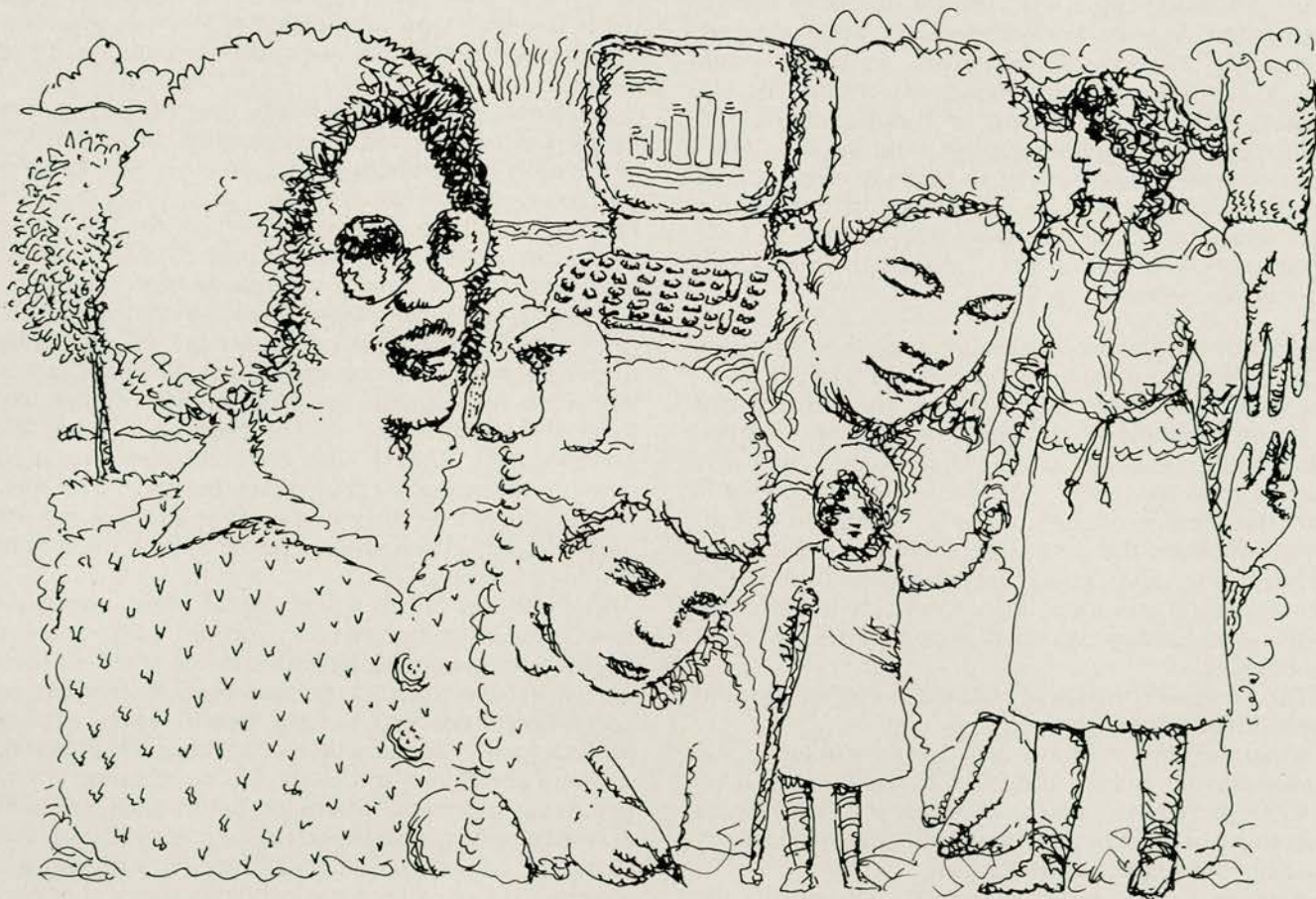
The amount and quality of follow-through activities vary widely, and there seems to be general agreement that this part of the program needs considerably more thought. "We need to find a way for teachers to take over ownership of the follow through," to decide how it should be conducted, says Judy Johnston, director of the Schenley High School Center. "The problem is time," she says. Unlike their colleagues at the elementary and middle school levels, high school teachers do not have time built into their workday for extra activities.

Although Phase I of the Schenley program is scheduled to end in 1987, when the last of the district's secondary teachers has gone through the center, Phase II is scheduled to kick in. The goal of Phase II will be to institutionalize the Schenley program at other district high schools, says Johnston. "We want to bring Schenley's collegial atmosphere to the other high schools, to create a place where teachers will become more supportive of each other and continue to grow and develop. We want every school to think of itself as a center for excellent teaching." But she admits that giving teachers the time to meet with colleagues and work on teaching skills probably means restructuring the workday: "The question is, can teachers become self-developing professionals, as many already are, and continue to work in the same lockstep environment?" Of course the answer is no, she says. "We'll be looking at different ways to fracture the school day—breaking the stranglehold of schedules." Again, the planning of Phase II will be up to teachers.

Whatever happens beyond 1987, the Schenley program has already made a real difference to Pittsburgh's secondary school teachers—and to their students. Although it will be years before the long-term effects of the Schenley project can be measured, its underlying principle seems to be firmly established. Everyone who discusses the Schenley experiment comes back again and again to the same idea: Give teachers more say in their teaching and the chance to work together, to exchange ideas and to learn from each other. Ultimately, the Schenley High School Teachers Center has meant a real commitment by all involved toward making teaching more of a profession, says union president Fondy. "It is not teachers teaching teachers, but teachers working together." □

CERTIFIED PARTNERS

Four Good Reasons for Certification of Paraprofessionals



BY ANNA LOU PICKETT

AS TEACHERS and students return to the classroom this fall, they will be joined by an estimated four hundred thousand paraprofessional classroom assistants. The dramatic growth in the number of paraprofessionals — there were fewer than ten thousand in 1965 — and the expansion of their role has been one of the most significant changes in the delivery of education services in recent decades. And now, as the Carnegie report forges a discussion of ideas that could transform teaching and the organization of schools, it is imperative that we look at the entire education team and give

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renewed attention to the training, standards, role, and career path of classroom paraprofessionals.

But first, some history. Recognition of the potential value of paraprofessionals in education began in the 1950s when local boards of education, confronted by a shortage of teachers, began to look for alternative means of providing services. One of the most prominent early programs was an effort supported by the Ford Foundation in the Bay City, Michigan, schools. Teacher aides were recruited and trained to perform clerical and other routine administrative chores in order to free teachers to spend more time instructing students. Acceptance of the project was not automatic. Critics were concerned that aides would be used to replace teachers with underprepared, "cheap-labor" or to justify larger class sizes. In general, however, the reactions were positive and the program was adopted, first in Michigan and, gradually, as fears were proved unfounded, by

school districts across the country.

The 1960s brought a wave of initiatives that gave great impetus to the employment of paraprofessionals. The growth of the civil rights movement, efforts of women and older citizens to achieve equity, and the campaign to secure entitlements for children and adults with disabilities all led to the need for expanded and improved programs across the broad range of human service delivery systems. At the same time, there was a growing realization by policy makers, service providers, and consumers that existing personnel were inadequate in numbers and skills to meet the varied needs of dependent children, people with mental illness or mental retardation, people who were poor and disadvantaged, increasing numbers of immigrants, and others with special needs. As a result, administrators turned to paraprofessionals as one means of supplementing and enhancing the programmatic and administrative functions of professional personnel. In many urban school systems, paraprofessionals hired from the community also served as liaisons between the schools and the community as a way to counter the growing lack of confidence between the two.

AS THE employment of paraprofessionals increased in all areas of the human services, there was also a recognition of the need to reduce the barriers that prevented minority workers, women, and impoverished young people from achieving professional status. Early efforts to define and establish the concepts of effective career opportunities for paraprofessionals were based on the notion that there is a difference between a job and a career and that while the creation of jobs is good, it is not enough. It needs to be enhanced with career ladders and other opportunities for career mobility.

The efforts of the mid- and late 60s were built around the following assumptions:

- that the nation sorely needed more workers in the human services fields — health, education, and welfare;
- that there were millions of people who could work effectively in these fields if they had access to necessary training and academic credentials;
- that it is possible to differentiate the tasks of the various jobs and separate them into categories, some of which could be carried out by full professionals and others that could be performed by paraprofessionals;
- that unskilled workers can be trained to perform some of these tasks very quickly through on-the-job training; can learn more-advanced tasks while working to enable them to move up a "career ladder"; and, with easy access to formal education, can achieve professional status;
- that even while they are training for professional tasks, workers will be engaged in career development, not just dead-end or make-work jobs; at the same time, they will be performing functions that society and consumers badly need; and
- that the utilization and training of these workers will improve the quality of educational, health, and social services.

In 1965, Arthur Pearl, director of the New York State Youth Training Project, and Frank Riessman, director of the Lincoln Hospital Mental Health Program, co-

authored a book entitled *New Careers for the Poor*. This work served as a guide for the development of educational programs in institutions of higher education that reached out to these workers. It gave impetus to recruiting paraprofessionals from impoverished neighborhoods to provide direct human services in their communities. It also provided the expanding movement with a name — New Careers.

THROUGHOUT THE 1960s and early 1970s, the federal government was a key player in the paraprofessional/New Careers movement. The Community Action and Head Start Programs were funded through the Economic Opportunities Act of 1964, and its New Careers amendment was one of the key components of the bill.

In *From Aide to Teacher: The Story of the Career Opportunities Program*, George Kaplan chronicled one of the most comprehensive and effective New Careers projects ever undertaken — the Career Opportunities Program (COP). Established in 1970 by the U.S. Office of Education, over a seven-year period, COP involved more than twenty thousand people in career advancement programs for aides who wanted to become teachers. The COP project officially ended in 1977, and while a few local school districts and colleges still offer career development programs based on the COP model, few localities institutionalized the programs. Thus, the collaborative efforts that enabled disadvantaged women, returning Vietnam veterans, and other low-income people to enter careers in education, for the most part, have been lost as a resource for workers and employers alike.

In those few places where career ladder programs have been institutionalized for classroom paraprofessionals, it has been primarily due to the efforts of their unions. In New York City, for example, when the United Federation of Teachers won the right to represent paraprofessionals, it found widespread dissatisfaction with working conditions and salary and no meaningful system of advancement. The union built a true system of upward mobility, based upon easy access to training and advanced education, fair and objective criteria, and guaranteed movement for all who met them. This, plus the negotiation of other benefits — such as the annualization of salary, health and welfare coverage, and, more recently, a pension program — stabilized the paraprofessional workforce and made it a respected and permanent part of the education team.

In 1969, before the AFT affiliate in Baltimore became their collective bargaining representative, paraprofessionals in that city were given no training and were paid less than the minimum wage. Today, their yearly salary can be as high as \$25,000, they have a free tuition arrangement with community colleges, and they receive 100 percent tuition reimbursement for courses taken at four-year colleges. Over five hundred paraprofessionals have moved up the ladder to become teachers.

I want to emphasize, however, that these programs are the exception: Across the country, the overwhelming majority of paraprofessionals receive limited, if any, training and have neither system nor incentives for advancement.

ALTHOUGH PARAPROFESSIONALS work across the full range of classroom settings, with children of all ages and abilities, employment patterns indicate that the majority of them work with special needs children — those who are disadvantaged or disabled or who have limited English. Early efforts to recruit and prepare professionals focused primarily on placement in compensatory educational programs serving disadvantaged children and youth; more recent efforts have centered on providing services to children and adults with developmental, emotional, and physical disabilities.

We have come a long way since the days when the role of the paraprofessional was seen as primarily clerical and housekeeping.

Until the mid-1960s, our society generally relegated people with disabilities to institutional settings out of sight of the community. In the last two decades, major changes in attitudes have led to a new and significant trend — the development of smaller, more humane, community-based services for people with special needs. These reforms were brought about by the efforts of parents, educators, and other advocates concerned with providing maximum opportunities for growth, development, and participation in more normal environments for their disabled children and clients. Their efforts led to passage of legislation that served as the basis for change in the delivery of services for the disabled.

The landmark law enacted by Congress was, of course, P.L. 94-142, which requires a free, appropriate public education for all children with disabilities. In addition, most states have passed legislation that supports that federal law.

In response to these mandates, local education agencies and other service providers have developed new staffing patterns and interdisciplinary teams to provide instructional, health, therapeutic, advocacy, vocational, and social services to handicapped students. Increasingly, paraprofessionals have joined their professional co-workers as essential members of these teams. Two recent surveys indicate that the number of paraprofessionals employed in special education programs increased from approximately twenty-seven thousand in 1974 to more than one hundred fifty thousand in 1986.

WE HAVE come a long way since the days when the role of the paraprofessional was seen as primarily clerical and housekeeping. In today's classroom, paraprofessionals support and enhance the work of teachers in all components of the instructional process. They

observe and record data about student performance, follow lesson plans developed by the teacher, work with small and large groups of students, or tutor individual children. They implement behavior maintenance and management programs designed by the teacher and assist in designing and producing instructional materials. And they still carry out routine administrative chores. In short, they are becoming technicians and specialists who are directed and guided by the teacher.

Beyond the work paraprofessionals perform in the classroom, they serve crisis intervention teams for students with emotional disabilities, work as occupational and physical therapy aides, and act as communication aides. Some school districts employ them to monitor students working off campus in vocational training programs. They also serve as a link between special and general education for students with special needs who are ready to participate in general education classes. And paraprofessionals still function as liaisons between the school and community.

As the role of the paraprofessional continues to expand, to be in transition, so does that of the teacher. Questions about how to restructure teaching are now front and center in the education reform debate. Earlier reform reports, such as *A Nation at Risk*, assumed that traditional instructional roles and responsibilities remained unchanged. They made no mention of the expanding use of paraprofessionals and other support staff. Their recommendations for higher standards did not address the demographics of teacher shortages nor the structural changes necessary to attract and maintain quality people and to give students the kind of individual attention they can't currently get.

A Nation Prepared: Teachers for the 21st Century, the report recently released by the Carnegie Forum on Education and the Economy, is one of the first major efforts to look at the expanding roles of teachers as program managers and supervisors and to build, in part, some of their recommendations for national teaching standards on these changes. The report says that the way schools are organized may have made sense in the past but no longer does. It calls for less reliance on the traditional lecture format that requires that all students learn in the same way and at the same pace and in groups of thirty. Instead, it envisions a school in which there is a wide flexibility of instructional method, time, and staffing — and different types of instructional personnel to work with students. Carnegie proposes that teachers be viewed as managers of multiple human resources, including paraprofessionals, parents, student tutors, volunteers from business and other external community resources, and teacher interns.

THE ATTENTION given to the ideas in the Carnegie report makes this an ideal time to (re) introduce the need to develop systematic training and career ladders that work for paraprofessionals.

While school districts have continued to employ paraprofessionals in ever-increasing numbers and to extend their responsibilities in the instructional process, opportunities for systematic inservice training, career advancement, and access to continuing education have not kept pace. With rare exceptions, training for paraprofessionals is sporadic and based on highly

parochial needs established by local school districts instead of reflecting the common skills needed by paraprofessionals. Many paras are hired, given one day of preservice training, and put into the classroom. And, as mentioned earlier, despite efforts to establish meaningful career ladders over the past twenty years, few exist.

A good certification program would offer paraprofessionals real opportunities for upward mobility.

One approach that needs to be explored and that, if done right, could go a long way toward remedying this situation is the development of permit or certification systems. Administered at the state level, a certification system would cover all instructional paraprofessionals. It would establish criteria for their employment, prescribe education and experience requirements for their career advancement, and develop guidelines for their roles and responsibilities.

There are four major arguments in favor of certification. First, by setting standards and mandating specified training and experience, certification would guarantee a level of quality in the educational services provided by paraprofessionals. Second, a good certification program would offer paraprofessionals real opportunities for upward mobility. With easy access to advanced training, any para who worked hard and made the grade could move up the ladder — and up the salary schedule. This, in turn, would make it a more attractive and long-term career, helping to draw qualified people to its ranks. Third, certification would provide a clearer definition of the differentiated responsibilities associated with different permit levels, matching responsibilities more carefully to training. In many school districts today, the duties of paraprofessionals vary widely. In some situations, they are expected to perform functions for which they are neither qualified nor paid; in other situations, their talents go underutilized.

Lastly, a carefully constructed certification program would give formal recognition to the importance of paraprofessionals. It would establish a permanent place for them as valued members of the education team.

CERTIFICATION IS not a new idea. Throughout the initial phase of the paraprofessional movement, a few (nine) states developed certification procedures that established standards for the employment of paraprofessionals. None of the systems were mandatory, and in many cases what one state called a certification process others described as administrative guidelines. There was little agreement about educational requirements for employment; they ranged from a GED to some college training. None of these early efforts were competency based nor did they include opportunities for systematic training and upward mobility if that was the personal goal of the paraprofessional.

Today, thirteen states have some kind of hiring or

promotion criteria for paraprofessionals in public schools that they regard as a certification or permit system. The terminology used may mean different things to different people; what's important is to look beyond the name given to the system to see if the vital elements of a solid program are there.

Requirements and enforcement vary widely. In four states, certification is permanent. Seven states have only one level of certification. Of those states with more than one level of paraprofessional positions, requirements for advancement generally combine a specified number of college credits, hours of in-service training, and years of work experience.

The Kansas permit system, for example, has three levels. The first level — Paraprofessional I — requires participation in at least four in-service training sessions totaling at least twenty clock hours. The local education agency may substitute all or part of this requirement for an "equivalent amount of appropriate college coursework" completed during the school year. A Paraprofessional II permit requires two years' experience as an instructional paraprofessional; completion of thirty semester hours of approved college work or 450 clock hours of approved in-service training, or a combination of each. A Paraprofessional III must have three years' experience and have completed sixty semester hours of approved college work, or an associate degree from an approved training program, a certification from an approved training program in a vocational-technical school, an equivalence of nine hundred clock hours of approved in-service training, or a combination of each of the four totalling nine hundred clock hours.

THE KANSAS program is one of the best existing certification systems and has a number of strengths, most notably its extensive training program. The Kansas State Department of Education has not only developed an extensive array of curricular materials; it also provides instructors and consultants to local school districts to help plan and conduct the training. Despite these assets, there are problems with the Kansas system. First, it applies only to special education paraprofessionals, even though Kansas employs regular education paraprofessionals as well. A more serious problem is the absence of state-mandated salary increases or differentiated responsibilities associated with different permit levels. A local school district may *choose* to pay paras or assign them according to their permit level but is not obligated to do so. The only role the state plays is to reimburse the local district for each para it hires, at one-half the rate of a full-time teacher; to assist local districts in developing and delivering in-service training to paraprofessionals; and to verify that local districts have correctly assigned paraprofessionals to the appropriate permit level. In other words, a paraprofessional who puts in the time and effort and meets all the criteria to qualify for a higher level is not guaranteed advancement or higher pay.

That flaw, which goes to the heart of the problem, is shared by all other existing certification systems and brings us to a discussion of what elements are necessary if a certification system is to produce the results we want.

(Continued on page 47)

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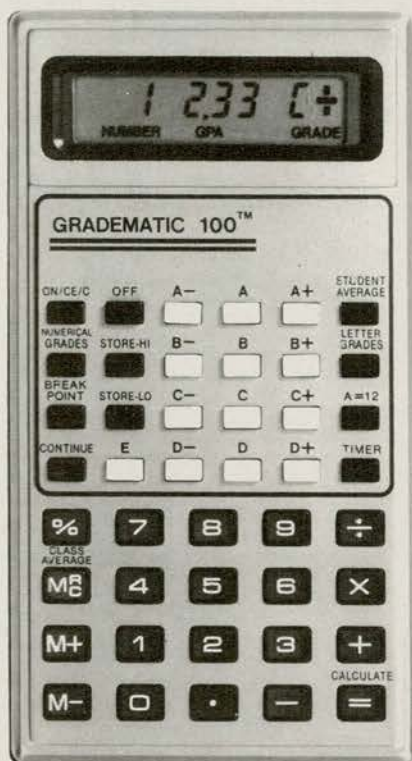
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UNCAPPING THE RETIREMENT AGE

No Exemption of Tenured Faculty

BY LAWRENCE M. FRIEDMAN

MY SUBJECT is the law concerning mandatory retirement, with special reference to tenured faculty at colleges and universities. I will speak mostly about the legal aspects, although they hardly can be disentangled from the social aspects; indeed, they should not be.

First of all, it must be remembered that each of the states may have its own laws on the subject. The overwhelming majority of them in fact do. The federal government also has its law. Federal law overrides state law; but the matter is more complicated than that. The federal laws do not cover the whole subject, and they do not plug up every possible angle or hole. The states can add to the federal laws, and many state laws indeed go beyond the federal provisions. To know the law in any particular state, then, we begin with the federal law and also look to see what additional wrinkles are added by the laws of the state.

Under federal law, forced retirement is legally treated as an aspect of age discrimination. It is illegal, generally speaking, to discriminate against workers because of

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their age. Mandatory retirement is an *exception* to this general rule. To understand the law of retirement, then, we have to begin with a brief description of the federal laws that relate to age discrimination.

Federal law was completely silent on this issue until 1967. Three years after the passage of the great Civil Rights Act of 1964, Congress enacted the Age Discrimination in Employment Act (ADEA).

At the heart of this law was a ban on age discrimination by labor unions, employers, or employment agencies. The act applied to industries that "affected" commerce and had twenty-five or more employees (this figure was later dropped to twenty). There are, of course, borderline cases; but clearly all major employers are covered. Under the law, it is illegal to refuse to hire somebody because of age, to fire an employee because of age, or to discriminate in any terms or conditions of work. There are some exceptions, and two are relevant to our subject. The first we dismiss quickly: Under the act, it is not a violation to carry out the terms of a "bona fide seniority system or any bona fide employee benefit plan such as a retirement, pension, or insurance plan." For a while, there was confusion over what this meant. In any event, Congress settled the issue, as far as mandatory retirement is concerned: No plan could "require" workers to retire earlier than the federal ceiling age.

The second, and far more important, exception was that the act applied only to workers between ages forty



and sixty-five. This meant that an employer could refuse to hire an individual over sixty-five and could also adopt a rule that everyone sixty-five or older had to go. In short, mandatory retirement was an exception to the age discrimination law; mandatory retirement below age sixty-five was forbidden.

And, of course, Congress could change the rules about mandatory retirement simply by raising or lowering the age specified in this law. This is exactly what happened. In 1978, Congress raised the upper age to seventy. Since 1978, mandatory retirement has been allowed, under federal law, but only for people seventy and older. Incidentally, the 1978 amendments also abolished mandatory retirement altogether for federal employees. A few groups of federal workers — air traffic controllers, law enforcement officers, and firefighters — could still be retired; their specific retirement ages were specified in the law.

To complete the job and rid the country of mandatory retirement, Congress would have to raise the upper limit of ADEA or remove it entirely. There have been many proposals to do exactly that. They have not yet succeeded, but there is a good chance that they will succeed in the future, perhaps the near future. We will return to this point.

SOME OF the state laws have longer and more complicated histories than the federal law. But, since the

1960s, the states have been strongly influenced by federal civil rights law and by ADEA.

Nonetheless, state laws are by no means blind copies of the federal statute. A fair number of them go further in protecting the elderly. California, for example, like most states, has general provisions that outlaw age discrimination. Usually these laws are part of a more general law that outlaws race, sex, religious, and ethnic discrimination as well. Unlike many states, however, California has completely “uncapped” its statute. There is no maximum age. Mandatory retirement is thus illegal in California.

The law on this subject was passed in 1977 and went into effect at the beginning of 1978. It applied to any firm with five or more workers. California ended forced retirement by making it “unlawful” to dismiss any worker from the job on account of age as long as the worker was forty or older. A worker has the right to stay on past the “normal retirement date” if he or she “indicates in writing a desire” to work and can “demonstrate the ability to do so.” Employment lasts as long as the worker has “ability to perform . . . adequately” and the employer “is satisfied with the quality of work performed.”

California was the first state to uncapped, but it was followed by other states, now more than a dozen, among them Maine, Florida, Connecticut, New York, and Wisconsin. The number is growing.

State laws, however, are never absolute; none covers 100 percent of all workers. Typically, they exempt very

small employers; a mom and pop store in California with two hired workers does not have to worry about the law. They also typically exempt high executives or policy makers. There is some dispute about the boundaries of this category, but we can pass over this point. A more important exception, in both state and federal laws, is the so-called BFOQ doctrine. BFOQ stands for bona fide occupational qualification. An employer can impose mandatory retirement, if the job *requires* young people, or at least people younger than a certain age. This provision was borrowed from the Civil Rights Act of 1964, where it applied to sex (but not race) discrimination.

What does BFOQ cover? There is dispute over this. The courts have on the whole interpreted it quite narrowly. As far as age is concerned, the main application is to people in jobs that require them to be in tip-top physical condition because of some factor that affects public safety. The clearest example is airline pilots, who must retire at sixty. (The pilots have fought this, but so far they have lost.) Courts and administrators have tried to keep the category of BFOQ jobs as small as possible. For example, although the pilots have to retire at sixty, flight engineers need not. Recently, United Airlines had to agree to pay \$10 million in back pay to flight engineers forced out at sixty; the airline also promised to discontinue its offending practices.

At the state level, police and firefighters are the most common examples of workers whose age is a BFOQ. In many states, the law specifically exempts them from more general rules. In Wisconsin, an employer may take age into consideration for jobs that expose an employee to "physical danger or hazard"; police and firefighters are specifically mentioned. Wisconsin also makes special provision for school bus drivers. There have been a number of lawsuits, by police, firefighters, and others, trying to squirm out of various state exceptions. These lawsuits have been, in the main, unsuccessful.

ANOTHER EXCEPTION, in some states, is of special interest: tenured faculty members at colleges and universities. In 1978, when Congress raised the ceiling age from sixty-five to seventy, it automatically changed

the retirement age at thousands of businesses — including schools. But an exception was written into the law: Any "institution of higher education" could continue to retire at age sixty-five employees "serving under a contract of unlimited tenure." This exception expired on July 1, 1982, and is, therefore, no longer in effect. But it revealed an ominous tendency. Lawmakers had been persuaded to treat tenured faculty members as a separate group, in need of special, delicate handling.

Why should this be so? A number of reasons were given: a need to open positions for younger faculty, particularly women and minorities; a need to cut costs — senior faculty were expensive; and a need to avoid the problem of firing tenured faculty for cause, instead of through an automatic rule.

The exception expired in 1982; but the fact that it was there at all was a bad sign. Statutes do not come out of the blue. Behind the exception were high administrators of colleges and universities; they were and are dead set against the removal of mandatory retirement.

Their efforts have been successful in some of the states. Take California, where mandatory retirement has been completely abolished. Tenured faculty are an exception to that rule; they are subject to the federal ceiling, which means they must retire at seventy. On California campuses, no one else has to retire — not lab technicians, not secretaries, not gardeners, not research associates — not even instructors who do not have tenure. The same situation exists in New York; here the law was amended to add this discrimination against tenured faculty at "institutions of higher education." In Connecticut, too, there is in general no age cap; but seventy is the upper limit for public employees, school teachers, and people who work for "an institution of higher education."

On the other hand, some states *have* uncapped retirement, without exempting faculty. These states include Wisconsin, Florida, and Maine.

Thus, the situation for tenured faculty is roughly this: In most states, they can be required to retire at seventy; and so can everybody else. In a few states, they can be required to retire at seventy, but nobody else can except for police, firefighters, and a few miscellaneous

CONGRESS CONSIDERS REMOVING THE CAP

The American Federation of Teachers has been working to pass legislation to uncap the mandatory retirement age. H.R. 4154, the Age Discrimination in Employment Act of 1986, sponsored by Rep. Claude Pepper (D-Fla.), is awaiting action in Congress. This bill was reported favorably by the House Education and Labor Committee in July, and the House of Representatives is expected to act on the bill after the summer recess. A companion bill, S-1054, has been introduced in the Senate by John Heinz (R-Pa.). The Senate is waiting for the bill to

pass the House before scheduling.

University administrators have been lobbying hard for a fifteen-year exemption from the protections of the legislation for tenured faculty. Both House and Senate bills reject such a delay in coverage; however, amendments could, of course, still be adopted.

Since it was the Senate that adopted an amendment in 1978 that delayed the law's coverage of tenured faculty for three and a half years, it is likely that the attempt to single out tenured faculty for discriminatory treatment will again

occur in the Senate. The AFT Legislative Department is therefore urging all AFT members to write their *senators*, urging them to support passage of H.R. 4154 and oppose any amendment that would single out tenured faculty.

According to AFT Legislative Director Gregory Humphrey, the American Association of University Professors, which sought to exclude tenured faculty from the protections of the bill in 1978, is now opposing passage of H.R. 4154, claiming the legislation is a threat to the tenure system.

types of workers. And in a few states, tenured faculty are part of the general rule, and there is no statutory ceiling. The glaring inequity is in the middle category — in California and New York, for example.

What could change this situation? Federal law could. If the government uncaps the retirement age completely, its law would override California and New York and remove mandatory retirement for tenured faculty. This may happen — but the universities are lobbying hard to prevent it. They insist that a California-type exception must be written into any federal law uncapping retirement.

California or New York could change their laws. But this is unlikely; universities and their administrators exert tremendous pressure at the state level.

To sum up the present situation: Under federal law, tenured faculty, like everybody else, can be forced out at age seventy, under existing age discrimination law. There are proposals to uncap the retirement age, but they have not yet succeeded; there is also strong pressure to keep an exception for tenured faculty.

The states generally follow federal law. An important group of states has uncapped the retirement age and ended mandatory retirement. But in some of these states — California and New York — tenured faculty members are left out in the cold. If a university chooses to have a mandatory retirement policy — and virtually all of them do — its faculty have to retire at seventy.

WHY ARE tenured faculty members singled out for unfair treatment? University administrations are desperately fighting to preserve the present system. Some professors agree with them — which is something of a surprise.

Five reasons are usually advanced. The first is cost: older professors cost more. This is true, but it hardly justifies discrimination and is in any event a matter of degree. After all, a university could save a fortune by getting rid of everybody over fifty and hiring young, cheap teachers. The added cost of uncapping does not strike me as significant.

The second argument is that retirement is necessary to make job openings for young people, women, and minorities. The problem, to say the least, is exaggerated. Opponents of uncapping sometimes talk as if faculty members have discovered the secret of eternal life. They talk as if professors never die.

In fact, most faculty members will probably retire at seventy, or before, and the effect of uncapping will be relatively small. The universities worry about a glut of teachers; in fact, shortages are predicted within the next twenty years.

What actually happens when the age cap is removed? This has been done in Wisconsin and Florida, and the sky has not fallen in. At my own university, Stanford, the administration bitterly opposes the abolition of mandatory retirement. Yet in June 1986, nineteen professors took emeritus status. Only six of these were seventy years old. More than two-thirds — thirteen out of nineteen — took early retirement. And we do not know how many of the six seventy-year-olds would have stayed on if they had the chance. In Florida, where there is no retirement age for faculty, not many teachers continue to work; the university system en-



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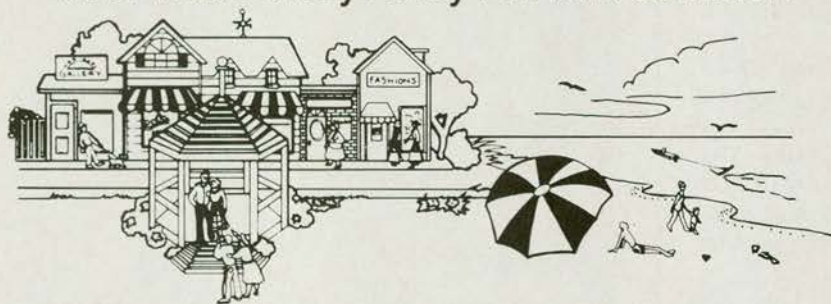
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courages early retirement financially. In Wisconsin, too, less than half of the faculty members who were still teaching when they turned seventy in 1985 elected to stay on. The problem, then, is enormously exaggerated.

THE THIRD reason given is that if mandatory retirement is abolished, the tenure system will be abolished along with it because universities will see no other way to get rid of unproductive teachers unless they dismantle the whole system. The logic of this escapes me. Fourth, and in some ways the most insidious, is the claim that young people are needed because they bring fresh ideas, young blood — all of us have heard this kind of phrase. The notion is that older people do not keep up with their field. Only by hiring younger people can a university continue to be at the cutting edge. Many people sincerely believe this, including many of my own colleagues.

Nonetheless, it is fundamentally wrong. It rests on stubborn stereotypes about older people. The statutes lump faculty together with police, firefighters, air traffic controllers, and bus drivers. The comparison is absurd. White-collar workers and professionals are simply not washed up at seventy. (I am not admitting that blue-collar workers are, either.) There is a lot of dead wood at colleges and universities — no one can deny that — but the dead wood is usually dead by thirty-five or forty or forty-five. The few people who would stay on after seventy would do no harm — quite the contrary, they would be a great boon to their institutions.

This is something I want to stress. The assumption is that elderly teachers and scholars will damage their institutions. I cannot understand why administrators do not consider the *opposite* problem: robbing the universities of talent through mandatory retirement. This is not mere speculation. A number of business firms, and many professions, do not have and have never had mandatory retirement. Doctors, lawyers, and Supreme Court justices are not required to retire at any special age. Nobody has ever suggested that this creates problems for these businesses and professions. Of course, there are isolated instances of people who stay on the job too

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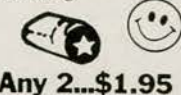
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long; the surprise is how few of these actually occur.

For example, there have been more than one hundred justices of the United States Supreme Court. It is an arduous and demanding job. In almost two hundred years, there have been two or three clear examples at most of justices who sat past the time when they could do their job well. It is the *other* side of the coin that is amazing and impressive: The great number of judges who did great things past seventy, or past eighty — and in one case, Oliver Wendell Holmes Jr., past ninety. John Marshall led the Court into his eighties; Brandeis was over eighty when he retired. Most people, it turns out, are quite capable of deciding for themselves when they have had enough: Supreme Court justices, doctors, lawyers — and teachers, too.

The last argument, which is very common, claims to be based on fairness. The present system (it is said) is more humane, because everybody is forced out at the same age; if the schools allowed faculty to stay on, there would have to be embarrassing incidents later, as doddering professors had to be told they had become incompetent.

This argument strikes me as illogical and often insincere. In the first place, the businesses and professions that do not have mandatory retirement have had no such experience. These painful scenes just do not happen; or do not happen often enough to be a legitimate worry. It is also a bit like arguing that it is all right to send everyone accused of a crime straight to jail because it spares *some* people the embarrassment and humiliation of public trial. Why would it be fair to deprive a whole group of people of their jobs in order to soothe the feelings of a few of these, at some later time, a problem that may never in fact arise? The argument ignores the real pain suffered by people who want to continue to work and who are forced out by an inflexible rule.

The case for mandatory retirement strikes me, therefore, as weak — morally and socially. It is just as weak for tenured faculty as for anybody else. Let us hope that mandatory retirement will be ended by Congress and the states as soon as possible.

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OUR PROFESSION, OUR SCHOOLS

(Continued from page 17)

extremely compressed compared to other occupations demanding a college degree. After ten to twelve years, most teachers have reached the top of the scale. The Carnegie report estimates that if teaching were restructured to be more like other professions, with different levels of teachers and corresponding levels of responsibility, starting salaries would be about what they are today, average teacher salary would be significantly higher, and a substantial number of people — those holding advanced certification — would be making \$60,000 to \$100,000, with local and regional variations determined by the same kinds of factors as they are today.

IN A RESTRUCTURED teaching profession, certified teachers could be assisted by interns and instructors and computer lab technicians, by paraprofessionals and clericals and administrative staff, by tutors and volunteers, and by an increasingly sophisticated and accessible selection of computer and video technology. Interns will be finishing their final stages of teacher preparation. Some instructors will be on loan from businesses for a year or two; others will be recent college graduates who have chosen to work in the schools as part of a tuition loan plan; still others may be drawn from the rapidly growing ranks of college-educated retirees who still have much to offer.

The professional teaching staff will be freed up to practice their profession. They will have more time to spend with their students — not setting up machinery, conducting routine drill sessions, or filling out forms, but teaching. They will have time to do what the earlier reform reports called for: to teach writing; to help children sort out fact from opinion; to lead discussions that take students beyond scattered names, dates, and places to real knowledge and understanding. They will have the time to develop new ways and new materials for conveying difficult concepts; and they will have time to work with the child whom no one else can reach.

With the aid of new technology and a diverse complement of teaching staff, new options of time, teaching method, and class arrangement will open up. While some students are analyzing ideas in a small seminar, others will be gathered around a computer station. While some are receiving intense assistance through one-on-one tutoring, others will be viewing historical footage in the video screening room. The effectiveness of our teaching will no longer be compromised by having to fit it into fifty-minute time slots. Nor will

The effectiveness of our teaching will no longer be compromised by having to fit it into fifty-minute time slots.

teachers be forced by an inflexible class schedule “to teach to the average.”

Teachers will no longer be isolated all day long in a self-contained classroom. Like other professionals, they will have time during the school day to consult with their colleagues, to share ideas, and to brainstorm solutions to stubborn educational problems. Some teachers will want to divide their time between teaching and other professional responsibilities, such as the development of discipline policy and grading standards, the assignment of students, the allocation of their school's budget, the design of a staffing structure into which various categories of support staff would fit, and the evaluation of a mushrooming array of new software. Certified teachers will not only be on top of the latest research but will themselves be identifying the questions for which we do not yet have answers and will join with their colleagues at local universities in the development of classroom-based studies. In addition, they will do what every doctor in a teaching hospital does: perpetuate their profession by passing on the best of their science and art to the young interns who will eventually replace them.

Other instructional staff and support personnel, under the direction of certified teachers, will be available to conduct drill-and-practice sessions, lead small-section review classes much as teaching assistants do in graduate school, mark multiple-choice tests, coach multiplication tables, prepare a hands-on science lesson, read a story aloud, organize field trips, check a book review report, run the video equipment and monitor the viewing room, tinker with the mechanical problems that arise at computer work stations, persuade parents of the importance of providing time and space for homework, and so on.

The central function of the professional teaching staff will be to shape the climate and the structure of their school and its curriculum and to develop the best learning program for each individual child and see that it is executed.

I'VE BEEN talking about how a new structure would enable teachers to do their best teaching. Let me turn once again to our students, for the same system that has confined teachers has also confined children. As I mentioned earlier, even under the best of circumstances — when the supply of talented teachers was plentiful, when family structure was stronger than it now is, when homework time didn't have to compete with TV — even then, one-half to three-quarters of our young people did not complete high school. And is it any wonder? To again use a medical analogy, suppose that a doctor had to try to diagnose and treat patients in groups of thirty instead of individually. Ridiculous? Of course. But are the needs, the problems, the strengths, the achievement levels, the attention spans, or the learning styles of students any less diverse than the history and symptoms presented by patients?

How do children best learn? Is there any one of us who really thinks that it is by putting them together in groups of thirty, sitting at their desks for five or six hours a day? Do any of us believe that the lecture format — which numerous studies show constitutes approximately 85 percent of classroom time — is the desirable

method for all subjects and all children? Is it any wonder that teachers, who on a daily basis are required to get thirty fidgety youngsters to master the same topic at the same pace and with the same instructional approach, are suffering from job stress?

Many critics have attacked teachers for the problems in our schools. But it is not teachers' fault, anymore than the problems of the auto industry are the autoworkers' fault. Our autoworkers are as good as the Japanese, but they are working in a defeating structure. What if you are a junior high school teacher and you get a student in your class who can't read? What do you do? You can't really help him. He needs a different setting. He needed a different setting six years earlier. He didn't get one because schools aren't structured to give him one.

In the end, it is we who must serve as the protectors of our students and our profession. We wouldn't want it any other way.

But they could be. The new approaches to the staffing and design of schools that we have been discussing will do much more than enable us to cope with a teacher shortage, as important as that is. They will also allow us — finally — to begin to move in the direction of more individualized learning, fitting the structure to the child rather than the other way around.

Students learn at different paces and in different ways. Most students need more time in some subjects than in others, and most learn better through one method than through another. Some students learn best by reading a chapter in a book, others by watching a videotape, or by using programmed instruction on a computer. Some children can best master new material by teaching it to younger students, by reviewing it in a structured coaching session, or by analyzing it in a teacher-led seminar. Some students can master a concept the first time around. Others need two tries, or three, or more. Some students shine in large groups; others are too shy to participate. Some students can pace their efforts over a five-month semester; others need the sharper incentive of shorter time spans. The rigidity of the current structure forces us to try to fit these very different children into the same mold. The fit often isn't a good one.

Teachers know this better than anyone, but we've never had the flexibility or the personnel or the technology necessary to plan and oversee more individualized learning programs. We now have the possibility of bringing all those elements together for the first time. Teaching would be broadly defined as connecting students with the materials, experiences, and resources that will best help them learn. The teacher's job would be more like the doctor's: to diagnose and then to develop and execute a plan of educational action — like writing an educational prescription for each child.

Sometimes that program would be carried out by the certified teachers and sometimes by other instructional staff. And if the first prescription doesn't work, we will be able to try a second, or a third, or a fourth.

IN THINKING about the way things could be and should be, there is no blueprint before us. Our only sure principles are to hold to our standards and to give teachers the leeway to exercise their judgment and to start thinking about how to restructure and reshape our schools and our profession so that teaching and learning can flourish. We of course do not abandon what we have. We experiment; we refine; we try again. It will take time.

If we sit by and do nothing, or if we just make marginal repairs, we will see the quality of our teaching force rapidly decline. Emergency credentials will be issued in the hundreds of thousands. The country has built up great expectations. If things get only slightly better — or if they get worse — all the powers we can exercise at the bargaining table or in the legislative arena will not be enough to stop an angry public from getting even with the public school system.

But even if we could fool the public, we cannot fool ourselves. Nor would we want to. In the end, it is we who must serve as the protectors of our students and our profession. We wouldn't want it any other way.

We have before us the great possibility of forever transforming the lives of teachers and students in America. Many good people are on our side.

For students — especially those to whom life has not been so kind — it will be a new chance. And for teachers, it will mean the opportunity to give them that chance. It will mean a real profession and a real community of learning.

In closing, I want to acknowledge that many of the ideas I have been discussing will mean change, and change is always hard. Over the past couple of years, as these ideas have begun to take form, we have experienced two feelings in tension with each other. On the one hand, there are many things about our schools and our profession and our jobs that we do not like, so we project an image of hope, and hope gives us a picture of how things might be.

But at the same time, there is the fear of change. Is the change going to be in the direction we want it to be? Will things really get better, or will they get worse? So in the middle of our hopes, our fears take hold and we experience a kind of paralysis. Maybe, we say, it is better to hold onto things the way they are now; the terrain is familiar, and we have adjusted our dreams to fit the landscape.

I would hope that in this battle between hope and fear, we would be instructed by our experience over the past few years and indeed over the last seventy years. This union and its members have always been good for taking risks. We stood for unionism when no one else believed in it. With only a handful of members, and when others said it would be suicidal, we called for collective bargaining elections because we believed that when teachers had sketched before them a vision of what could be if they joined together, they would go with their hopes and not their fears. They did then, and I believe they will now. □

TEACHING KNOWLEDGE

(Continued from page 21)

questions with clear, correct answers are not very important or profound.

The tests are sometimes tricky, but they are rarely difficult in terms of the level of knowledge required. It is not really difficult to identify an answer that suggests that Piaget's work had something to do with stages of development, for example. That is a different level of knowledge than the task of explaining what Piaget's work indicates for the teaching of number concepts to four- or seven- or nine-year-old children who exhibit the understandings common to various stages of development. An even greater level of knowledge would be required if the task were to evaluate alternative approaches to the teaching of number concepts for children with different learning styles.

We do not have a basis in current teacher tests with any of the latter kinds of questions. We test only factual recall or the ability to choose a teaching technique in response to short scenarios that give insufficient information to make a truly reasoned judgment. Although the desired answer can be found by eliminating the ridiculous answers or those that don't fit the topic of the question, a thoughtful, honest, and knowledgeable teacher would in most cases have to answer, "It depends." It is that understanding of the base for educational decisions that comprises the real knowledge base for teaching.

One of the things that is most striking about the current conception of professional knowledge in teaching is that it primarily emphasizes techniques, with little reference to the circumstances under which they might be appropriate and why they might be useful. This is true both in teacher education and in teacher testing. This conception of teaching knowledge not only ignores the fact that any technique has limited applications, it assumes that teachers don't need to have a basis for deciding what to teach, for what purposes, and when. They only need to have a battery of tactics at their disposal for implementing a curriculum that is prescribed for them.

Indeed this assumption pretty much matches the contemporary conception of the teacher's role in education. Until teachers are expected to understand the foundations of learning, and these foundations have been spelled out in concrete terms, there will be little ammunition for arguing that teachers should have a greater role in the design of education.

IN DEFINING the knowledge base for teaching, it might be useful to start by thinking about the building blocks for pedagogical knowledge. In medicine, the initial part of training and the first sections of the medical board examinations focus on knowledge of how the human body functions: knowledge of anatomy, physiology, endocrinology, pathology, and so on. It is assumed that making sound judgments about treatment depends on understanding the phenomenon one is about to treat.

In education, knowledge of how children (and adults) grow, develop, and learn is equally important for making judgments about what and how they might be

taught effectively. This includes an understanding of cognitive, physical, and psychological development, as well as knowledge about how learning normally occurs and about deviations from the norm. Theories of teaching and learning posit relationships among various known attributes of learners and how they are activated in different learning situations. These theories inform judgments about the choice of techniques, suggesting alternatives and decision criteria, rather than simple choices.

Since all teachers, and even some researchers, know that effective teaching strategies vary depending on the goals of instruction, the subject being taught, the nature of the learners, and their stages of development, it is imperative that conceptions of teaching knowledge emphasize the importance of judgment in making teaching decisions in the face of uncertain and diverse situations. Although there is seldom a single right answer to a problem of teaching practice, there are bases for making a professionally appropriate judgment about how to proceed in a complex situation.

A thoughtful, honest, and knowledgeable teacher would in most cases have to answer, "It depends."

Other professions that also require the application of knowledge in complex, nonroutine situations have developed methods for testing such abilities in a variety of ways. In law and accounting, for example, essay responses to case scenarios allow for multiple "right" answers. The test is designed to assess the candidate's understanding of important considerations and the ability to apply knowledge in a professionally acceptable manner to the case at hand.

The psychiatry boards use simulated interviews with real patients to assess a candidate's ability to apply appropriate considerations to the problem of diagnosis and initial treatment. Even though the jury of peers involved in the evaluation may not agree among themselves about a diagnosis, they can apply a common standard of practice to the assessment of the process.

The medical boards also use computer simulations to test a candidate's ability to follow through a course of diagnosis and treatment, to request and use new information appropriately, and to apply knowledge in the unique case presented by an individual patient.

All of these are ways of incorporating real-world uncertainties and judgment in a performance assessment that more nearly represents the knowledge needed to be a good practitioner. What is important is that these approaches conceive professional knowledge broadly and realistically, tolerating multiple approaches and perspectives while reinforcing a standard of professionally responsible practice.

When teacher tests can reflect such a view of the professional knowledge base, and when teacher education is designed to support such a view, teaching will become a profession with a claim to authority in the decisions that shape teaching work. □

CERTIFIED PARTNERS

(Continued from page 34)

First, of course, it must incorporate a true career ladder, one that guarantees advancement for all who meet its standards. The development of such a career ladder should be part of the larger discussion currently under way concerning the structure of the teaching profession and the best ways to educate children. It must include differentiated levels of responsibility and multiple points of entry. This procedure was used in the COP program referred to earlier. It represents the marriage of two concepts dealing with career development — upward mobility and task differentiation. It enables people to enter the system at various levels and determine where they want to end their career advancement based on personal goals and job preference. Some paras will want to become teachers. A successful career ladder program will provide that opportunity. But the majority will be seeking growth and satisfaction in their paraprofessional role. A good system will allow people to maintain rewarding jobs at different levels of responsibility.

Second — and this is key — barriers to education and training must be removed. Paraprofessionals are not highly paid. The majority are women who also carry family responsibilities. For them to meet certification requirements, they must have access to systematic competency-based education and/or in-service train-

ing. Such training must relate to the differentiated levels of responsibility. Collaborative efforts among state and local education agencies, two- and four-year colleges, and professional and employee groups are needed. A comprehensive program that will enable the motivated paraprofessional to move through the permit system and follow a realistic career plan is essential.

Third, a certification system, bringing with it new standards and requirements, must not have a punitive impact on current employees. It must build on the talent that is there — opening doors, not closing them.

A CERTIFICATION program — even a good one — is, of course, not a panacea. But if carefully developed with the input of working paraprofessionals and their organizations it could be an important means of ensuring quality, providing upward mobility, and bringing much-needed recognition to the paraprofessional.

There is much in today's climate that is encouraging. The recent convention of the American Federation of Teachers adopted official policy in favor of certification for paraprofessional classroom assistants. And the Carnegie report should lead to a flurry of new initiatives, both in the structure of the teaching profession and in the structure of schools. Today's education reform discussion is not just about teachers: It is about how to best use our human and technological resources to educate our children. The paraprofessional is a central part of that equation. Now is the time to move forward with certification. □



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(Continued from page 25)

Baron has also participated in training the high school students in curriculum and methods to use in their once-a-week sessions in the elementary school. Magnetism, electricity, and outdoor biology curricula were developed by the state coordinator. The lessons developed for the high school tutors are primarily hands-on activities with groups of four and five children.

For example, one lesson is on the water drop lens. Each child has his own materials: a piece of acetate (the clear sheets you use for the overhead projector), a cup of water, and a piece of newspaper. The child puts one drop of water on the acetate, which is laid over the newspaper. What changes? What looks different? What happens if you lift up the acetate? or add more water? The children observe, experiment, question, discover, and create. They and their tutors are thinking and "doing" science, instead of reading or hearing about it.

Each tutor works with the same children each week, an obvious help in building rapport. Although the lessons and activities are structured and the materials are assembled for their use, the tutors are called upon to use their own ingenuity in working with the children, and they often discover they have skills they didn't know they had. Elementary teachers conduct follow-up lessons to reinforce learning.

Recruiting students turns out to be both a challenge and one of the hidden benefits of this program. Because students must miss class in order to participate, they must have their teacher's approval. The students must also accept the responsibility of catching up on any work they miss. In recruiting students, Baron tried to identify those who were academically strong but who were not particularly active in class or in extracurricular activities. This became a way of relating to these students who are so often overlooked; it made teachers focus on them and what their strengths might be.

The elementary students' self-images are enhanced by the knowledge that these "big kids" come to teach them voluntarily.

The benefits to students, both tutored and tutors, echo the findings of research. The high school students invariably rise to the occasion and shoulder the extra responsibility—keeping up with their course work and meeting their tutorial obligations. Teachers report they are proud of their students, and the program seems to confer status from their peers.

The elementary students' self-images are enhanced by the knowledge that these "big kids" come to teach them voluntarily. The older students also serve as academic role models. The tutoring program permits small-group instruction with high participation levels—every student can be involved. The principal at Leith Walk Elementary school observes that science is made accessible to all students, regardless of their ability levels. The program at Leith Walk is a variation on the

theme, using students from Towson State as the tutors. In that instance it provides a basis for school/college collaboration. When tutors are high school students (or middle school as is the case in Montgomery County's Pyle/Burning Tree Program), an important benefit is the interaction among teachers at different grade levels and the opportunity for them to get a longer view of the schooling process. It can lead to better curricular alignment and to altering expectations about students. For example, Ms. Baron, a high school science teacher, felt that the elementary school curriculum might not be demanding or fast paced enough for some children.

The teachers at both levels had several meetings for planning, implementation, and evaluation that allowed them to exchange views. This kind of interchange is a unique opportunity given the current way schools are structured. Cross-age tutoring programs provide a basis on which it can happen. □

REFERENCES

1. Paulitto, D.P. "The Effect of Cross-age Tutoring on Adolescence: An Inquiry into Theoretical Assumptions." *Review of Educational Research*, Spring 1976, Vol. 46, No. 2.
2. Hedin, D.P. *Students as Teachers: A Tool for Improving School Climate and Productivity*, a paper prepared for the Carnegie Task Force on the Teaching Profession, 1986.
3. Cohen P.A., Kulik, J.A., and Kulik, C-L.C. "Educational Outcomes of Tutoring: A Meta-analysis of Findings." *American Educational Research Journal*, 1982, 19(2), 237-248.

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WE MUST NEVER FORGET

The story of the Holocaust cannot be told in its entirety; it can only be told in fragments: words, images, memories, prayers, tears, agonies.

How does one communicate the burning of a ghetto or the arrival of a train at Birkenau at midnight? How does one convey the mass murder of ten thousand men, women and children, some buried alive, at Babi Yar? How into us, for the sake of our children, grandchildren, and children, some buried alive, at Babi Yar? How into us, for the sake of our children, grandchildren, and children, some buried alive, at Babi Yar?

But the story of the 6 million Jews and millions of others who suffered and died at the hands of the Nazis will not remain forgotten. On October 16, 1985, Yom Kippur was broken.

By the U.S. Holocaust Memorial Museum in Washington, D.C. — the only national museum outside of Israel dedicated to the memory of the victims of the Holocaust.

Authorized by Congress in 1980, the U.S. Holocaust Memorial Council is charged with raising the estimated \$30 million needed to establish and endow the museum, which is scheduled to open in 1989.

AFT president Albert Shanker, who attended the groundbreaking ceremony and is also serving as the AFLEOC's liaison to the Holocaust Memorial Council, has promised the support of this union in the fundraising effort, which has been entitled "A Campaign To Remember."

At the groundbreaking ceremony, soil from the concentration camps at Auschwitz, Bergen-Belsen, Dachau, Theresienstadt and Treblinka and from the Warsaw Jewish Cemetery were mixed into the foundation for the museum. It is thus fitting that the contributions, no matter how small, from thousands of individuals — including union members — who are dedicated to the goals of the museum, students and parents — who are an affirmation that the story of the Holocaust will not be forgotten.

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